

Exploring the perceived level of satisfaction with the quality of library services in university libraries in Tanzania

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ABSTRACT

This study explores the perceived level of satisfaction with the quality of library services (QLS) in university libraries in Tanzania. Specifically, the study analyzed the extent to which services influence library users' level of satisfaction and assessed how users perceive their satisfaction with the quality of library services. The study was guided by the SERVQUAL model, and it used a cross-sectional research design. The population of this study involved academic staff, students, heads of higher learning institutions, directors of libraries, quality assurance officials, heads of departments in the libraries, and library staff, amounting to 64,988 and Simple random sampling and purposive sampling procedures were used to select 397 respondents and 68 key informants. Questionnaires and interviews were used to collect data and were analyzed using the Statistical Package for Social Sciences (SPSS) tool version 20 and content analysis for qualitative data. The key findings revealed that 75% of library staff were approachable, polite, friendly, empathetic, and available to respond timely to users' needs. Moreover, 61.2% indicated that time provided for using the library was adequate for users, and results from binary logistic regression show that noise, poor photocopy services, lack of air conditioning, lack of weekend services, and early closing time had a statistically significant influence on users' satisfaction with library services. Moreover, the study found that 38% opined that a good library provides users with advisory services; sufficient collection was mentioned by 33.8%. Seating arrangements and an attractive environment to learn were rated at 47.9%. However, 13% disagreed that a good library provides reservation/booking services. The study therefore concluded that library users were satisfied by the university libraries' services in terms of collection, environment, staff, facilities, and services provided. Library management should have a current collection/facilities, a conducive environment, trained staff, and adequate furniture.

Keywords: Library Users, Librarians Perception, Tanzania, University Libraries, Quality of Library Services

I. INTRODUCTION

The functions of university libraries are to support and contribute to university activities which includes teaching, learning research and consultancy. The library acquires information materials, catalogue, classify/organize information and disseminate it according to its users. Information has been identified as important key to cover all development of human being (United Nations, 2022). According to Robinson (2022) academic library is the central organ of the university, in which together with good laboratories and faculties form an important parameter of judging the status and quality of the university. On the other hand, Mubofu *et al.* (2020) described library as an establishment charged with the responsibility for acquiring books, making them accessible to those who require them and converting every person in its neighbourhood into habitual library users. Therefore, the library must create a balance between specific research and information needs and a usable collection of information materials to meet the need of the university's academic programmes. According to Ashilungu and Onyancha (2024), an academic library has the mission to build and maintain a collection that will support academic needs of the university and provide access to all sources of information. Similarly, Khan and Shahzad (2024) observes that, the role of the university library is to achieve academic excellence and thus; the library has to play vital role since a university is incomplete without a good library.

Studies have shown strong correlations between information quality and use as well as between user perceptions and satisfaction. These relationships have been influencing changes in library operations towards improving the quality of library services provision (LSP) (Shahzad *et al.*, 2021). Rapid technological advancements in information science have changed how libraries provide services. It has redefined how information is collected and increased demands on the skills of library staff, library facilities, and the entire infrastructure of libraries (Vijayalatha, 2023). Through post-utilization evaluations, library decision makers are concentrating on raising service standards and enhancing the user experience. For service-oriented businesses, customer satisfaction is essential since happy customers are devoted,

upbeat, and likely to recommend services. According to Kaushik (2022), service quality is determined by users' assessment of their experience with the product or service obtained. This study aimed at exploring the perceived level of satisfaction with the quality of library services on university libraries in Tanzania. It focused on five key entities: library staff, library services, library collection, library as a place, library facilities, and how they impact the actual experience of library users and their satisfaction levels.

