

**ASSESSING THE IMPACT OF LIBRARY SERVICES AMONG DISTANCE
EDUCATION STUDENTS AT UGANDA MANAGEMENT INSTITUTE**

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**UGANDA CHRISTIAN
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DECLARATION

I, Annet Namamonde, hereby declare that this research work is my original work and has not been submitted by any other Diploma/Degree award to any Institution/College/University before

Signed

A handwritten signature in blue ink, appearing to read 'Namamonde', is written over a light green rectangular background.

Date 16/09/2025

APPROVAL

I confirm that this dissertation has been prepared and presented with my approval as research supervisor.

Mr. Ssekitto Francis

A handwritten signature in black ink, appearing to be 'Ssekitto Francis', written on a light-colored background.

Date:

DEDICATION

This research work is dedicated to my lovely Parents, Mr. & Mrs. Betty Ssaabwe of Nanziga Busiro Bunga, to all my Brothers and Sisters, my lovely Children; it's been a financial and spiritual battle but the Lord has seen me through!

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ACRONYMS

Gen Z:	Generation Z
ICT:	Information, Communication and Technologies
IT:	Information Technology
OER:	Open Education Resources
UiTM:	UniversitiTeknologi MARA

ABSTRACT

Libraries ought to adapt to meet the changing needs of users, including distance education students. This study assessed the impact of library services among distance education students at Uganda Management Institute to evaluate how well they meet the information needs of distance education students. The objectives of the study were: to find out the library resources provided to distance education students at Uganda Management Institute; to quantify the user satisfaction rates of distance education students regarding the library information and services provided at Uganda Management Institute; to establish the satisfaction rates of distance education students regarding library staff support at Uganda Management Institute; and to evaluate the extent to which library and information services meet the information needs of distance education students at Uganda Management Institute. This was a mixed-methods study that used a case study research design. The study population was composed of 150 distance education students and 5 librarians. Sampling involved simple random selection of 109 students from a population of 150 and a census of five librarians. Data was collected through structured questionnaires and semi-structured interviews, with instruments detailed in the appendices.

The study findings revealed that UMI provided diverse library resources. It was further revealed that most distance education students were generally satisfied with the library information and services at UMI and they met their information needs. However, challenges were faced such as the lack of awareness about the full spectrum of library information and services at UMI, cost attached to some library resources, limited computers and slow internet. It was concluded that the UMI library provides a wide range of library resources to distance education students at the institution. Most distance education students are satisfied with the library information and services at UMI and also most agree that they meet their information needs. However, they are also exposed to challenges such as the lack of understanding of the full spectrum of library information and resources due to tight schedules, need to pay for some library resources, limited computers and slow internet, which affect their user satisfaction rates. It is imperative to address these challenges to enhance their user satisfaction rates. The study recommended educating distance education students on available library information and services subsidizing fees on library resources, obtaining more computers and faster internet, and conducting needs assessments.

CHAPTER ONE: INTRODUCTION

1.1 Introduction

This chapter presents background of the study, statement of the problem, aim of the study, objectives, and scope of the study, research questions and the significance of the study.

1.2 Background to the study

Distance education has gained traction over the years due to its convenience (Papachristopoulos, 2024; Irieguna et al., 2024). Flexibility in learning and advancement in technology have promoted interest in distance learning all over the world. In the developed world, distance education was already firmly established with learners able to access education from anywhere (Esse & Ohaegbulam, 2017). In less-developing countries, although it was present to a less extent, the COVID-19 pandemic was particularly an enabler because it completely changed the higher education landscape by encouraging the adoption of distance learning. In Africa, many academic institutions are also employing distance education as a way of expanding access to education (Owusu-Ansah et al., 2018). Today, most libraries in academic institutions are expected not only to serve students on-campus but also those off-campus. This has resulted in the need to provide a better library experience for distance learning students contributing to an evolution of librarian services (Tomlinson & Arnold-Garza, 2022).

Quality library service provision is necessary to ensure successful academic outcomes for distance education students (Mensah & Afful-Arthur, 2019). It is argued that there ought to be able to deliver online databases, e-books and journals to students who might not attend classes physically (Yeh & Tsai, 2022). These resources are essential to students taking their classes online which requires them to be at the same par with traditionally schooled students. Libraries in Africa attached to academic institutions are therefore going through a transition stage where they have to develop to meet the information needs of distance education students as well. Nonetheless, most are constrained by the absence of strategic support and dedicated funding (Owusu-Ansah et al., 2018). Another study shows that the students who study remotely have issues with using the web and online catalog services (Tomlinson & Arnold-Garza, 2022). Therefore, enhancing users' interfaces and giving virtual library tours or brief orientations are among the priorities. Libraries should be able to offer digital services that are easy to navigate and which cover a wide area of need.

Another discussed area is centered around equity attainment of all students to library services. There are other researchers who noted that not all students are equipped with appropriate technology and/or available internet connection to use such services to the limit (Wolbring & Nguyen, 2023). This has raised matters concerning equity and use of ICTs by distance learners in the course of their studies. Another issue relates to the changing sphere of the librarian and the self-reflection on that subject could be found in this source. As the college moves to digital environments, other scholars claim that the profession of a librarian becomes more instructional where librarians teach how to locate and critically assess information on the internet (Umar et al., 2023). Some people still argue that the place of a librarian should be in selecting and organizing specific materials.

Distance education has also been more and more appreciated as a crucial approach to learning especially in Africa and Uganda where it is an opportunity many students would not get in traditional classroom breakout. A survey carried out by Buruga and Osamai (2019) has shown that the major sources of fresh knowledge about library services are fundamental in boosting students' performance by offering essential teaching and learning materials through online platforms. Buruga and Osamai (2019) reported that students' exposure to technology in terms of availability of digital resources is a challenge since most of the African rural areas, including Uganda, lack adequate internet connection. In addition, distance learners normally have poor perception of the services offered at the library, which is an added drawback to their learning process. It has however been a transformative cause through quality integration of technology in offering library services. This means that libraries are slowly starting to tap into the social web to reach out to students who are part of distance education. Umar et al. (2023) further reported that the promotion of mobile library services and gaining access to online databases are key strategic intervention strategies towards the attainment of resource accessibility to students. Furthermore, although resources to support digital media are becoming more available and essential, there are some academics insisting that tangible items are still crucial for the learners who have no digital connection (Chinedu & Umah, 2023).

Another important debate is the lack of training and assistance for students in the access and use of library services. There is still a debate on how libraries can create and execute programs to educate students on optimal use of information, communication and technologies (ICTs) and the resources available through the media, among others (Tomlinson & Arnold-Garza, 2022). Nonetheless, more significant gaps remain in the literature in identifying and understanding

the emerging specific needs of diverse students in-distance learning. For example, there is inadequate knowledge of the ways that services can be delivered especially to the non-traditional students like working students (Yeh& Tsai, 2022). It is against this background that this study assessed the library and information services for distance education students at Uganda Management Institute (UMI).

1.3 Background to Uganda Management Institute

Uganda Management Institute (UMI) was started in 1992 with a vision of strengthening executive management capacity to increase efficiency in delivering services in different sectors (Uganda Management Institute, 2024). It has courses in diplomas and degrees in management, public policy and business administration which are vital in helping build capacity of leaders in the country. It also has a central role of offering education and training for professionals within the public and private sectors of Uganda. UMI appreciates the increasing demand of distance education given the current job market and increased demand for flexible classes for working learners. The institute has applied different online learning systems so that distance education student will be able to get proper study materials and assistance (Uganda Management Institute, 2024). This is especially so, because many of these students may not have access to physical libraries and/or services offered on campus.

The library at UMI houses a great facility to support distance education students. It enhances collection of virtually all forms of digital collections including e-books, journals and databases instrumental in research and learning (Uganda Management Institute, 2024). More so, UMI offers library services such as reference services via the internet, as well as tutorials to enable the students use the library resources efficiently. This support is important so that distance learners can be well equipped in information literacy to improve on their studies. Nevertheless UMI struggles to fully address the needs of the distance education students. The challenges it faces include inadequate funding to help provide adequate library resources, inadequate funding to help provide modern and effective resources, lack of funding for constant staff training on new technologies and many others (Uganda Management Institute, 2024). Moreover, the access to the materials and other digital tools is a mandatory requirement for students and remains an issue for concern as the institute tries to develop its distance learning program. This research assessed library and information services for distance education students at UMI.

1.4 Statement of the problem

Evaluating library and information services for distance education students is important to determine the extent to which the available resources support the learners. This is because libraries are expected to effectively offer and deliver relevant electronic resources, individualized student services, and efficient and effective information skills training to distance education learners (Buruga & Osamai, 2019). These services are crucial in supporting students concerning their academic pursuits and guaranteeing they can appropriately coordinate themselves in the progressively intricate environment of the digital age. However, at UMI, these services are not fully implemented. A survey done by the UMI library showed that only 45 percent of distance education students expressed satisfaction with the amount and type of library support (UMI Library Survey, 2023). Challenges include limited access to online resources, inadequate staff interaction, and restricted funding for digital resources. If unresolved, these issues may lower academic performance and graduation rates. This study therefore examined how well library services support distance education students and identifies strategies to improve them.

1.5 Purpose of the study

The purpose of the study was to assess the impact of library services among distance education students at Uganda Management Institute to evaluate how well they meet the information needs of distance education students.

1.6 Specific objectives

The specific objectives of the study were:

- i. To find out the library resources provided to distance education students at Uganda Management Institute.
- ii. To quantify the user satisfaction rates of distance education students regarding the library information and services provided at Uganda Management Institute.
- iii. To establish the satisfaction rates of distance education students regarding library staff support at Uganda Management Institute.
- iv. To evaluate the extent to which library and information services meet the information needs of distance education students at Uganda Management Institute.

1.7 Research questions

This study was guided by the following research questions; -

- i. What are the library resources provided to distance education students at Uganda Management Institute?
- ii. What are the user satisfaction rates of distance education students regarding the library and information services provided at Uganda Management Institute?
- iii. What are the satisfaction rates of distance education students regarding library staff support at Uganda Management Institute?
- iv. To what extent do library and information services meet the information needs of distance education students at Uganda Management Institute?

1.8 Scope of the study

1.8.1 Content scope

The study was restricted to the research objectives. It evaluated the library and information services offered to distance education students in UMI. This involved focusing on the kind of resources they have access to like digital materials and e-books and online based databases. Furthermore, the study established the satisfaction level of the users with the mentioned services, the extent to which the library staff assisted the users, and the extent to which the library service provide for the information requirements of distance learning. This scope was justified because it targeted aspects of library services that were central to learners' success in distance education.

1.8.2 Geographical scope

The geographical coverage of this research was restricted to UMI in Kampala, Uganda. This decision was informed by the fact that UMI is a large institution of higher education with many learners study through distance learning system throughout Uganda. By focusing on UMI, the study gave detailed information about variety of library services existing in this institution and how such services were organized to address the needs of distance education students. This kind of organization provided a deeper perspective into what has been achieved and what has hindered or promoted the achievement within this context only.

1.8.3 Time scope

The time horizon for this research study was restricted to the present academic year (2024/2025). This timeframe was considered appropriate due to potential newer changes in

library services in the course of the year which may be occasioned by new education needs or technological enhancement. With respect to the present population and the experiences of present users, the study offered specific concrete suggestions based on up-to-date findings for enhancing library support for distance education students at UMI.

1.9 Significance of the study

Through evaluating the existing support and resource available at UMI, the study identifies areas requiring improvement. This may result into improved information access, high level of user satisfactory, and efficient staff service delivery. These changes may assist distance learners excel in their classes by offering them what they require to excel in school.

The study also adds onto the body of knowledge of library services in the environment of distance education. The study uses previous research as a foundation and adds on new knowledge which may be found relevant by other researchers or scholars in the same field. This research may also extend knowledge on information literacy and satisfaction of users in the academic library.

Lastly, the study reveals to the policy makers the existing disparities of library services in support of distance education students which may prompt them on the need to make policies to address the challenges. As a result, based on data obtained from the study, the government of Uganda, Ministry of Education and other policy stakeholders may formulate policies that improve funding, staff training and adequate resource provision to management. It may hence produce better learning results in distance learning and help the general course of accomplishing education requirements in Uganda.

1.10 Justification of the study

The rationale behind the choice of this study was based on the fact that distance education has become more prevalent in modern learning space. The situation where more students decide to study online should warrant that such students are provided with necessary learning resources and assistance (Yeh& Tsai, 2022). These resources can still be accessed through libraries, however, often a gap exists between what is made accessible and what students may require (Umar et al. 2023, 2023). Libraries provide quality resources and support critical for students' successful learning and as such should not be underestimated. Thus, this study aimed at making sure distance education students at UMI have all essentials for effective learning.

1.11 Definitions of key operating terms

The key operating terms for the study are defined as follows:

Distance Education: This was used to mean the mode of learning where students access instruction without being physically present on campus.

User Satisfaction: This was used to mean the degree to which library services met or exceeded distance learners' expectations and information needs.

Library Services: This was used to mean all resources, technologies, and staff support provided to facilitate information access and learning.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

Literature review, according to Bryman (2012), refers to process of reviewing literature. It involves seeking information and selecting sources; for instance, articles, databases in order to review information. In his work, Kumar (2019) defines literature review as a process of familiarisation with the existing knowledge in a student's area of research interest. Through a literature search, the researcher is acquainted with the breadth and scope of a given area and discovers areas to research. This chapter gives the theoretical framework and what other authors have postulated on this research.

2.2 Theoretical framework

Several theories can be used to guide the study. These include the Service Quality Model (SERVQUAL) by Parasuraman et al. (1988) which evaluates service quality across reliability, responsiveness, assurance, empathy and tangibles; Moore's Theory of Transactional Distance (1977) which explains how interaction and structure influence learner satisfaction in distance education; the Technology Acceptance Model by Davis (1989) which addresses perceived ease of use and usefulness of digital library services; and S. R. Ranganathan's Five Laws of Library Science (1931) which evaluate user satisfaction of library services. These theories provided a multidimensional lens for analyzing how library services influence distance learners' satisfaction.

The theoretical framework for the study was derived from S.R. Ranganathan's Five Laws of Library Science formulated in 1931. These laws provide a fundamental standpoint from which to assess how satisfactorily library services deliver on the particular information requirements that encompass the distance learners. Five principles were listed by S.R. Ranganathan who is regarded as a father of library science. As postulated by George (2022) and Anderson et al. (2019), these are:

- Books are for use: This law postulates library users should have access to material which serve the information retrieval purpose of the specific user.
- Every reader his or her book: From this, it means that maximum user satisfaction can only be achieved for every user to be able to find relevant and readily arranged materials.

- Every book its reader: This law claims that every book should be handled by someone in the society thus the emphasis on circulation.
- Save the time of the reader: This law postulates that user access to information should be time efficient and as such libraries should adopt effective methods of providing such access.
- The library is a growing organism: This law claims that libraries should adapt dynamically to the users' demands and new technologies.

Ranganathan's laws emerged during a period when libraries were primarily focused on collection development and preservation (George, 2022). His insights revolutionized librarianship by emphasizing user engagement and accessibility. The first law, "Books are for use," challenges the traditional view of libraries as static repositories. Instead, it promotes an active role for libraries in serving their communities by facilitating access to knowledge. The second law, "Every reader his or her book," underscores the diversity of user needs and preferences. In today's multicultural societies, this principle is especially relevant as libraries strive to serve various demographics effectively. Ensuring that all users can find relevant materials fosters inclusivity and enhances overall satisfaction (Atuase et al., 2024). The third law, "Every book its reader," reinforces the belief that every piece of literature holds intrinsic value for someone, even if its audience is niche or specialized. This perspective encourages libraries to maintain comprehensive collections that encompass a wide range of subjects and formats, ensuring that all voices are represented. The fourth law emphasizes efficiency in service delivery: "Save the time of the reader." In an era characterized by information overload, this principle is crucial. Libraries must implement streamlined processes and effective search tools to help users find what they need quickly and efficiently (Abraham & Sabu, 2022). Lastly, "The library is a growing organism" acknowledges that libraries must evolve alongside societal changes and technological advancements. This adaptability is essential for maintaining relevance in an ever-changing information landscape.

Proponents of Ranganathan's laws claim that they give a universal model of librarianship emphasizing the service to users. A study showed how such laws may be applied to the new environments, e.g., digital libraries and open educational resources (OER) reflecting on core principles of inclusiveness and user interest (Marquardt & Bhardwaj, 2023). However, George

(2022) urged for reconsideration of those laws because of today's technological changes and developments as well as the emerging digital collections. Though Ranganathan's laws form a locker system, they have to be amended to fit the current century. As the role of digital information increases the role of libraries to provide information and user support must be reevaluated. Some scholars call for the update of new principles based on today's users' profiles and expectations, especially Generation Z (Gen Z) who appear more digitally centric (George, 2022). The new generation of users challenges the old approach of library operations to fit what has been develop in the new generation of computers user.

While Ranganathan's laws provide a robust framework for evaluating library services, it is essential also to acknowledge some challenges faced by libraries today:

Rapid changes in technology require constant adaptation from libraries (Mensah & Affuah-Arthur, 2022). Staying up-to-date with new tools and platforms can be resource-intensive (Anderson et al., 2022). As users become more accustomed to instant access through digital platforms like Google or social media channels, their expectations regarding speed and efficiency have increased significantly. Many libraries operate under budget constraints that limit their ability to acquire new materials or invest in technology (Abraham & Sabu, 2022). Not all students have equal access to technology or reliable internet connections, which can hinder their ability to utilize online resources effectively. With vast amounts of information available online, helping users discern credible sources from unreliable ones has become increasingly challenging.

The reason why Ranganathan's framework is of great importance is because the laws stress on identifying and catering for the needs of the user which is important in assessing the library services delivered to distance education students. They also provide a starting point for evaluating current practices to determine what needs improvement in the delivery of library services. Due to their relative permissiveness, these laws can in fact be used in this method, regarding new subject matters such as the access to digital information. Thus, it is also possible to relate the use of Ranganathan's laws to non-traditional learning environments, specifically education institutions to raise their efficiency. For instance, Marquardt and Bhardwaj (2023) revealed that due to the Covid-19 pandemic challenges such as closing schools and restricting public access to libraries, school libraries had chances for development by creating online resources and online service delivery.

To achieve the objectives of this study, Ranganathan's Five Laws were used as a theoretical framework with the following guidelines. This study applied the first law of library science "Books are for use" to evaluate the extent to which services in the library meet the needs of distance education students. In assessing outcomes, the second and third laws which are "Every reader his or her book" and "Every book its reader" informed the assessments on the relative success with which students locate relevant sources and their level of satisfaction with the services offered. The fourth law which is "Save the time of the reader" was used to evaluate how librarians help the distance learners to get information across. The fifth law, "The library is a growing organism" was used to assess the extent to which library services were growing and evolving to meet students' needs in the emerging poly-media learning culture. Using Ranganathan's laws, this research was intended to not all meet its objectives but also provide practical recommendations for devising a meaningful strategy for providing library services to the distance education students in UMI.

2.3 Library resources provided to distance education students in universities

Libraries play a critical role in supporting these learners by providing access to various information resources tailored to their unique needs. This section expands on the types of library information resources available to distance education students.

2.3.1 Past papers

Distance education students are able to get acquainted with the projects and theses of past students. These materials act as reference points for current learners, providing tips on how to excel academically and demystifying expectations as well as practices within one's field of study (Usman et al., 2022). Students studying previous projects can understand much about structuring their work, their research questions and overall research methods. Furthermore, availability of these documents serves to create a continuous theme that is felt within the academic community. The subsequent users of the open-source work – students who study at a distance and can feel often isolated from their peers and instructors – they therefore benefit from reviewing the work of their predecessors. It also helps familiarise them with academic expectations, along with finding inspiration for their work (Usman et al., 2022). Libraries must complement this opportunity by making these resources easily retrievable in digital libraries or other online databases as it will enable students to access these resources within anytime/anywhere.

2.3.2 Course materials

Libraries also keep sets of course-related items that are relevant to courses offered to ensure the distance education students have what they need to use in their learning (Usman et al., 2022). The content may entail writing samples, such as lecture notes, lists of readings, additional reading assignments, and other forms of content, including videos or podcasts. In this way, libraries offset the constraints of distance learning by offering carefully selected courses that enable learners to access their required learning materials. The availability of course materials is significant because in distance education environment a student may not be able to access an instructor or traditional course resources. This service can be built on by the libraries, partner with the faculty members to ensure that the materials used in the course are recent, and in line with current standards (Balorushan et al, 2021). Also, libraries can provide links to these materials which a student can easily get on the internet, thus make the learning process even more integrated.

2.3.3 Textbooks

Books or textbooks continue to be a crucial ingredient in students' learning even though distance education students may well have a problem sourcing their books. Usman et al. (2022) indicated that textbooks were 64.6% available and embraced smoothly by distance learners. High costs to purchase some important text for a course continue to be a thorny issue for students as depicted in this statistic. For this reason, libraries have been developing different approaches to enhance the access to textbooks (Usman et al., 2022). Some libraries carry textbook-hire schemes whereby learners can hire textbooks for given courses till the completion of the course. Some collaborate with publishers to offer electronic versions of books for sale that can be reached by web access (Mensah &Affuah-Arthur, 2019). Further, librarians can help distance learners get books via interlibrary loan services when a given text is not available nearby. Still there are some barriers with the price of and access to textbooks. It is difficult for many distance learners to acquire the required texts due to various challenges related to finance (Usman et al., 2022). Hence, the crucial need for libraries to encourage the adoption of Open Educational Resources (OERs) that offer either Freeware or low cost relative to 'standard' textbooks. This way, through support of OER initiatives, libraries can lighten some of the financial load that distance education students are faced with, as well as improve the access to instructional materials.

2.3.4 Internet resources

This plays a critical role with learners who are often entirely unable to access specific physical libraries, gaining their resources online instead. Similarly, in line with the study, Usman et al., (2022) pointed out that, to meet the students' research requirements, there is the need to enhance the basic facilities such as online databases, journals, and other digital sources. In this case most of the libraries pay subscribe to a number of online databases whereby one gets to retrieve articles, research reports and academic journals among others. Internet sources are invaluable; they allow distance learners to search for sources from the comfort of their homes, without having to go to a library. But issues of connectivity remain an issue in many areas, which might limit access to such important resources (Bashorun et al., 2021). In order for distance learning to work effectively, it is necessary for Libraries to engage institutions of learning and local governments to lobby for better Internet solutions for distance learning programs. Besides, libraries need to regularly provide easy access to resources, and ensure that they are easily search able. Offering detailed instructive and informative articles on how to search and use those sources efficiently may improve the abilities of distance learning students as well as their overall search experience.

2.3.5 Electronic resources

Consequently, most libraries also now possess separate collections of electronic resources for distance education students in addition to books and other printed matter. Electronic resources are e-books, electronic journals, database and open sources e resources that are crucial for learning and research work according to Mensah and Affuah-Arthur (2019). They also enjoy using e-books because they are easily accessible and convenient especially to learners taking distance learning courses. In particular, libraries can offer students an access to the vast number of e-books, and these books may be focused on various subjects, which may be helpful to students who attend particular programs. This enables the students to read on multiple devices such as tablets or smartphones to enable them read in events that they are on the move (Balorushan et al., 2021). Another important use of electronic journals is with regards to the provision of support to the research initiatives of distance education students. Most libraries offer access to academic journals containing scholarly works in form of peer reviewed articles in individual fields of study (Usman et al., 2022). Through the use of online-based journals, libraries ensure that distance learning students get to update themselves with occurrences in their areas of specialty and as they prepare their research they get to see whatever literature is available online. In addition, libraries can complement their electronic collections by highlighting open access to scholarly materials which grants free access to articles. Not to

mention, this approach will not only benefit academic researchers, but it will also be in sync with current objectives of diversity and inclusiveness in education.

2.4 User satisfaction rates of distance education students regarding the library information and services provided in universities

User satisfaction is an essential aspect of the provision of library services most especially for the distance education students who rely on them for their academics. A study by Bashorun et al. (2021) showed that a large number of distance education students were dissatisfied with the library support services offered at their institution; 68.7% of them were dissatisfied in general. This discovery is worrisome because it presents the view that a significant portion of distance learners does not receive appropriate support from their libraries. The discontentment that distance education students expressed included the extent to which they found relevant text and other materials to their course of study and how they accessed them.

User satisfaction in library services encompasses various dimensions, including the availability of resources, accessibility of services, and overall user experience. The dissatisfaction reported by distance education students often stems from challenges they face in locating relevant texts and materials pertinent to their courses. According to Gyau et al. (2021), it is important to measure user satisfaction in order to make an assessment of library effectiveness in providing service. They found out that users were fairly content with learning and research support offered to them but some of them were dissatisfied with some service delivery. As such, while 89.5% of the respondents declared satisfaction with the current awareness services availed through emails and phone, only 48.6% showed satisfaction with virtual reference service deliveries (Bashorun et al., 2021). This proves that libraries should periodically assess and expand or contract provided services depending on patrons' responses.

Due to emergence of distance education, supportive services are very important in ensuring that the users get access to the library resources. Specifically, Mensah and Affuah-Arthur (2019) opined that libraries offer what they called 'support services', which are aimed at helping the users to find a way around the resources provided. These include user education programs and online reference services which are important to enhance the solutions for any instant ask by the distance learners. However, these support services may gain a wide range of satisfaction among users. For instance, even though majority of the respondents confirmed that the library provided support services like online user education there were still many who

complained of specific service such as document delivery services (Bashorun et al., 2021). This means that although there may be several support available within the libraries it is important for a library to provide support services that are functional and tailor made to meet the needs of distance learning students.

Education on the use of library resources forms another important major contributing factor to user satisfaction level among the distance education students. Most libraries provide: basic orientation service and information literacy training to assist the user/client in acquiring relevant information searching skills in the use of bibliographic databases (Mensah & Affuah-Arthur, 2019). However, if these training sessions are not accompanied by some sort of promotion and information on how to access such training sessions. They may not isolate out those who would benefit most. Libraries should also provide more availability in the training they offer—either through tutorials that can be accessed at the learner’s leisure or videos of the training process. Thus, increasing and popularizing training can and should become one of the priorities necessary to satisfy users and make them empowered.

Another challenge faced by distance education students concerning the library service is access. Inadequate internet connection was identified as a main challenge that impacted on client satisfaction of distance learning students. According to Bashorun et al. (2021), 91.8% participants pointed at poor internet as a barrier towards effective use of library resources. This is especially important for distance learners who largely access their learning materials in online databases and through information technology. Admission of no reliable internet connection creates a big problem with students interest in accessing the internet since they will rarely do it and this will make them have more time in the library, but receive less information hence denying them maximum satisfaction. Thus, libraries need to promote better physical connectivity enhancing learning facilities for distance education students; at times, through partnership with educational establishments and local authorities.

Other barriers include the availability and accessibility of information resources through the internet. The other challenge highlighted in the study concerns the actual physical access to libraries, which remain a basic asset for distance learning students. The learning spaces that exist in so many libraries offer limited access to users or are physically situated far from distance learners’ areas of residence and hence cannot be easily used for physical materials (Bashorun et al., 2021). The existence of online article sharing exacerbates this problem even

more; although all respondents in Bashorun et al.'s study were dissatisfied with their institution's lack of document delivery services. Inventory control is another way through which access to library resources is restricted; geographical isolation is also another aspect. In fact, it is evident that many distance learners reside in rural or isolated settings where there are no actual access to libraries (Bashorun et al., 2021). These can make one feel out of touch with the academic community and also decreases overall satisfaction with the services of the library academic resources.