1.1 Statement of the Problem

The impact of perception on the utilization of university library resources and facilities cannot be underestimated. According to Khan and Shahzad (2024), there has been a shift from traditional library services to a modern approach. This shift has influenced how library users perceive information services offered and how they utilize it. Additionally, the rise of ICTs has led to increased access to information through the internet, resulting in decreased interest in traditional library services. This, in turn had a negative impact on the reputation and relevance of libraries (Idowu & Oso, 2022; and Mushi *et al.*, 2020). While this shift from traditional library service provision is well documented from other studies above, the situation is opposite from Tanzanian experience, where the perceptions and satisfaction of university libraries exhibiting hybrid environment services is unknown. This warranted the present study.

1.2 Research Objectives

- i. To analyse the extent to which the library services influences library users' level of satisfaction
- ii. To assess how library users, perceive their satisfaction with the quality of library services.

1.3 Research Questions

- i. How does various type of services contribute to overall satisfaction of library users?
- ii. What factors shape users' perceptions on quality services?

II. LITERATURE REVIEW

2.1 Theoretical Review

The ServQual framework was used in this study because of its worldwide efficacy in assessing service quality. ServQual, which was created by Parasuraman *et al.*, (1988), it measures the discrepancy between user expectations and perceptions in order to determine the quality of a service. It focuses on five main elements, which can be summed up as follows: Assurance (staff trust and confidence), Empathy (individualized attention), Responsiveness (timely support), Reliability (constant and correct service delivery), and Tangibles (physical facilities and personnel appearance). When real service meets or exceeds expectations, it is considered high-quality service.

Because it highlights user perceptions, finds gaps in service delivery, and establishes a direct correlation between service quality and user pleasure, the ServQual model is frequently used. It is versatile and adjustable to library settings, enabling organizations to evaluate not only conventional services but also digital resources, librarian knowledge, and information accessibility. It is a useful tool for continual improvement since it also makes benchmarking between institutions or over time possible.

2.2 Empirical Review

An empirical review evaluates previous studies that observed at a topic using actual data. Golder *et al.*, (2023) orated that empirical review emphasizes what was investigated, how it was investigated, and the results summarizing the available data, pointing out research gaps and trends, and demonstrating how the present study expands on earlier findings. Empirical reviews, as opposed to theoretical reviews, are based on real study findings rather than theoretical ideas Pandey, (2024). Based on the two specific objective of this study empirical literature review is presented as follows.

2.2.1 The Extent to which the Library Services Influences Library Users' Level of Satisfaction

The degree to which library services affect users' satisfaction in academic libraries has been the subject of investigations. The results typically indicate that the main factors influencing user satisfaction are the quality, availability, and sufficiency of library services. In a study on Tanzanian university libraries, Mbua, (2025) discovered that the accessibility of ICT resources, the effectiveness of librarians, and the availability of current information resources have major impact on user satisfaction. The study found that library users are less satisfied when services are delivered slowly and with inadequate infrastructure. Similarly, Alam and Mezbah-ul-Islam, (2021) found that user-oriented services, efficient communication, and prompt service delivery have a high positive correlation with satisfaction among Bangladeshi university students.

A related study by Okello-Obura and Ikoja-Odongo (2019) examined the quality of library services in East African institutions and found that aspects including assurance, responsiveness, tangibility, and reliability have a direct

impact on user satisfaction. According to the survey, patron satisfaction was higher in libraries that integrated ICT services and had longer hours.

Additionally, Kaishe-Mulungu, *et al.*, (2024) looked at how Library service provision including digital resources enhance users' satisfaction in Tanzania university libraries. The results showed that having access to up-to-date digital repositories, online databases, and e-resources greatly increases user satisfaction, especially for postgraduate, lecturers and researchers' users. On the other hand, variables that negatively impact user experience were found to include noise, unstable power supply, inadequate photocopying services, low bandwidth and lack of air conditioning. Similarly, Devi and Bhatt, (2024) discovered that regular feedback mechanisms and user involvement in library service planning enhanced the perceived quality of library services and, in turn, satisfaction level.