To address the various challenges faced by distance education students regarding library services and improve user satisfaction levels, several strategies can be implemented. Libraries should conduct regular surveys and assessments to gauge user satisfaction levels continually (Gyau et al., 2021). By actively seeking feedback from distance learners about their experiences with library resources and services, libraries can identify areas needing improvement. Libraries must prioritize promoting their training programs effectively while ensuring they are accessible at convenient times for users (Esse&Ohaegbulum, 2017). Offering asynchronous training options such as recorded webinars or online tutorials can help accommodate diverse schedules. Libraries should explore partnerships with local authorities or educational institutions to enhance internet connectivity within learning environments catering specifically to distance learners (Bhati& Kumar, 2020; Chinedu&Umah, 2023). Libraries need to develop robust document delivery systems that allow distance learners easy access to physical materials regardless of their location (Mensah &Afful-Arthur, 2022).

Establishing local study centers equipped with necessary resources could provide physical spaces where distance learners can access library materials without traveling long distances (Bhati& Kumar, 2020). Collaborating with public libraries can help extend resource availability beyond institutional boundaries while promoting shared access among all types of learners (Anderson et al., 2019). Leveraging technology such as mobile applications or chatbots can facilitate easier communication between librarians and users while providing real-time assistance whenever needed (Bashorun et al., 2021). Libraries should actively promote all available resources through marketing campaigns targeted at distance learners so they remain informed about what is accessible (Adejo, 2020). Recognizing that different student populations have unique needs will allow libraries tailor their offerings accordingly whether through specialized collections or targeted outreach efforts aimed at specific demographics like adult learners returning after years away from academia. Creating opportunities for community

engagement such as study groups or workshops can help bridge gaps between remote students and foster a sense of belonging within an academic community despite physical distances separating them.

2.5 Library staff support provided to distance education students in universities

Library staff offer special assistance to learners undergoing distance education as a way of improving their studies. The expansion of distance education implies a significant rising in attention to maintenance an extensive comprehension to the ways in which the library services can effectively respond to the needs of distance education students.

Virtual access to library collections is crucial to the need to the distance education students as most of them incidentally depend on the support of the online materials. Mensah and Afful-Arthur (2019) assessed the knowledge and use of library resources among distance learners in the University of Cape Coast. From their research they established that distance learners realize the need for library services although they complained of limited access saying that library services are not enough publicized and that there is inadequate promotion by the libraries. As a common thread, many students described their needs as lacking sufficient specialized services designed for students who are distance learning. The study underlines that librarians must raise their profile and adapt to distance learners needs. For example, casual conversations with some faculty members showed that librarians could greatly encourage students' use of the library resources. In order to reshape the rather distant attitude of students toward library services, libraries need to develop resources meant for faculty who, in their turn, will incorporate elements of information literacy into assignments, (Mensah &Afful-Arthur, 2019). Additionally, the study also pointed out the fact that most of the distance learners have always complained of being excluded fully from accessing library service since they rarely move around the physical facilities of the university. Moreover, respondents recommended that satellite libraries should be established at the distance education centres. This feedback shows the significance of the physical closeness and that for the library to meet the needs of the remote students new service delivery models need to be adopted.

Mwinyimbegu (2019) conducted an analysis how the process of marketing and promotion of OERs in Tanzanian Public Universities is coordinated by librarians. It emerged that librarians

act as promoters, identifiers, advisors, disseminators, evaluators, collectors, and integrators of OERs into university curricula. However, challenges like inadequate awareness about OERs by both the librarian and the students also pose a problem to the promotion process. This problem is made worse by the fact that centrally, there are no institutional policies on the use of OER's (Mwinyimbegu, 2019). The results imply such measures as enhancing awareness campaigns and establishing clear and strong institutional policies could greatly improve use of OERs among distance education students. OERs should be supported by librarians since they always understand the management of information and the availability of resources. This way the librarians can ensure that distance learners attend the training workshops and are in a better position to make use of the OERs. Regarding the lack of convenience and effectiveness this proactive approach does not only improve resource availability but also contributes to the general principles of affordability and access to higher education (Mwinyimbegu, 2019).

Interestingly, the level of support put in place by the librarians has a direct impact on the extent of e-learning. Wahid et al., (2020) explored this relationship among students of Universiti Teknologi MARA (UiTM) Information Technology students. Accordingly, their study revealed that librarians play a significant role in enhancing the content quality, service quality and system quality of the e-learning. Concerning the research findings, it is observed that active participation of the librarian is significant to facilitate the needs and concerns of distance learning student in obtaining relevant and adequate learning materials and assistance required for satisfactory e-learning education. In the study, a structured questionnaire was used to capture different elements of the Librarian support in e-learning environments. Studies showed that when librarians get involved with e-learning effectively, therefore, the library is helping out with content selection, technical support, timely reminders, and quality technologies, students are going to perform better in online learning environments (Wahid et al., 2020). This has dire consequences to call for libraries to become part of e-learning and be working within this framework. In addition, librarians can build on the effectiveness of e-learning by presenting tailored information competency training modules that would prepare students with proper academic research tools necessary in the usage of effective electronic information retrieval systems. Besides enhancing students' interest such initiatives are also effective in creating a sense of belonging among distance learning students who otherwise rarely get to interact with their peers in traditional social campus activities.

With increased utilization of information technologies academic librarians are also changing their roles in accordance with changes in people information seeking behaviors. Similarly, analysing the new roles in the Kenyan universities, Nakitare et al. (2020) identified new role in terms of librarians as apomediaries –enabling users not only through traditional method of information transfer. This shift is consonant with a more pervasive culture shift wherein librarians are employed not only to disseminate information but to also help people learn and to do effective knowledge-seeking on their own. From the study it was evident that most libraries’ patrons have become digitally literate and use the resources in a ‘google it’ kind of fashion; though a large number still use print resources in spite of the digital (Nakitare et al., 2020). This duality creates a potential for librarians to facilitate the transition from traditional to virtual methods by providing functionality that allows users to integrate both types of resources in the facility. Of particular concern here is the fact that librarians need to be put through continuing professional development in order to meet the changing demands. The trainings, as distance learners and librarians adopt new technologies and innovate the means of delivering information, ensure that the librarians have the competencies needed to meet the needs of the distance learners.

While the appointed role of the librarian is in the support of distance education students, nowadays, they experience many difficulties in meeting modern requirements in education. These challenges were identified and widely explained by Ubogu (2021) and include; inadequate funding and disappointing IT proficiency among librarians as some of the factors affecting the provision of adequate services. New technologies particularly in information and communication have impacted on the manner in which libraries work; although many librarians lack training in these technologies or their institutes do not support them sufficiently (Ubogu, 2021). This lack of skills is not only an issue for the librarians as it hinders their performance in delivering necessary services, but also as it hampers their interaction with distance learning students who rely on technology access. To overcome all these challenges it is a call to institutions to provide for librarian training programs that especially focus on new technologies and ways of engaging users. Through training library staff to give out proper instruction and making available all the requisite tools to the universities, distance education students’ support will be boosted.

2.6 The extent to which library and information services meet the information needs of distance education students in universities

The growing trend of the offering of distance education in universities calls for a look at the way in which library and information services address distance education learners' needs. Atuase et al. (2024) studied support strategies given to distance learners in University of Education Winneba, and University of Cape Coast. In the context of documented mixed-methods, quantitative, and qualitative investigation including 1,170 students and additional qualitative information from librarians, the authors found the lack of foresight for ordinary methods of staff and students into the usage of unlimited sources. The evidence reaffirmed that library stakeholders ought to develop targeted interventions to meet distance learners' needs. Engaging the identified resources should therefore be well addressed by a model that enhances user centered practices in libraries to enhance the students learning in distance education (Atuase et al., 2024).

Another consideration is the question of the relative openness of the library services available to distance learning students. In the study conducted by Oyedipe et al. (2018), the findings showed that Part-time learners' overall access to all the necessities of their learning like Textbooks and Newspapers were very high but the use of electronic sources, were all low. This meant that their study showed that students did not fully know the type of resources readily available to them that hampers proper utilization of library services, particularly for online students. To the authors, libraries should increase their efforts to reach out to all students with information concerning the available resources. They also observed that while there were readily available print resources, only few users often sought electronic resources such as databases owing to accessibility issues or awareness (Oyedipe et al., 2018). It is most worrisome among the distance education students with regard to awareness about the available library services. Mensah and Affuah-Arthur (2019) also concluded that, while most respondents professed some level of knowledge regarding library services, few were aware that such services were offered to them as distance learners. Their survey showed that 56% of the respondents knew something about general library services while only 15.5% knew of services provided for distance education students. This gap presents a clear agenda for libraries to step up their external activities and raise different sensitisation campaigns for distance learning students. The lack of communication about available resources and support services means that libraries can improve their service to this demographic (Mensah & Affuah-Arthur, 2019). So

there are several problems that distance learners face that defines their ability to access the library services.

Ofodu and Agim (2017) established problems like lack of appropriate technology implementation and support, fabrication of ICT support, and absence of robust information skills development schemes as key determinants of service delivery gaps in open and distance learning. All of these can be frustrating to the students who mostly depend on the internet to aid them in their studies. The authors suggest that libraries should improve faculty and staff technology support and increase institution cooperation that will improve resource access for off-campus learners. These are issues that need to be addressed if the general experience of distance education students has to be enhanced (Ofodu and Agim 2017). There are also questions as to the efficacy of information resources given by academic libraries. Specifically, Ogonna et al. (2021) looked at how effectively the library resources of the National Open University of Nigeria provide the information needed by its students. Various available resources meant to meet the students' requirements as highlighted in this study could not sufficiently do so because of barriers including poor funding and irregular power supply. According to the authors, resource checks and scouting compliance with the institutional guidelines are critical to enhancing service provision. In doing so, they argue that solving funding concerns and guaranteeing equal opportunities in accessing technology for learning are critical measures toward improving delivery on library services to distance learning students

More general information about library services for distance education can be obtained from Oliveira and Greenidge's (2020) systematic literature review that's focused on the academic libraries' success in supporting off-campus learners across the globe. According to them their findings reveal that despite the fact that many distance learners are content with the library services available to them, they first seek information through other means before visiting the library or involving the librarian. This negative trend implies that libraries are not in harmony with distance learners' information seeking behaviors. So the libraries have to shift their practices when it comes to engaging with these students and improving the value of their learning. Additionally, Oliveira and Greenidge call for studying the particularity of those attitudes toward information searching by distance learners using qualitative approaches. By understanding the general use of information by these students beyond an academic library

context, academic libraries get an understanding of where to focus their efforts in a way that meets the gaps of service delivery that they have noted (Oliveira &Greenidge, 2020).

In the provision of library services to distance education student's technological development is a very important factor. The connectivity of digital environments helps libraries provide users with access to information from a distance, reference services, and tele mentoring in the use of information resources. According to Ofodu and Agim (2017), technology enhances flexibility in access to information and there are gaps that the use of technology could cover in service delivery. Moreover, virtual reference services like chat bots also help distance learners in case they have queries or need directions when using any of the online resources. It's important for libraries to embrace these technologies to enhance the feedback mechanism with a view to improving on the services required for the out-station users.

2.7 Research gap

The decision to conduct this study on library and information services for distance education students at UMI was prompted by several significant research gaps identified in the existing literature. These gaps highlight the challenges faced by distance learners and the inadequacies of current library services in meeting their information needs.

Insufficient understanding of library resources

One of the primary gaps in the literature is the lack of comprehensive studies assessing the specific library resources available to distance education students at UMI. While previous research has explored various aspects of library services, such as user satisfaction and barriers to access, there is a notable absence of detailed evaluations regarding the types and quantities of resources provided specifically for distance learners. For instance, studies like those conducted by Bashorun et al. (2021) and Atuase et al. (2024) have highlighted general dissatisfaction with library support services but did not delve deeply into the specific resources available to these students or how these resources align with their academic needs. Understanding what resources are offered is crucial for determining whether they adequately support the curriculum and learning objectives of distance education programs.

User satisfaction rates

Another significant gap pertains to the quantification of user satisfaction rates among distance education students regarding library information and services. While some studies, such as

those by Gyau et al. (2021) and Mensah & Affuah-Arthur (2022), have addressed user satisfaction in broader contexts, there remains a need for targeted research focused on UMI's distance learners. The findings from Bashorun et al. (2021) indicate that a considerable percentage of distance education students are dissatisfied with library services; however, there is limited empirical data quantifying this dissatisfaction or identifying specific areas where improvements are necessary. A detailed assessment of user satisfaction can provide valuable insights into how effectively library services meet the needs of distance learners, guiding future enhancements.

Library staff support

The role of library staff in supporting distance education students is another area that has not been sufficiently explored in existing literature. While studies have acknowledged the importance of staff assistance in facilitating access to information, there is a lack of focused research evaluating satisfaction rates specifically related to library staff support at UMI. Understanding how well library staff meet the needs of distance learners through reference services, guidance on resource use, and personalized support is essential for improving overall service delivery. Research by Kumar and Gupta (2023) suggests that effective librarian engagement can significantly enhance user experiences; thus, assessing this aspect at UMI could reveal critical insights into areas for improvement.

Meeting information needs

A critical research gap exists regarding the evaluation of how well library and information services meet the specific information needs of distance education students at UMI. While some literature discusses general trends in library service provision for distance learners (Irieguna et al., 2024), there is a lack of targeted studies that assess whether current offerings align with the unique academic requirements of UMI's distance education programs. Understanding this alignment is vital for ensuring that libraries provide relevant resources and services that directly support students' learning objectives.

Barriers to accessing library services

Previous studies have identified barriers to accessing library resources as a significant issue for distance learners (Adejo, 2020; Bashorun et al., 2021). However, there remains a need for more nuanced research that explores these barriers within the context of UMI specifically. Factors

such as inadequate internet connectivity, geographical isolation, and limited physical access to libraries have been documented; yet, an in-depth exploration of how these barriers uniquely affect UMI's distance learners is lacking. Addressing these challenges is crucial for developing targeted strategies that enhance access to library services.

Impact of distance education on library service delivery

The shift towards distance education has fundamentally altered how libraries deliver services and resources. Despite this transformation, there is limited research examining how libraries have adapted their offerings in response to the growing demand for online learning support (Kumar & Sinclair, 2022). Specifically, an exploration into how UMI's library has evolved its services to cater to distance learners considering factors such as digital resource availability, online training sessions, and virtual reference services has not been thoroughly investigated. This study aimed to fill this gap by evaluating current practices and identifying potential areas for enhancement.

CHAPTER THREE: METHODOLOGY

3.1 Introduction

This chapter provides the steps followed when conducting the study. It includes the research approach and design, study population, sample size determination and sampling strategies, the data collection methods and instruments, data quality control and data analysis procedures, ethical considerations, and limitations to the study.

3.2 Research approach

The research approach refers to inquiries carried out with qualitative, quantitative, or both methodologies, offering guidance to processes in a specific research context (Creswell, 2012). In this study, a mixed-methods approach was employed, utilizing both qualitative and quantitative research designs. This combination allowed for a comprehensive exploration of the library and information services provided to distance education students at UMI and how effectively these services catered to their needs. The use of both quantitative and qualitative research approaches significantly enhanced the validity of the findings due to the triangulation of the collected data. By integrating quantitative data with qualitative insights from interviews and open-ended survey responses, the researcher was able to develop a deeper understanding of the issues at hand. This methodological triangulation provided a richer context for interpreting the results, as it allowed for cross-validation of findings and a more holistic view of user experiences (Bryman, 2012).

Applying both qualitative and quantitative methods in this study enabled the researcher to gain deeper insights into how library and information services met the needs of distance education students at UMI. The quantitative component involved structured questionnaires that quantified user satisfaction rates regarding various aspects of library services, including resource availability, staff support, and overall service effectiveness. These questionnaires yielded statistical data that highlighted trends and patterns in user satisfaction, providing a solid foundation for understanding the general sentiment among distance learners. On the other hand, the qualitative findings complemented the quantitative data by providing context and depth to the numbers. Through interviews, librarians shared their personal experiences with library services, revealing specific challenges they faced and suggestions for improvement.

3.3 Research design

A research design can be defined as a plan for creating evidence selected to address the research questions in which the investigator is seeking (Bryman, 2012; Yin, 2018). This study adopted a mixed-methods case study research design. The use of a case study enabled the assessment of library services at UMI in detail. It enabled the analysis of numerous concerns which include but are not limited to the kind of resources helpful at UMI, the satisfaction of the users and the assistance offered by the library staff. Such an approach of analysis assisted in identifying some details that could have been overlooked using other research designs.

Through this detailed examination, the mixed-methods case study revealed essential information about the types of resources that were most helpful to distance education students at UMI. It highlighted not only the availability of digital resources but also the necessity for physical materials that could support various learning needs. This understanding was crucial for determining whether current library offerings aligned with the academic requirements of distance learners. Additionally, the case study approach provided an opportunity to quantify user satisfaction rates among distance education students. By integrating both qualitative and quantitative data collection methods, such as surveys and interviews, the study captured a comprehensive view of student experiences. This dual approach allowed for a richer analysis of user satisfaction, revealing specific areas where library services met or fell short of expectations. Moreover, assessing library staff support emerged as another critical focus within this case study framework. The interactions between library staff and distance learners were explored to understand how effectively staff members assisted students in navigating resources and addressing their information needs. The findings indicated varying levels of satisfaction with staff support, emphasizing the importance of training and development for library personnel to enhance their ability to meet the demands of distance education students.

3.4 Study population

A study population refers to the total number of individuals or groups selected for a research study (Creswell, 2012). In this research, the study population comprised 150 students enrolled in distance education programs at the Uganda Management Institute (UMI), along with five librarians who provided essential library services to these students (UMI, 2024). The selected group of students was diverse, encompassing individuals pursuing various accredited courses with the goal of obtaining certification through distance learning. The focus on distance education students was intentional, as they are the primary beneficiaries of library information

and services at UMI. These students rely heavily on library resources to support their academic endeavors, making them a critical unit of analysis for this study. By concentrating on this demographic, the research aimed to gain insights into their specific needs and experiences regarding library services, ultimately assessing how well these services met their educational requirements.

In addition to the distance education students, five librarians were included in the study population. These librarians were chosen because they played a vital role in delivering library information and services to distance learners at UMI. Their perspectives and experiences were essential for understanding the effectiveness of library support for distance education students. By including both users and providers of library services, the study aimed to create a comprehensive view of the library's impact on student satisfaction and success. The combination of these two groups (distance education students and librarians) allowed for a multifaceted exploration of library services at UMI. This approach facilitated an examination of various factors influencing user satisfaction, including the types of resources available, the quality of staff support, and the overall effectiveness of library services in meeting the needs of distance learners. Selecting this specific study population also addressed a gap in existing literature regarding the unique challenges faced by distance education students in accessing library resources. Previous studies have often generalized findings across broader student populations without focusing on the distinct experiences of distance learners. By concentrating on UMI's distance education programs, this research aimed to provide targeted insights that could inform improvements in library services tailored specifically for this group.

3.5 Sample size determination and sampling procedure

Sampling is the process of selecting a portion of a population to represent the entire group in a research study (Creswell, 2012). For this study, the Krejcie and Morgan sampling table was utilized to determine the appropriate sample size of students. According to Krejcie and Morgan (1970), for a population of 150 distance education students, a sample size of 109 was deemed suitable. This means that out of the 150 distance education students enrolled at Uganda Management Institute (UMI), 109 were selected to participate in the study. To ensure a fair representation of the student population, simple random sampling was employed. This technique provided each student with an equal opportunity to be selected, thereby minimizing bias and enhancing the validity of the findings (Creswell, 2012). By employing simple random

sampling, the study aimed to capture a diverse range of perspectives from distance education students regarding their experiences with library services.

In contrast, all five librarians at UMI were included in the study using census sampling. Census sampling involves enrolling every member of a small population in the research study (Kothari, 2019). This approach was appropriate for librarians due to their limited number, allowing for comprehensive insights into their roles and contributions to supporting distance education students. By including all librarians, the study aimed to gather detailed information about the library services they provide and their interactions with distance learners. The combination of these sampling techniques allowed for a robust analysis of library services at UMI. The selected sample of distance education students provided valuable quantitative data on user satisfaction and resource utilization, while the inclusion of all librarians offered qualitative insights into service delivery and support mechanisms. This dual approach facilitated a more comprehensive understanding of how library services meet the needs of distance learners. The following table summarizes the key aspects of the participants involved in this study, including their types, total numbers, sample sizes, and sampling techniques used:

Table 1: Population, sample size and sampling strategy

Category	Frequency	Sample size	Sampling strategy
Distance Education Students	150	109	Simple random sampling
Librarians	5	5	Census sampling
Total	155	114	

Source: UMI (2024)

3.6 Data collection methods

Data collection methods refers to the process for data gathering (Kothari, 2019). Data collection methods included questionnaires and interviews as explained below:

3.6.1 Questionnaires

A questionnaire is a structured tool consisting of a formal list of questions designed to gather responses from participants. It can include various types of questions, such as closed-ended formats like multiple-choice and rating scales, as well as open-ended questions that allow for

more detailed responses (Bryman, 2012). The use of questionnaires enables researchers to efficiently collect information from a large number of participants within a relatively short time frame (Creswell, 2012). This efficiency is particularly advantageous in this study, which aimed to gather responses from a significant number of distance education students. One of the key benefits of using questionnaires is their ability to produce quantifiable data that can be measured and analyzed statistically. This quantitative data is instrumental in identifying trends and patterns in student satisfaction regarding the library services provided at UMI.

Additionally, questionnaires are often more cost-effective than conducting in-depth interviews, making them a preferred method when resources are limited (Creswell, 2012). The structured nature of questionnaires allows for straightforward data collection and analysis, which can be particularly beneficial in studies with larger sample sizes. In this research, a set of structured questionnaires was administered to the identified sample of 109 distance education students. The questions focused on various aspects of their library usage, including patronage patterns, overall satisfaction with library services, and specific usage experiences. The quantitative nature of the data collected through these questionnaires provided a solid foundation for evaluating the effectiveness of library services at UMI. By employing a systematic approach to question design and administration, the study aimed to capture comprehensive insights into student experiences. The results obtained from the questionnaires were analyzed to identify key trends in user satisfaction and to highlight areas where library services excelled or fell short.

3.6.2 Interviews

An interview, often referred to as structured communication, involves a direct dialogue between the interviewer and a single respondent. This method typically employs open-ended questions, allowing participants to share detailed information about their thoughts, feelings, and experiences (Kothari, 2019). Interviews serve as a valuable source of qualitative data, which is essential for exploring topics in greater depth. This approach enables researchers to uncover subtle differences in attitudes and emotions that may not be easily discernible through questionnaires (Bryman, 2012). One of the significant advantages of conducting interviews is the opportunity to build rapport with participants. Establishing a friendly and comfortable atmosphere can encourage respondents to disclose more nuanced information about their experiences with library services. This depth of insight is particularly useful in understanding

the complexities of user satisfaction and the effectiveness of library support for distance education students.

In this study, interviews were conducted with librarians at UMI to gather insights into their experiences and perspectives on providing library services to distance learners. By engaging directly with librarians, the research aimed to explore their roles, challenges, and strategies for supporting distance education students. The qualitative data collected from these interviews complemented the quantitative findings obtained from the student questionnaires, creating a more comprehensive understanding of library service delivery. The structured nature of the interviews allowed for consistency in data collection while still providing flexibility for participants to elaborate on their responses. This combination facilitated a rich dialogue that could reveal underlying issues related to library services that may not have been captured through standardized survey questions. For instance, librarians could discuss specific challenges they faced in assisting distance learners or share successful strategies they had implemented to enhance user engagement. Furthermore, the qualitative insights gained from these interviews were instrumental in identifying areas for improvement within UMI's library services. By understanding librarians' perspectives on student needs and service gaps, the study could offer targeted recommendations aimed at enhancing support for distance education students.

3.7 Data collection instruments

3.7.1 Questionnaires

Questionnaires were employed as the primary data collection instrument for this study. To ensure comprehensive coverage of all relevant information, the questionnaire was organized into several distinct sections. The first section focused on demographic information, gathering essential background details about the respondents, including their age, gender, program of study, and year of study. This demographic data provided valuable context for understanding the characteristics of the participants and how these factors might influence their experiences with library services. The subsequent sections of the questionnaire were designed to address each of the research objectives directly. Questions were formulated in a clear and concise manner to facilitate ease of understanding and response. This structured approach allowed respondents to provide specific feedback related to their library usage, satisfaction levels, and overall experiences with the services offered at UMI. By utilizing a well-organized questionnaire format, the study aimed to gather quantitative data that could be easily analyzed

to identify trends and patterns in student satisfaction. The clarity of the questions ensured that participants could respond accurately, leading to more reliable data for analysis. Overall, the design of the questionnaire played a crucial role in capturing the necessary information to evaluate library services effectively and assess how well they meet the needs of distance education students at UMI. The questionnaire is attached as Appendix 2.

3.7.2 Interviews

The interviews were conducted using a pre-prepared interview guide to ensure a structured and focused discussion. Prior to the interviews, participants received a brief overview of the research objectives and were assured that all information gathered would be kept confidential and used solely for research purposes. This transparency helped establish trust and encouraged open communication. The main questions in the interview guide were aligned with the research objectives, allowing for a targeted exploration of relevant topics. Given that the interview guide was semi-structured, it provided flexibility for the interviewer to probe further when necessary. This adaptability enabled the interviewer to seek clarification and gather additional information, ensuring a more comprehensive understanding of the participants' experiences and perspectives. By employing this method, the study aimed to capture nuanced insights from librarians at UMI regarding their roles in supporting distance education students. The qualitative data obtained from these interviews complemented the quantitative findings from student questionnaires, creating a richer and more holistic view of library services. Overall, the structured yet flexible nature of the interviews facilitated meaningful dialogue and contributed significantly to the study's objectives. The interview guide is attached as Appendix 3.

3.8 Data quality control

Data quality control is essential for enhancing the reliability of research evidence, ensuring that valid conclusions can be drawn and that the findings are meaningful (Creswell, 2012). To maintain high standards of data quality, several measures were implemented throughout the research process.

Firstly, both the validity and reliability of the data collection instruments were rigorously assessed. Validity refers to the extent to which a tool measures what it is intended to measure (Kothari, 2019). To ensure content validity, expert reviews were conducted to evaluate how comprehensively the data collection instruments covered the relevant research areas. Feedback was sought from knowledgeable professionals, including the research supervisor and an

information scientist. Their insights were invaluable in refining the instruments, leading to enhancements that ensured the collection of high-quality data.

On the other hand, reliability pertains to the consistency and reproducibility of the data collected within a specific context (Kothari, 2019). To enhance reliability, clear instructions were developed for administering the instruments, which helped minimize potential errors during data collection. Additionally, standardized procedures were established to ensure that all aspects of the data collection process were consistently followed. This approach aimed to reduce variability and increase confidence in the findings.

By prioritizing both validity and reliability, this study aimed to produce robust and credible results that accurately reflected the experiences of distance education students and librarians at UMI. The careful design and testing of data collection instruments not only contributed to the integrity of the research but also ensured that the conclusions drawn from the data would be meaningful and actionable.

3.9 Data analysis procedure

Data analysis involves employing techniques to draw valid and appropriate conclusions from collected data (Bryman, 2012). This study followed a systematic three-step process for data analysis.

The first step involved cleaning the data, which included reviewing the dataset to identify and address any missing information, removing duplicates, and eliminating incomplete or incoherent entries. For the qualitative data, this process also included transcribing the recorded interviews to ensure accurate representation of participants' responses.

The second step focused on preparing the data for analysis through data entry. The quantitative data collected from the questionnaires was entered into Microsoft Excel, while qualitative data from the interviews was documented in Microsoft Word. This organization facilitated easier access and manipulation of the data during the analysis phase.

The third step entailed analyzing the data. The quantitative data was subjected to statistical analysis, generating descriptive statistics that were presented in both numerical and graphical

formats, including means and percentages. This quantitative analysis provided insights into trends in student satisfaction with library services.

For the qualitative data, thematic analysis was employed to identify patterns and themes within the responses. This involved coding the transcribed interview data and organizing it into categories that reflected common experiences and viewpoints among librarians. The findings were then presented in a narrative format, supported by direct quotations from participants to illustrate key points. Both datasets were utilized for triangulation, enhancing the validity of the research findings.