Over all empirical studies revealed that, user satisfaction is largely determined by the quality of library services, library collection, library as a place, librarians' knowledge and skills as well as library facilities including the accessibility of relevant information resources, ICT adoption, staff response, and physical facilities. As a result, improving user experiences at academic institutions requires ongoing evaluation and enhancement of library service quality. The services, facilities, staff efficiency, and manners all of which address the information demands of library users have a direct impact on how satisfied library users are. According to Bamkin (2020) on analysis of academic libraries' collection development, space planning, futuristic technologies, and information services, the library of the future will serve as a knowledge refinery and visually pleasing and emotionally charged social hub.

Therefore, it is undeniable that user's satisfaction with the library's space, collection, services, personnel, and facilities has a substantial impact on how often users use the resources provided and how well their needs are met. User satisfaction in the library serves as a vital indicator of service quality in library setting (Aminu & Trivedi, 2022). However, failure to provide the required quality of services could lead to dissatisfaction. Given the significant responsibilities of library staff in provision of services, it is crucial for every university library to enhance the skills and knowledge of its librarian workforce (Saragih *et al.*, 2021). While many library users have demonstrated the impact of library services on their satisfaction, there are still questions about the specific services that should be offered to meet users' needs. Therefore, this study aims to determine the extent to which library services influence user satisfaction levels by using a five-point Likert scale to evaluate various services provided by the university libraries, focusing on library facilities, services, librarians, collection and place.

Library Services: Based on library services, libraries offer a broad range of services to satisfy its users. These include interlibrary loan, online book reservations, circulation, reference, photocopying and printing, orientation, workshops, current awareness services, selective information distribution, audiovisual facilities, and even refreshments. With at least two libraries at each of the 30 public and private colleges in the nation, attempts are underway to expand access to online resources by integrating contemporary technology and internet connectivity (United Republic of Tanzania [URT], 2022; Mushi *et al.*, 2023).

University libraries' main responsibility is to gather, arrange, and make learning materials in a variety of formats accessible. In order to improve accessibility and facilitate teaching and research, services are increasingly being provided via online platforms like Net Library, institutional repositories, and integrated library systems (Mbughuni *et al.*, 2022). Digital resources, including e-books and e-learning platforms, have become central in ensuring that students and staff can easily access updated academic materials.

Due to the availability of resources from publishers, online bookstores, databases, and the internet, libraries no longer have a monopoly on information on a global scale (Mahmood *et al.*, 2021). University libraries are forced by this competition to embrace cutting-edge technological strategies in order to be valued, visible, and relevant to their patrons. Libraries can fulfill changing academic needs and preserve user happiness by adopting digital services and user-centered procedures (Ofori *et al.*, 2020).

Research conducted in Tanzania shows successes and difficulties in guaranteeing user satisfaction. Even if a large number of customers are happy with the services and collections offered, problems including bad shelving arrangements, insufficient security, and subpar customer service continue to be obstacles (Khan *et al.*, 2019). Specifically, poor security erodes patron confidence and deters patronage of libraries (Saragih *et al.*, 2021). In order to promote trust, strengthen the library's reputation, and guarantee a secure, friendly learning environment, increasing customer satisfaction necessitates ongoing development, employee training, and operational changes (Nzewi, 2023; Albrecht, 2023).

Library as a place: With library as a place, the idea of the library as a location highlights that libraries are social, cultural, and educational spaces where users can establish a feeling of community in addition to being informational centers (Hamilton-Nixon, 2019; Dameria *et al.*, 2020). By connecting individual values and perceptions to place identity, attachment, and dependency, this viewpoint emphasizes the cognitive, emotional, and psychomotor aspects of user experiences. User pleasure and engagement are greatly impacted by the layout and organization of libraries, including study spaces, digital resources, and physical design (Riratanaphong, 2024).