The quantitative results were presented first, followed by qualitative insights that corroborated and enriched the quantitative findings. This comprehensive approach allowed for a more nuanced understanding of how library services at UMI met the needs of distance education students, ultimately contributing to more informed recommendations for service improvements.

3.10 Ethical considerations

Ethical considerations, as outlined by Creswell (2012), serve as essential guidelines for conducting responsible research. In this study, each participant was provided with an informed consent form to ensure they understood the purpose of the research and their rights as participants. This form included detailed information about the study and assured participants that all data collected would remain confidential and solely in the possession of the researcher. The informed consent form is attached as Appendix 1.

To protect participant anonymity, the collected information did not include any identifying details that could reveal their identities. The research process was designed to ensure that participants were neither manipulated nor coerced into participating, and every effort was made to minimize any potential risks associated with their involvement.

The ethical integrity of the study was further upheld by ensuring that the research methodology was clearly articulated, with no duplication or exaggeration of data in reporting results.

Additionally, the research was conducted only after obtaining the necessary permissions from both the Directorate of Graduate Training and the Ethical Committee at Uganda Christian

University (UCU). This step ensured that all ethical standards were met and that the study adhered to institutional guidelines for conducting research involving human subjects.

By prioritizing ethical considerations throughout the research process, this study aimed to foster trust and transparency with participants while ensuring that their rights and well-being were safeguarded (Bryman, 2012). These ethical practices not only contributed to the credibility of the research findings but also reinforced the commitment to conducting responsible and respectful research within the academic community.

3.11 Limitations to the study

Limitations refer to the restrictions or potential barriers encountered during the course of a research study. They encompass the shortcomings associated with the chosen research approach and any possible sources of bias (Bryman, 2012).

One of the primary limitations faced in this study was the availability of resources necessary for its execution. Although financial constraints were present, they did not adversely affect the quality of the research. Careful planning and resource management were employed to ensure that the study was completed within the established timeline.

Accessing distance education students also posed a significant challenge, as many of them did not attend classes in person and some resided in remote areas. This geographical dispersion made it difficult to reach all potential participants. However, proactive measures were taken to maximize participation rates. Strategies included utilizing online platforms for data collection and scheduling interviews at times convenient for students, thereby ensuring that as many individuals as possible could contribute to the study.

CHAPTER FOUR: PRESENTATION AND DISCUSSION OF RESULTS

4.1 Introduction

In this chapter, the study findings are presented and discussed. The chapter contains information on the response rate, demographic information, study findings and a discussion of the findings.

4.2 Response rate

The total participation rate was expected to be 110 (5 interviews and 105 questionnaires). However, the actual was 107 (5 interviews and 102 questionnaires). The response rate is illustrated in table 2 below.

Table 2: Response Rate

Description	Expected	Actual	Percentage
Questionnaires	105	102	97.14%
Interviews	5	5	100%
Total	110	107	97.27%

Source: Primary data (2024)

As illustrated in table 4.1 above, the response rate was 97.27%. This was high response rate considering that it was almost 100%. The cause of the discrepancy in the response rate was because 2 respondents submitted questionnaires with a lot of missing information/blanks and 1 respondent did not submit his questionnaire. All attempts to reach him were futile. A study by Creswell and Creswell (2018) emphasized that higher response rates contribute to more robust statistical analyses and allow researchers to draw more meaningful conclusions about user satisfaction and service effectiveness. Similarly, Kothari (2019) noted that achieving a high participation rate is crucial for ensuring that the results are representative of the broader population, particularly in studies involving distance education students who may face unique challenges in accessing library resources.

4.3 Demographic information

The respondents (those who answered the questionnaire) were asked to provide information about their gender, age and programs of study. This was to get background information on who

the students who participated in the study were. The demographic information is presented below:

4.3.1 Gender distribution

The respondents were asked to provide information on their gender. Two categories were provided, male or female. Each respondent was expected to tick only one option. The findings are presented below:

Table 3: Gender distribution

Description	Frequency	Percentage
Male	57	55.88%
Female	45	44.12%
Total	102	100%

Source: Primary data (2024)

57 (55.9%) respondents were male while 45 (44.1%) were female. The findings showed that most participants were male although the gender distribution was fairly equal since the gap between males and females was not very wide. In terms of this study, it shows that most views are from males although this had no impact on the study findings since gender considerations did not have an impact on the findings. Researchers often emphasize the importance of diverse representation in studies to ensure that findings are reflective of the entire population (Creswell & Creswell, 2018).

4.3.2 Age distribution

Respondents were further asked to share the age group to which they belonged. They were expected to select one of the following: 20-29 years, 30-39 years, 40-49 years, and 50 and above years. The findings are presented in the table below.

Table 4: Age distribution

Description	Frequency	Percentage
20-29 years	18	17.65%
30-39 years	48	47.06%
40-49 years	36	35.29%
50 and above years	0	0%
Total	102	100%

Source: Primary data (2024)

From the findings, it was seen that most participants 48(47.1%) were aged between 30-39 years, followed by 36(35.3%) who were aged 40-49 years and lastly, 18(17.7%) who were aged 20-29 years. This showed that most respondents were middle-aged. Given that UMI is mostly known for its postgraduate courses, this kind of population is expected. Additionally, distance education students are usually working people who cannot study daily/physically, therefore, they are most likely to fall in these age groups. The age group did not have an impact on the study findings but only provided a picture on how old the participants who participated in the study were. This observation is consistent with findings from previous studies indicating that younger adults and middle-aged individuals are more frequently represented in distance learning environments (Adejo, 2020; Atuase&Maluleka, 2022). Researchers have noted that demographic factors such as age can influence user preferences and behaviors; however, they do not always dictate satisfaction levels or service usage (Kumar & Gupta, 2023). In this study, the insights gained from all age groups contributed to a comprehensive understanding of how library services meet the needs of distance education students at UMI.

4.3.3 Programs of study

Lastly, the participants were asked to tick the fields of their programs of study. The list had different options which included: ICT, Management, Human Resource Management, Procurement and Supply Chain Management, Marketing and Communications, Public Policy

and Management, Public Administration and Governance, General Management and Social Sciences. They were expected to tick one option. The findings are presented below.

Table 5: Programs of study

Description	Frequency	Percentage
ICT	15	14.71%
Management	24	23.53%
Human Resource Management	9	8.82%
Procurement and Supply Chain Management	12	11.76%
Marketing and Communications	6	5.88%
Public Policy and Management	12	11.76%
Public Administration and Governance	12	11.76%
General Management	6	5.88%
Social Sciences	6	5.88%
Total	102	100%

Source: Primary data (2024)

The results showed that 24 (23.5%) were pursuing management-related programs, 15 (14.7%) respondents were pursuing ICT-related programs, 12 (11.6%) programs in Procurement and Supply Chain Management, Public Policy and Management, and Public Administration and Governance, 9(8.8%) programs in Human Resource Management and 6(5.9%) programs in Marketing and Communications, General Management, and Social Sciences. This showed that the participants had diverse range of academic programs and therefore, the insights shared reflected different professional perspectives. Researchers have noted that the specific academic backgrounds of students can influence their information-seeking behaviors and satisfaction with library resources (Kumar & Gupta, 2023; Adejo, 2020). The predominance of Management-related programs aligns with the profile of Uganda Management Institute (UMI), which is known for its focus on postgraduate education, particularly in management disciplines. This finding supports the assertion that distance education students are often working professionals seeking to enhance their qualifications while balancing their careers (Buruga&Osamai, 2019). As such, these students may have specific information needs related to their fields that libraries must address to ensure effective support.

Results

4.4 Library resources provided to distance education students at Uganda Management Institute

The first objective of the study was to find out the library resources provided to distance education students at Uganda Management Institute (UMI). Respondents were asked to tick all the library resources that they were provided with at UMI. This would help in determining the library resources that were provided to them. The findings are presented below.

Table 6: Library resources provided to distance education students at Uganda Management Institute

Description	Frequency	Percentage
Books	92	90.20%
Online journals	56	54.90%
Databases	48	47.06%
Total	102	100%

Source: Primary data (2024)

As seen above, most students 92(90.2%) ticked books. 56(54.9%) ticked online journals and 48(47.0%) ticked databases. This implied that UMI mostly provided books to distance. This was followed by online journals and lastly, databases. The overwhelming preference for books as the primary library resource suggests that UMI has effectively maintained a robust collection of physical texts that meet the academic needs of its distance education students. This aligns with findings from previous studies, which emphasize the importance of traditional print resources in academic libraries, especially for students who may not have consistent access to digital materials (Buruga&Osamai, 2019; Adejo, 2020).

The high percentage of students accessing books indicates that these resources are integral to their learning experiences. In contrast, the lower percentages for online journals and databases highlight potential areas for improvement in library services. While more than half of the respondents reported using online journals, the fact that only 47.0% accessed databases suggests that there may be barriers to utilizing these digital resources effectively. Researchers have noted that distance learners often face challenges in accessing and navigating online

databases, which can hinder their ability to fully engage with available information (Kumar & Gupta, 2023; Mensah & Afful-Arthur, 2022).

The reliance on books over digital resources may also reflect a preference among students for tangible materials or a lack of familiarity with available online tools. This finding underscores the need for libraries to enhance their digital offerings and provide targeted training sessions to help students navigate and utilize online databases and journals more effectively. Moreover, the results suggest that while UMI provides essential resources, there may be an opportunity to promote greater awareness and usage of electronic resources among distance education students. As libraries increasingly shift towards digital formats, ensuring that students are equipped with the skills to access and utilize these resources is crucial for their academic success.

In the interviews, the librarians provided more clarity on the library resources they provided to distance education students. The librarians shared that they provided a variety of physical or tangible resources to distance education students at UMI. These included textbooks, past papers, periodicals and newspapers. Specifically, a participant shared that:

“Students come for different books like textbooks and past papers. We also provide newspapers and information on CD-ROMs and flash disks.”

The above assertion showed that the UMI library provided different physical resources that aligned with the academic needs of distance education students. Distance education students had the authority to access physical resources from the UMI library.

Another participant shared that:

“Yes, students can access e-books and periodicals. In fact they can access online journals through the university’s website as long as they have login credentials.”

This statement showed that apart from physical resources, students could access e-books and online journals as well. This showed that the UMI library provided hybrid library resources and that distance education students could benefit from a wide range of resources.

4.5 User satisfaction rates of distance education students regarding the library information and services provided at Uganda Management Institute

The second objective of the study was to quantify the user satisfaction rates of distance education students regarding the library information and services provided at Uganda

Management Institute (UMI). The objective aimed at measuring the satisfaction levels of distance education students with the library information and services provided at UMI. The students were asked to rate their level of satisfaction with the available library information and services provided at UMI. The findings are presented below:

Table 7: User satisfaction rates with library information and services

Description	Frequency	Percentage
Very satisfied	15	14.71%
Satisfied	47	46.08%
Neutral	34	33.33%
Dissatisfied	6	5.88%
Very dissatisfied	0	0%
Total	102	100%

Source: Primary data (2024)

47(46.1%) respondents expressed that they were satisfied with the library information and services at UMI. 34(33.3%) were neutral. This implied that they were neither satisfied nor dissatisfied. 15(14.7%) were satisfied and lastly, 6(5.9%) were dissatisfied. The findings implied that most participants were generally satisfied with the library information and services at UMI and a few dissatisfied. Those who were dissatisfied were not contented with the library information and services at UMI and felt like the institution could do more to make them better. In the qualitative findings, the librarians shared their views on the satisfaction rates of the students as regards to library and information services provided.

The findings suggest that a significant majority of distance education students at UMI are generally satisfied with the library information and services available to them. With nearly half of the respondents expressing satisfaction, this reflects positively on the library's ability to meet the needs of its users. The high percentage of satisfied users aligns with research by Gyau et al. (2021), which highlights that user satisfaction is often linked to the perceived relevance and accessibility of library resources.

The presence of a substantial neutral response rate (33.3%) indicates that while many students are content with the services, there is also a considerable portion who may feel indifferent or

uncertain about their satisfaction levels. This neutrality could suggest that some students may not have fully utilized all available resources or may not have formed strong opinions about the library's offerings. Researchers like Atuase and Maluleka (2022) emphasize that understanding user engagement is crucial for improving library services, as indifferent users may represent an opportunity for libraries to enhance their outreach and support efforts.

The small percentage of dissatisfied respondents (5.9%) raises important considerations for UMI's library services. While this number is relatively low, it still indicates that some students feel that improvements could be made. The qualitative insights gathered from librarians regarding these dissatisfaction rates may provide valuable context for understanding specific areas where students feel underserved or where library services could be enhanced. As noted by Kumar and Gupta (2023), addressing user concerns directly can lead to improved satisfaction and greater utilization of library resources.

A participant revealed the challenges distance education students faced that influenced their satisfaction rates. According to the librarian:

“Distance education students are rarely at the institute and even when they come, the library is not usually their top most priority. So, it is possible that many do not know what we offer apart from the few who access online resources.”

As per the above finding, there was a possibility of some distance education students not knowing the full spectrum of library information and services available to them at UMI. This was attributed to their nature of programs and schedules which made it difficult for them to fully be involved in the daily affairs of the institute, such as understanding the library environment.

Another participant shared how students were expected to pay for some resources which discouraged them from utilizing library information and services. It was revealed that:

“Sometimes we have resources, like textbooks, that students have to pay for. This is because they are few and it is compulsory for each of them in a given program to have them. Usually when this is the case, some students fail to pay and are discouraged from seeking out other library resources.”

This revelation was an indicator of the plight of some distance education students. There were cases where they were expected to pay for library resources affecting their access to library information and resources.

Lastly, it was shared that the library had few computers with slow internet. A librarian stressed that:

“We have very few computers. Most students do not have a chance to use them. At the same time, our internet is extremely slow. Some students prefer to use their mobile internet than the institute’s which is costly.”

This assertion revealed that technical limitations were a challenge. These mainly affected the utilization of online resources therefore affecting user satisfaction rates. This was a challenge given that some information may not be accessed physically making access to a computer and internet important.

4.6 Satisfaction rate of distance education students regarding library staff support at Uganda Management Institute

The third objective of the study was to establish the satisfaction rates of distance education students regarding library staff support at Uganda Management Institute (UMI). The objective aimed to determine how satisfied distance education students were with the support received from library staff at UMI. Before, asking them to rate their level of satisfaction, they were asked if they had ever sought help from the library staff. The findings are presented below:

Table 8: Whether distance education students had ever sought help from library staff

Description	Frequency	Percentage
Yes	102	100%
No	0	0%
Total	102	100%

Source: Primary data (2024)

The findings revealed that all respondents (102(100%)) had ever sought help from library staff. This implied that they were in position to provide their satisfaction rates with library staff support at UMI. The results demonstrate that every participant in the study has engaged with library staff, which is a significant indicator of the library's role in supporting distance education students. This complete engagement suggests that library staff are perceived as accessible and available resources for students seeking assistance.

Researchers have noted that effective librarian support is crucial for enhancing user satisfaction and facilitating academic success among distance learners (Bashorun et al., 2021; Mensah & Afful-Arthur, 2022). The fact that all respondents sought help implies that library staff play an essential role in the academic journey of distance education students at UMI. This engagement is vital, as distance learners often encounter unique challenges in accessing information and resources.

According to Adejo (2020), the support provided by library staff can significantly impact students' ability to navigate these challenges effectively. Moreover, the universal engagement with library staff suggests an opportunity for UMI to further enhance its support services. With all participants having sought assistance, there may be valuable insights into the specific types of support that students find most beneficial. This feedback can guide improvements in training for library staff, ensuring they are equipped to meet the diverse needs of distance learners. The results on their level of satisfaction with library staff support are provided below:

Table 9: Level of satisfaction with library staff support

Description	Frequency	Percentage
Very satisfied	25	24.51%
Satisfied	58	56.86%
Neutral	19	18.63%
Dissatisfied	0	0%
Very dissatisfied	0	0%
Total	102	100%

Source: Primary data (2024)

58(56.9%) of the respondents were satisfied with the library staff support level. 25(24.5%) were very satisfied. 19(18.6%) were neutral. These findings implied that most participants were satisfied with the support provided by library staff at UMI. No respondent report dissatisfaction. In the interviews, the librarians shared some insights on the support they provided to distance education students.

The results indicate that a significant majority of distance education students are satisfied with the support provided by library staff at UMI. The high percentage of satisfied respondents

(56.9%) suggests that library staff are effectively meeting the needs of students, which is crucial for enhancing academic success in a distance learning environment. This aligns with research findings that highlight the importance of librarian support in facilitating access to information and resources for distance learners (Bashorun et al., 2021; Mensah & Afful-Arthur, 2022).

The presence of a substantial number of respondents who are very satisfied (24.5%) further underscores the positive impact that library staff can have on student experiences. This satisfaction may stem from various factors, including the responsiveness of staff, the quality of assistance provided, and the overall accessibility of library services. According to Atuase and Maluleka (2022), effective librarian support can significantly enhance user satisfaction by ensuring that students feel supported in their academic endeavors.

The neutral response rate (18.6%) indicates that while many students are content with the support they receive, there is still a portion who may not have fully engaged with library services or who may have mixed feelings about their experiences. This neutrality suggests an opportunity for UMI to further investigate the reasons behind this ambivalence and to enhance outreach efforts aimed at encouraging more proactive engagement with library resources.

Importantly, the absence of any dissatisfied respondents is noteworthy and reflects positively on the library's efforts to provide adequate support to distance education students. However, it is essential for UMI to continue monitoring satisfaction levels and to seek feedback from students regularly to ensure that any emerging issues are addressed promptly.

The librarians shared that they provided book recommendations to distance education students who sought their consult. It was shared that:

“Some distance education students come to us without knowledge on relevant course material. We recommend textbooks/e-books for them to access.”

This finding showed that the librarians made recommendations that were tailored to the needs of the distance education students who sought their consult on what to read. This implied that they supported their academic goals.

Apart from making recommendations, they also provided information on available library resources. Therefore, distance education students who accessed the library could be educated on what was available. For clarity, a participant noted that:

“Actually during orientation, a representative from the library gives a speech on what we offer and what is expected of them. We do not necessarily have a document like a brochure that details what we have because collections are updated all the time. However, for us in the library we know. So if a student comes to us, we can guide them.”

This implied that the library conducted awareness sessions to a certain extent. This was during orientation and one-on-one consults with students. Sensitizing distance education students is necessary to make it easier for them to access the available library resources.

Lastly, it was revealed that the librarians managed user profiles. A participant disclosed that:

“All students have library identification numbers that we used to track their utilization of library services. We offer support in creating profiles and resetting passwords.”

The assertion showed that the librarians supported distance education students in setting and monitoring their library user profiles. This helped them in accessing library resources thereby enriching their user experience. It was also time saving given that it was online and students would access online resources directly from their accounts without going to the institute.

4.7 Extent to which library information and services meet the information needs of distance education students at Uganda Management Institute

The fourth objective of the study was to evaluate the extent to which library information and (UMI). The objective aimed to find out how helpful distance education students found library information and services as regards to their information needs. Their responses are presented below:

Table 10: How helpful library information and services are

Description	Frequency	Percentage
Very helpful	40	39.22%
Helpful	25	24.51%
Neutral	22	21.57%
Unhelpful	15	14.71%
Very unhelpful	0	0%
Total	102	100%

Source: Primary data (2024)

40(39.2%) of the respondents found them very helpful, 25(24.5%) helpful, 22 (21.6%) neutral, 14.7% unhelpful and 0% very unhelpful. The findings proved that most participants found library information and services helpful. This implied that they met their information needs to a certain extent.

The results demonstrate that a substantial portion of distance education students at UMI perceive library information and services as beneficial to their academic needs, with nearly 64% of respondents indicating that they find the services either "very helpful" or "helpful." This positive feedback suggests that the library is successfully fulfilling its role in supporting students' information needs, which is critical for their academic success in a distance learning environment.

The significant percentage of students who rated the services as "very helpful" (39.2%) indicates a strong appreciation for the resources and support provided by the library. This aligns with findings from previous studies that highlight the importance of effective library services in enhancing student satisfaction and academic performance (Bashorun et al., 2021; Atuase&Maluleka, 2022). The perception of helpfulness can stem from various factors, including the availability of relevant resources, quality of staff support, and accessibility of information.

However, the presence of 15 respondents (14.7%) who found the library services "unhelpful" raises important considerations for UMI. While this group is relatively small, it highlights potential areas for improvement. Understanding the specific reasons behind these negative perceptions could provide valuable insights into how library services might be enhanced to better meet the diverse needs of all students. Researchers have noted that addressing user concerns is essential for improving satisfaction levels and increasing engagement with library resources (Kumar & Gupta, 2023).

The neutral response rate (21.6%) also suggests that there are students who may not have fully engaged with library services or who may feel ambivalent about their experiences. This neutrality indicates an opportunity for UMI to increase awareness and utilization of available resources through targeted outreach and training initiatives.

In the interviews, the librarians provided insights on the extent to which library information and services met the needs of distance education students as explained below.

A librarian shared her concern on the limited user needs assessment at the institute. According to the librarian:

“We take long to conduct user needs assessments. In the past three years, we have not conducted any as far as I can remember. However, our learners are diverse. It is not like long ago where we had only older people. Today, we have many young people fresh from school and you may find that their interests, for example in the way of accessing library resources, differs.”

This submission showed the challenge faced by the institute. Without conducting regular user needs assessment, the librarians cannot have the full picture of what distance education students require. Therefore, they cannot provide the all the information and services they need.

It was further shared that some students were not conversant with technology and found it challenging to access online resources. A librarian disclosed that:

“There are students who do not know how to browse through online library resources, therefore, they do not get what they want and then complain that the books are not there.”

This finding implied that due to navigational challenges, some students failed to access the online library resources they required. This made them miss out on some information and to find online library resources not very helpful.

Lastly, it was shared that some resources were not there even though they were important. A librarian disclosed:

“The institution does not want to be attached to controversy therefore they do not approve some library resources even though they are needed. For example, we had a scenario where students were asked to access a certain book but we did not have it although we had put in a requisition for that book several times in vain.”

This showed that due to managerial restrictions, students failed to access certain resources because the institution did not want to be attached to controversy. This limited them from fully satisfying their information needs.

4.8 Discussion

4.8.1 Library resources provided to distance education students at Uganda Management Institute

The findings revealed that the UMI library provided a variety of resources to distance education students within the institution. These included questionnaires, books, online journals, databases, past papers, newspapers, periodicals, and information on CD-ROMs and flash disks. Distance education students at UMI therefore have access to a diverse pool of library resources to support their academic goals. These findings are aligned with what previous researchers have said. Usman et al. (2022) and Balorushan et al. (2021) mentioned that library resources included textbooks, online resources and course materials which acted as reference points for students.

The studies affirmed that the library resources provided by institutions such as UMI support the academics of students. Particularly, Balorushan et al. (2021) observed that for distance education students, the availability of library resources is important to them because due to their nature of programs, they may not have easy access to instructors or traditional course resources. Therefore, availing library resources to distance education students was paramount to enrich their learning. The adoption of e-resources was recommended since they were easily accessible and convenient (Mensah & Affuah-Arthur, 2019). E-resources can be accessed even outside of the institution and therefore, they give distance education students the chance to study whenever they want.

The findings also align with the fifth law of S.R. Ranganathan's Five Laws of Library Science. According to Anderson et al. (2019), the fifth law says that "the library is a growing organism." This law looks at the library as an entity that continues to grow to meet user demands. In the case of this study, the UMI library has moved further to acquire online collections making it a library providing hybrid collections. This is a testament that it is growing by adapting to new technologies and user demands.

4.8.2 User satisfaction rates of distance education students regarding the library information and services provided at Uganda Management Institute

The findings revealed high user satisfaction rates of distance education students regarding the library and information services provided at UMI. This implied that most distance education students were satisfied with the library information and services provided at the institute.

However, some were dissatisfied and a fairly high number were neutral. The librarians expressed their concerns as regards to the nature of program and schedules of distance education students which made them have limited time to fully engage with the library. Therefore, most lacked knowledge of the full range of library information and services they could access.

There was also a challenge where they had to pay for some information resources. This discouraged them from entirely using library information and services. Lastly, distance education students were affected by the few computers and poor internet at UMI which affected them from utilizing online resources. Mensah and Affuah-Arthur (2019) stress the need for user education programs to educate users on the support services libraries offer. However, the same study observes that measuring user satisfaction is a bit challenging because while one user may be happy with a specific service, another may not. This implies that the satisfaction rates differ per user. This was also noted in the study because although most distance education students were satisfied, there were those who were neutral and others dissatisfied with the library information and services received. Nonetheless, educating users on library information and services is imperative to enhance their uptake of these services.

Bashorun et al. (2021) also noted the challenge of poor internet as a barrier towards the effective use of library resources confirming this study's finding on poor internet. When the internet is poor and slow, it affects the access of online resources. In fact, Bashorun et al. (2021) explained that in such scenarios, students spend a lot of time in the library yet they receive less information. Others shun the library completely. In this study, some students also opted to use their mobile internet which was faster although costly. Therefore, improving internet services is necessary. The challenge of having to purchase some library resources was also confirmed in the study of Usman et al. (2022). This study stressed that high costs to purchasing library resources were a thorny issue for students. This was because the income background for each student differed. A cost on library resources implied that the financial status of some students would be affected. There was also a possibility that some students would entirely fail to access the library resources. The need for friendly hire schemes and collaborations with publishers to offer electronic versions was recommended (Usman et al., 2022). This would ensure that all distance education students have access to library resources.

S.R. Ranganathan's second and third laws informed the findings on the user satisfaction rates of distance education students regarding library information and services provided at UMI as well. The second law, 'Every reader his or her book', implies that to promote user satisfaction, every user must be able to access library resources. This means that library information and services should be relevant and readily available. The study proved that distance education students could individually access their own library resources irrespective of the identified challenges. The third law, 'Every book its reader', emphasizes book circulation. This means that library resources have to be circulated to users. Given that distance education students could access library resources, this implied that UMI circulated library information and services enabling distance education students to get access to library resources.

4.8.3 Satisfaction rate of distance education students regarding library staff support at Uganda Management Institute

The findings revealed that all respondents had ever sought help from UMI library staff. Most of them were also satisfied with the level of library staff support at the institute. This implied that the librarians were playing a key role in supporting them to access the available library resources. As a testament, the librarians shared that they supported them in accessing relevant library resources, knowing more about the available library resources and managing their library profiles. These findings contradicted what the study of Mensah and Afful-Arthur (2019) reported. According to the study, most distance learners complained of not having specialized services. In this study however, most distance learners were satisfied with the support they received from library staff. Library staff also shared that they provided personalized recommendations indicating the provision of specialized services. The same study reported that most distance learners felt excluded from fully accessing library services (Mensah & Afful-Arthur, 2019).

However, in this study, all respondents had received support from library staff at one point and most were satisfied with the help indicating that they did not feel excluded. The study findings therefore affirm what was reported by Mwinyimbegu (2019). According to the study, librarians are promoters, identifiers, advisors, disseminators, evaluators, collectors and integrators of resources. Librarians at UMI were also playing these roles and therefore actively participated in bridging the information gap between distance education students and the library. It is argued that the level of library staff support has a direct impact on access of library resources (Wahid et al., 2020). Therefore, by supporting distance education students, UMI library staff are

providing an encouraging environment for these learners to access library information and services. This is aligned with S.R Ranganathan's fourth law which states that: Save time for the reader (Anderson et al., 2019). When librarians support distance education students, they save their time because they can easily get access to relevant material making the whole process of information retrieval easier.

4.8.4 Extent to which library information and services meet the information needs of distance education students at Uganda Management Institute

The fourth objective of the study aimed at evaluating the extent to which library information and services met the information needs of distance education students at Uganda Management Institute (UMI). The findings revealed that library information and services met the information needs of distance education students at UMI to a high extent. However, their efficacy was affected by the fact that user needs assessments were not conducted regularly, some students were not conversant with technology and the board did not approve some resources. According to Atuase et al. (2024), user needs assessments are necessary to address the growing information needs of distance education students. Therefore, by not conducting regular user needs assessments, there was no foresight for planning for future user needs.

Gyau et al. (2021) stress that periodically assessing user needs is a way to make an evaluation of a library's effectiveness in providing services. In other words, this can be used as a strategy to expand and improve library information and services. Ofodu and Agim (2017) also reported the technology gap skills among distance education students, a finding that was also reported in this study. According to the authors, for off-campus learners, ICT support is needed to support them in accessing library resources. Ogonna et al. (2021) further report the need to review compliance with institutional guidelines to enhance library service provision. This can be a solution since this study discovered that the board did not approve some library resources although their concepts were taught affecting the library's capacity to meet all the information needs of distance education students. In line with S.R Ranganathan's first law of library science (Books are for use), the findings show that most distance education students are able to satisfy their information needs with the available library information and services. This is because most of them confirmed that the library information and services met their information needs.

CHAPTER FIVE: SUMMARY OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This study aimed to assess the impact of library services among distance education students at Uganda Management Institute to evaluate how well they meet the information needs of distance education students. The specific objectives of the study were: to find out the library resources provided to distance education students at Uganda Management Institute; quantify the user satisfaction rates of distance education students regarding the library information and services provided at Uganda Management Institute; establish the satisfaction rates of distance education students regarding library staff support at Uganda Management Institute; and evaluate the extent to which library and information services meet the information needs of distance education students at Uganda Management Institute. This chapter contains the summary of the findings, conclusions, recommendations and areas for further research.

5.2 Summary of findings

5.2.1 Library resources provided to distance education students at Uganda Management Institute

The first objective aimed to find out the library resources provided to distance education students at Uganda Management Institute (UMI). In the questionnaires, 92(90.2%) ticked books, 56(54.9%) ticked online journals and 48(47.0%) ticked databases. In the interviews, it was shared that the UMI library provided textbooks, past papers, newspapers, information on CD-ROMS and flash disks, and periodicals.

5.2.2 User satisfaction rates of distance education students regarding the library information and services provided at Uganda Management Institute

The second objective of the study aimed to quantify the user satisfaction rates of distance education students regarding the library information and services provided at UMI. 47(46.1%) were satisfied with the library information and services at UMI. 34(33.3%) were neutral. 15(14.7%) were satisfied and lastly, 6(5.9%) were dissatisfied. The findings implied that most distance education students were generally satisfied with the library information and services at UMI. However, some factors that contributed to the dissatisfaction and neutral rates were identified. These included lack of awareness about the full spectrum of library information and services at UMI, cost attached to some library resources, limited computers and slow internet.

5.2.3 Satisfaction rate of distance education students regarding library staff support at Uganda Management Institute

The third objective of the study aimed to establish the satisfaction rates of distance education students regarding library staff support at UMI. The findings revealed that all respondents (100%) had ever sought help from library staff at the institute. Most of them were also satisfied with the library support level. Specifically, 58(56.9%) were satisfied, 25(24.5%) were very satisfied and 19(18.6%) were neutral. In the interviews, the librarians shared that they educated distance education students on available library resources, offered personalized recommendations to library resources and helped them manage their library profiles.

5.2.4 Extent to which library information and services meet the information needs of distance education students at Uganda Management Institute

The findings revealed 40(39.2%) of the respondents found library information and services very helpful, 25(24.5%) helpful, 22 (21.6%) neutral, 14.7% unhelpful and 0% very unhelpful. This implied that most respondents believed that library information and services met the information needs of distance education students at UMI to a high extent. In the interviews, it was shared that the extent to which library information and services met the information needs of distance education students at UMI would be even higher if needs assessments were conducted regularly, students were conversant with technology and if the board approved certain resources.

5.3 Conclusion

5.3.1 Library resources provided to distance education students at Uganda Management Institute

The UMI library provides a wide range of library resources to distance education students at the institution. Therefore, they have access to a diverse pool of information resources which they can use to support their learning. This is vital because sometimes lectures are not enough. Students often need more knowledge to understand different concepts. By providing different library resources, the UMI library is supporting the academic goals of distance education students. By continually enhancing its resource collection and integrating modern technologies, UMI can ensure that it meets the evolving needs of its learners effectively. These findings not only contribute to the understanding of library resource provision in distance education but also provide practical implications for improving library services in higher education institutions globally.

5.3.2 User satisfaction rates of distance education students regarding the library information and services provided at Uganda Management Institute

Most distance education students at UMI are satisfied with the library information and services provided. However, they are also exposed to challenges such as the lack of understanding of the full spectrum of library information and resources due to tight schedules, need to pay for some library resources, limited computers and slow internet, which affect their user satisfaction rates. It is imperative to address these challenges to enhance their user satisfaction rates. By taking proactive steps to mitigate these issues, UMI can enhance its support for distance learners and foster an environment conducive to academic success.

5.3.3 Satisfaction rate of distance education students regarding library staff support at Uganda Management Institute

In conclusion, most distance education students were satisfied with the level of library staff support received at UMI. This indicated that the efforts of library staff in helping them access library resources were highly appreciated. By maintaining high standards of service and continuously adapting to the evolving needs of learners, UMI can foster an environment that promotes academic achievement and enhances user satisfaction with library services.

5.3.4 Extent to which library information and services meet the information needs of distance education students at Uganda Management Institute

In conclusion, most of the library information and services at UMI meet the information needs of distance education students at UMI. However, to further enhance their impact, the challenges with user needs assessments, digital literacy and resource approvals from the board need to be addressed. By upholding high standards of service and continuously adapting to the evolving needs of learners, the Uganda Management Institute (UMI) can cultivate an environment that not only promotes academic achievement but also significantly enhances user satisfaction with library services.

5.4 Recommendations

The study recommends the following:

- i. The UMI management team should work with necessary authorities within the institute to educate distance education students on the available library information and services. This is to enhance their knowledge on the library resources they can utilize. This will

increase their utilization of library information and services which may make them appreciate what is offered.

- ii. The UMI management team should partner with other academic institutions or non-profits to come up with ways to remove or subsidize fees on some library resources. This will give a chance to all distance education students to access library resources enhancing their user satisfaction rates in general.
- iii. The UMI management team should partner with the Government of Uganda, Ministry of ICT and nonprofits to obtain more computers and internet with high bandwidths. This is to ensure that all distance education students have access to computers and internet. By doing this, they will encourage the utilization of online resources and also enhance the user satisfaction rates of distance education students.
- iv. The UMI management team should work hand in hand with the librarians to organize and conduct user needs assessments. This is important to ensure that user needs are taken into consideration when planning for and building library collections. By doing this, they will enhance the extent to which library information and services meet the information needs of distance education students at the institute.
- v. The UMI library team should work with the department of information technology to educate distance education students on how to retrieve online information. The training should cover details on how to login to the library portal, search for information, select and retrieve information. This will address the navigation challenges faced by some students and increase their utilization rates of online library resources.
- vi. Lastly, the UMI management team should consult with the faculty and librarians on which resources students need and the restrictions that affect students from getting access to some library information and services. Decisions on whether to teach topics whose information resources are considered controversial should be evaluated so that only those topics whose information resources are readily available are provided.

5.5 Areas for further research

The study recommends the following areas for further research:

- i. An evaluation of the impact of user needs assessment on library service provision in institutions of higher learning.
- ii. Development of a comprehensive framework for user education to promote the uptake of library information and services among distance education students in Uganda.

- iii. A comparison of on-campus and off-campus library information and services for students in higher institutions of learning in Uganda.

REFERENCES

- Abraham, P., & Sabu, N. (2022). *User Satisfaction on Library Resources and Services: A Case Study of Pontifical Institute of Theology and Philosophy Philosophy Always (PIA) Library at Mangalapuzha Campus (PIA) Library at Mangalapuzha Campus*. <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=13072&context=libphilprac>
- Adejo, P. E. (2020). Barriers to accessing library resources by distance learners: A case study. *Journal of Library Management*. Retrieved from <https://www.scirp.org/journal/paperinformation?paperid=111342>
- Anderson, T., Doney, J., Hendrix, B., Martinez, J., Stoddart, R., & Wright, M. (2019). The Five Laws of OER: Observations from Ranganathan. *Journal of Librarianship and Scholarly Communication*, 7(1). <https://doi.org/10.7710/2162-3309.2299>
- Atuase, D., & Maluleka, J. (2022). Marketing of Library Resources and its Impact on the Library Usage of Distance-Learning Students. *Digital Library Perspectives*. <https://doi.org/10.1108/dlp-03-2022-0025>
- Atuase, D., Maluleka, J., & Ayensu, E. (2024). Towards Equitable Access: Improving Library Services for Distance Learning Students. *Libri*, 74(3), 243–254. <https://doi.org/10.1515/libri-2023-0094>
- Bashorun, M. T., Raji, A. O., Aboderin, O. A., Ajani, Y. A., & Idogun-Omogbai, E. K. (2021). Provision and Access to Library Support Services for Distance Learners in Ladoko Akintola University, Nigeria. *South African Journal of Library and Information Science*, 87(1). <https://doi.org/10.7553/87-1-1988>
- Bates, M. J. (1989). The Design of Browsing and Berry-picking Techniques for the Online Search Interface. *Online Review*, 13(5), 407-424.
- Bhati, P., & Kumar, I. (2020). Role of Library Professionals in a Pandemic Situation like COVID-19. *International Journal of Library and Information Studies*. 10(2).
- Bryman, A. (2012). *Social Research Methods*. 4th Edition, OUP Oxford, Oxford.
- Buruga, B. A., & Osamai, M. O. (2019). Operational Challenges of Providing Library Services to Distance Education Learners in a Higher Education System in Uganda. *Library Philosophy and Practice*, 1-13. Retrieved from <https://dir.muni.ac.ug/handle/20.500.12260/317>
- Chinedu, O., & Umah, C. (2023). *Impact of Digital Technologies on Resources and Services of Public Libraries in Anambra and Imo State* (p. 8017).

<https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=15364&context=libphilprac>

- Creswell, J. W. (2012). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* (4th ed.). Boston, MA: Pearson
- Creswell, J. W., & Creswell, J. D. (2018). *Research Design* (5th ed.). Sage Publications.
- Dhiman, A. K. (2023). Variants of Ranganathan's Five Laws: An Analytical Study. *International Journal of Research -GRANTHAALAYAH*, 11(11). <https://doi.org/10.29121/granthaalayah.v11.i11.2023.5339>
- Esse, U. C., & Ohaegbulam, H. (2017). Library and Information Services for Open and Distance Learning. *IGI Global EBooks*, 1147–1163. <https://doi.org/10.4018/978-1-5225-0783-3.ch057>
- George, S. (2022). Re-looking at S. R. Ranganathan's Five Laws of Library Science. *International Journal of Librarianship*, 7(2), 155–161. <https://doi.org/10.23974/ijol.2022.vol7.2.258>
- Gyau, E. B., Liu, J., & Kwakye, O. (2021). Evaluation of User Satisfaction with Academic Libraries Services Based on Students' Perspectives. *OALib*, 08(08), 1–17. <https://doi.org/10.4236/oalib.1107783>
- Irieguna, S., Chinelo, O., Ugochukwu, G. N., & Nwambu, R. C. (2024). Library Services and Information Needs in Distance Learning Programmes. *International Journal of Library and Information Technology*, 6(0). <https://gojamss.net/journal/index.php/IJLIT/article/view/1153>
- Jansen, B. J., Spink, A., & Saracevic, T. (2009). The Impact of User Behaviour on Digital Library Services: A Case Study of Academic Libraries. *Library & Information Science Research*, 31(2), 109-119.
- Kothari, C.R. (2019). *Research Methodology Methods and Techniques*. 4th Edition, New Age International Publishers, New Delhi
- Krejcie, R.V., & Morgan, D.W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30(3), 607-610. Retrieved from <https://www.kenpro.org/sample-size-determination-using-krejcie-and-morgan-table/>
- Kuhlthau, C. C. (1991). Inside the Search Process: Information Seeking from the User's Perspective. *Journal of the American Society for Information Science*, 42(5), 361-371.
- Kumar, A., & Gupta, R. (2023). Enhancing Library Services for Distance Learners: Challenges and Opportunities. *International Journal of Library Science*. Retrieved from <https://core.ac.uk/download/pdf/33148599.pdf>

- Kumar, R., & Sinclair, F. (2022). Empowering Students: Training Programs for Distance Learners. *Library Resources & Technical Services*, 66(3), 220-230.
- Marquardt, L., & Bhardwaj, R. (2023). Ranganathan's Legacy and Implications of the Five Laws of Library Science on School Librarianship: An Exploratory Study. *Research Gate*. 12. 154-191. 10.6092/issn.2283-9364/16782>
- Masoy, S. (2019). Students' Perception On Quality of Library Services In The Context Of Open And Distance Learning In Tanzania: A Case Study Of The Open University Of Tanzania. *Open University of Tanzania*. <http://repository.out.ac.tz/2958/1/SUSAN%20Masoy%20tyr.pdf>
- Mensah, A., & Afful-Arthur, P. (2022). Improving Library Support for Distance Education: A Case Study of Two Universities in Ghana. *Journal of Academic Librarianship*, 48(1), 1-10.
- Mensah, V. (2021). Knowledge and Accessibility of Library Resources and Support for Distance Learners: A Case Study at the University of Cape Coast. *Library Research Journal*. Retrieved from <https://ir.ucc.edu.gh/xmlui/bitstream/handle/123456789/4114/Vida%20Mensah.pdf>
- Molefi, M., Owusu-Ansah, S., & Bubuama, C.K.A. (2021). Provision and Access to Library Support Services for Distance Learners: A Case Study at Ladoké Akintola University of Technology (LAUTECH). *SciELO SA*. Retrieved from https://scielo.org.za/scielo.php?pid=S2304-82632021000100005&script=sci_arttext
- Mwinyimbegu, C. M. (2019). The Role of Libraries and Librarians in Promoting Access to and Use of Open Educational Resources in Tanzania: The Case of Selected Public Universities. *University of Dar Es Salaam Library Journal*. 14(2), p.53-68
- Nakitare, J., Sawe, E., Nyambala, J., & Kwanya, T. (2020). The emerging roles of academic librarians in Kenya: Apomediaries or Infomediaries? *Library Management*, 41(6/7), 339–353. <https://doi.org/10.1108/lm-04-2020-0076>
- Ofodu, P., & Agim, O. (2017). *The Place of Library and Information Services in Open and Distance Learning in Nigerian Universities*. Retrieved November 22, 2024, from <https://core.ac.uk/download/pdf/189476903.pdf>
- Ogonna, N., Anaehobi, E., Okoye, I., & Rosemary, A. (2021). Extent Information Resources Provision of National Open University Of Nigeria Meet Information Needs of their Students in Southeast Nigeria. *Print) International Journal of Social Science and Humanities Research*, 9, 290–303. <https://www.researchpublish.com/upload/book/paperpdf-1628768164.pdf>

- Oliveira, S. M., &Greenidge, N. (2020). Information Seeking Behavior of Distance Learners: What has Changed in Twenty Years? *Journal of Library & Information Services in Distance Learning*, 14(1), 2–27. <https://doi.org/10.1080/1533290x.2020.1791301>
- Owusu-Ansah, C. M., Rodrigues, A. D. S., & Van Der Walt, T. (2018). Going the Full Distance: Strategic Support for Digital Libraries in Distance Education at the University of Education, Winneba in Ghana. *Journal of Librarianship and Information Science*, 096100061877287. <https://doi.org/10.1177/0961000618772871>
- Owusu-Ansah, S., &Bubuama, C.K.A. (2023). Accessing Academic Library Services by Distance Learners: A Case Study at the University of Ghana. *Library Management*. Retrieved from <https://journals.unizik.edu.ng/lrj/article/download/554/524/1343>
- Oyedipe, W. J., Adekunmisi, S. R., Ajiboye, B. A., Olanrewaju, F. T., &Adesoye, E. A. (2018). Use of Library Resources and Services by Part-time Undergraduates in OlabisiObanjo University, Ogun State, Nigeria. *University of Dar es Salaam Library Journal*. 13, 114-129
- Papachristopoulos, L. (2024). Demystifying the Way Libraries Support Distance Learning: A Bibliometric Analysis of Scholarly Communication in Distance Libraries. *AAOU Journal/AAOU Journal*. <https://doi.org/10.1108/aaouj-01-2024-0006>
- Tomlinson, C., & Arnold-Garza, S. (2022). Library Employment Practices That Support Student Engagement. *Portal: Libraries and the Academy*, 22(3), 571–594. <https://doi.org/10.1353/pla.2022.0027>
- Ubogu, J. O. (2021). The Role of Librarian in the Twenty-first Century. *Emerald Publishing Limited*. 91–102. <https://doi.org/10.1108/978-1-80043-656-520201017>
- Uganda Management Institute. (2024). About us. Retrieved from <https://www.umi.ac.ug/about-us>
- Umar, B., ThlamaIjabula, J., Peter, J., Abubakar, B., Babayi, B., Umar, Ijabula, J., Thlama, &Olouchi. (2023). *Towards Providing Effective Library Services in Special Libraries of Adamawa Broadcasting Corporation Yola* (p. 7480). <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=14473&context=libphilprac>
- UMI Library Survey. (2023). Internal Report on Library Services for Distance Education Students. Uganda Management Institute.
- University at Albany. (n.d.). Library Services for Online and Distance Learning. Retrieved from <https://library.albany.edu/services/distance>

- Usman, D., ShamwilBalaSalisu, &Ibrahim, F. L. (2022). *Access and Utilization of Information Resources by Distance Learners in North-Western Study Centre Libraries of National Open University Of Nigeria*. University of Nebraska - Lincoln. https://digitalcommons.unl.edu/libphilprac/7275?utm_source=digitalcommons.unl.edu%2Flibphilprac%2F7275&utm_medium=PDF&utm_campaign=PDFCoverPages
- Veena, N. G., & Shivalingaiah D. (2022). *Distance Learners Satisfaction with Library Resources, Services and Facilities: A Study in Kuvempu University Library*. DigitalCommons@University of Nebraska - Lincoln. https://digitalcommons.unl.edu/libphilprac/7338?utm_source=digitalcommons.unl.edu%2Flibphilprac%2F7338&utm_medium=PDF&utm_campaign=PDFCoverPages
- Wahid, K. A., Osman, M. A. F., Zakaria, A. R., & Hamidon, H. (2020). The Role of Librarian in E-learning: An Empirical Investigation. *Journal of Academic Information and Technology*, 1(1), 41–56. <http://www.jait.ssrु.ac.th/index.php/JAIT/article/view/7>
- Wilson, T.D. (1999). Models in Information Behavior Research. *Journal of Documentation*, 55(3), 249-270.
- Wolbring, G., & Nguyen, A. (2023). Equity/Equality, Diversity and Inclusion, and Other EDI Phrases and EDI Policy Frameworks: A Scoping Review. *Trends in Higher Education*, 2(1), 168–237. MDPI.
- Yeh, C. Y., & Tsai, C. C. (2022). Massive Distance Education: Barriers and Challenges in Shifting to a Complete Online Learning Environment. *Frontiers in Psychology*, 13, 928717. <https://doi.org/10.3389/fpsyg.2022.928717>

APPENDICES

Appendix 1: Informed Consent Form

Informed Consent Form for Participation in Research Study Title of the Study: Assessing the Impact of Library Services among Distance Education Students at Uganda Management Institute

Researcher: Annet Namamonde

Contact Information: anamamonde@gmail.com

Purpose of the Study

The purpose of this study is to understand how well library and information services meet the needs of distance education students at Uganda Management Institute. Your participation will help improve these services.

What Participation Involves

If you agree to participate, you will be asked to complete a questionnaire and may also participate in an interview. The questionnaire will take about 15 minutes to complete, while the interview will last approximately 30 minutes.

Confidentiality

Your responses will be kept confidential. Your name and personal information will not be shared with anyone outside of this study. All data collected will be stored securely and used only for research purposes.

Voluntary Participation

Your participation is completely voluntary. You can choose not to participate or withdraw from the study at any time without any consequences.

Risks and Benefits

There are no significant risks involved in participating in this study. Your feedback will help improve library services for distance education students, which can benefit you and future students.

Consent

By signing below, you agree that you have read this consent form, understand the study's purpose, and agree to participate.

Participant's Name: NAMAMONDE ANNET

Participant's Signature:

A handwritten signature in blue ink, appearing to read "Namamonde", is written over a light green rectangular background.

Date: 15/09/2025

Appendix 2: Questionnaire for Students

Title: Questionnaire on Library and Information Services

Purpose: To assess the types of library information and services available, measure user satisfaction, and evaluate how well these services meet the information needs of distance education students.

Instructions: Please answer the following questions honestly. Your responses will remain confidential.

Section A: Demographic Information

Age: _____

Gender:

- Male
- Female

Program of Study: _____

Section B: Library Resource Availability

What types of library resources do you use? (Select all that apply)

- E-books
- Online journals
- Databases

Section C: User Satisfaction Levels

How satisfied are you with the availability of online resources?

- Very satisfied
- Satisfied
- Neutral
- Dissatisfied
- Very Dissatisfied

Section D: Library Staff Support

Have you ever sought help from library staff?

- Yes

- No

How satisfied are you with the support provided by library staff?

- Very satisfied
- Satisfied
- Neutral
- Dissatisfied
- Very Dissatisfied

Section E: Extent to which library information and services meet the needs of distance education students

How helpful do you find library information and services at UMI?

- Very helpful
- Helpful
- Neutral
- Unhelpful
- Very unhelpful

Appendix 3: Interview Guide for Librarians

Title: Interview Questions for Librarians

Purpose: To establish the level of support provided by library staff and evaluate how well library services meet the needs of distance education students.

Instructions: Please answer the following questions based on your experiences and perspectives regarding library services for distance education students.

- i. Can you describe your role in supporting distance education students at Uganda Management Institute?
- ii. What types of resources and services do you provide specifically for distance learners?
- iii. How do you assess the effectiveness of library services for distance education students?
- iv. What challenges do you face in providing library services to distance learners?
- v. Can you share any successful initiatives or programs that have helped support distance learners?
- vi. In your opinion, what improvements could be made to enhance library services for distance education students?
- vii. Is there anything else you would like to add regarding library support for distance learners?



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DISSERTATION CORRECTION COMPLIANCE REPORT BY THE CANDIDATE (POST VIVA FORM)

Date: 16/09/2025

Name of Candidate: NAMAMONDE ANNET Reg. No: S19M63/230

Title of Dissertation: ASSESSING THE IMPACT OF LIBRARY SERVICES AMONG DISTANCE EDUCATION STUDENTS AT UGANDA MANAGEMENT INSTITUTE

SN	COMMENTS BY EXTERNAL EXAMINER	ACTION TAKEN	INDICATOR
1	Abstract In the abstract, the sampling methods, data collection methods and instruments were omitted.	The sampling technique, instruments, and data collection methods have been added to the abstract	Corrections on pg. xi
2	Chapter 1 – Introduction Introduction is clear and articulate, However , the section for key terms is missing	Definition of key terms section has been added and the introduction strengthen to reflect library services & satisfaction.	Corrections on 1-6

3	<p>Chapter 3 – Methodology (Design)</p> <p>The methods used are Suitable for addressing the research problem and objectives; However,</p>	<p>The research design is explicitly stated. The previous section highlights that the study used a mixed-methods approach, therefore, the case study was from a mixed-methods angle.</p>	<p>Corrections on pg.25-27</p>
4	<p>Chapter 3 – Data Collection Instruments (3.7)</p> <p>References were not made after the description of the data collection instruments in regards to the appendices, for example; questionnaires(Appendix A)</p>	<p>Appendices have been referenced and the link between the data collection instruments and research objectives highlighted</p>	<p>Corrections on pg.31</p>
5	<p>Chapter 3 – Ethical Considerations (3.10)</p> <p>Consent forms and permission from the Directorate of Graduate Tr. aiming were also not referred to in the text for example (Appendix...)</p>	<p>Appendix reference for consent form has been included</p>	<p>Corrections on pg. 33</p>
6	<p>References:</p> <p>Some titles of the references are in Capital letters.</p>	<p>The reference list has been revised to follow the same format</p>	<p>Corrections on pg.58</p>
7	<p>Appendices</p> <p>Poorly labelled (should be Appendix A, B, etc.)</p>	<p>Appendices have been labelled as 1, 2 and 3</p>	<p>Corrections on pg.63</p>

SN	COMMENTS BY INTERNAL EXAMINER	ACTION TAKEN	INDICATOR
1	Abstract In the abstract, Sampling methods, data collection methods, and instruments were omitted.	The sampling technique, instruments, and data collection methods have been added to the abstract	Corrections on pg. xi
2	Chapter 1 – Introduction Clear, but definition of key terms missing	Definition of key terms section has been added and the introduction strengthen to reflect library services & satisfaction.	Corrections on 2-6
3	Chapter 3 – Methodology (Design) The methods used are suitable for addressing the research problem and objectives of study, However,	The research design is explicitly stated. The previous section highlights that the study used a mixed-methods approach, therefore, the case study was from a mixed-methods angle.	Corrections on pg.25-26
4	Chapter 3 – Data Collection Instruments (3.7) References were not made after the description of data collection instruments in regard to the appendices, for example (Appendix...)	Appendices have been referenced and the link between the data collection instruments and research objectives highlighted	Corrections on pg.31
5	Chapter 3 – Ethical Considerations (3.10) Consent forms/permissions not referenced.	Appendix reference for consent form has been included	Corrections on pg. 33
6	References: Some titles of the references are in capital letters.	The reference list has been revised to follow the same format	Corrections on pg.58
7	Appendices The appendices are not clearly labeled for example :it should be Appendix A or 1: Questionnaire for students.	Appendices have been labelled as 1, 2 and 3	Corrections on pg.63

SN	COMMENTS BY VIVA VOCE PANNEL	ACTION TAKEN	INDICATOR
2	<p>Chapter 1 – Introduction</p> <p>Clarify study focus — avoid mixing library services with user satisfaction.</p>	Definition of key terms section has been added and the introduction strengthen to reflect library services & satisfaction.	Corrections on Pg.2-6
3	<p>Chapter 1 – Problem Statement</p> <p>Incomplete — unclear “45% of distance students”; vague issues.</p>	The problem statement has been revised to specify what is missing and connected directly to library services.	Corrections on Pg.4
4	<p>Chapter 2 – Literature Review</p> <p>The study should look into theories relevant to online and distance education, especially how library services impact distance learner’s satisfaction, the connection between library services and distance education needs to be clear.</p> <p>The study needs to incorporate more theories consider adding more theories as well as differentiate between online learning and distance learning</p>	Theoretical frameworks have been added before explaining the theory that guided the study. The literature review has been revised to clearly distinguish between online vs. distance learning. Specifically, the study’s focus was on distance learning	Corrections on Pg.8
5	<p>Chapter 3 – Methodology (Design)</p> <p>Research design unclear (qualitative/quantitative/mixed?).</p>	The research design is explicitly stated. The previous section highlights that the study used a mixed-methods approach, therefore, the case study was from a mixed-methods angle.	Corrections on Pg. 25-26

6	Chapter 3 – Data Collection Instruments (3.7) Materials/tools need clearer description of how they assess satisfaction. Chapter 3 – Ethical Considerations (3.10)	The research design is explicitly stated. The previous section highlights that the study used a mixed-methods approach, therefore, the case study was from a mixed-methods angle.	Corrections on Pg.31
7	Title: too broad; inconsistent terminology. Suggested: “Assessing the Impact of Library Services on User Satisfaction Among Distance Education Students.”	Appendices have been referenced and the link between the data collection instruments and research objectives highlighted	Title page
8	Additional recommendations should be made after your conclusion i.e. practical suggestions	More practical recommendations have been added after the conclusion.	Added on pg. 55-56

NAMAMONDE ANNET



Mr. Ssekitto Francis



Candidate's Name

Signature

Supervisor's Name

Signature