Upgrades to libraries' study areas, book collections, and technology infrastructure are essential for raising customer happiness and service quality. While personnel and cultural events create the library's human and service

dimensions, amenities like meeting rooms, cafes, exhibition spaces, and digital access enhance the whole library experience. Kim (2018) emphasizes that user perceptions have a critical role in directing the expansion, refurbishment, and design of libraries. However, studies reveal that many academic libraries have issues that negatively impact user views, such as inadequate space, bad ventilation, inadequate electricity, a lack of ICT equipment, and unprofessional staff behavior.

Users nevertheless value library services, especially circulation and resource access, in spite of these obstacles, suggesting that libraries continue to play a crucial role in academic engagement. Stakeholders must extend ICT-based services, improve librarian-user relations through training, and upgrade infrastructure in order to increase satisfaction. Positive opinions of libraries as professional and user-friendly locations are also influenced by the creation of well-kept, tidy, and ordered facilities (Kim, 2018; Kim & Yang, 2022). Fostering conducive learning environments requires a number of factors, including natural lighting, comfortable sitting, quiet study spaces, and access to print and online materials.

Convenience and accessibility play equal roles in determining the library experience. Broader usability is ensured by extended hours, adaptable study areas for both solo and group study sessions, and dependable internet connectivity. Emotional ties to a library's academic significance, history, or architecture boost patron happiness and loyalty, and libraries are frequently seen as intellectual icons (Cox, 2023). By offering individualized support and direction, helpful employees further improve this reputation. Because it has a direct impact on the caliber of library services and patron pleasure, it is crucial to comprehend how patrons view the library as a place.

Library collection: Library collection refers to all learning resources available in the library, the process of collection development involves methodical selection, procurement, and dissemination of a wide range of information materials that users need. In line with the institution's vision, mission, and academic programs, this includes books, licensed databases, audiobooks, movies, and digital resources (Mwilongo *et al.*, 2020). Whether in print or electronic formats, a well-structured collection guarantees that resources satisfy the learning and research goals of staff and students and directly increases user satisfaction by offering pertinent and easily available materials.

The quality and accessibility of library collections are directly related to user satisfaction. Research has demonstrated that both teachers and students appreciate collections, but it also emphasizes how crucial it is to include administrators and professors in collection construction (Mahmood *et al.*, 2021). Higher satisfaction levels are reported by libraries that maintain friendly, multipurpose spaces and incorporate user demands into their rules. In addition to collections, other elements that influence the overall library experience include physical space, technology, and chances for social interaction.

By offering current, specialized, and multidisciplinary resources, strong library collections promote academic support, research, and innovation (Bachynska *et al.*, 2024). Additionally, by ongoing assessment and modification, effective collection development guarantees sustainability, enhances institutional reputation, and enables accreditation (Oguntuase *et al.*, 2024). Well-organized collections facilitate long-term preservation through archiving and digitization, enhance interaction, and make resource finding easier. Libraries continue to be vital to academic advancement by incorporating digital technologies, personalized services, and the preservation of rare resources.

Librarians: Professionals who work in libraries, librarians offer patrons technical or social programming as well as information services. Antonia *et al.* (2024) opined that librarian in universities are of two categories: academic and non-academic, belonging to either of the categories has implication as employee's role, duties, status and career progressions in the academic setting. Their tasks, responsibilities, prestige, and career advancements in academic contexts are critical, and they might be either academic or non-academic (Donkor *et al.*, 2024). Librarians provide services by being attentive, quick to respond, and adept at solving problems. By building relationships, selecting efficient information access options, and assessing academic landscapes, they can increase user satisfaction.

They should be actively engaging with academic environment and anticipating user needs, rather than passively waiting for requests for specific services. Oguntuase *et al.* (2024) opined that librarians are tasked with nurturing and enhancing relationships with faculty, researchers, and students, ensuring that the services provided are in alignment with the institution's academic objectives and priorities. In the selection of information access solutions, including databases, journals, and other resources, librarians are urged to evaluate cost and effectiveness of these options. This necessitates a careful balance between budget limitations and the provision of high-quality academic resources, thereby ensuring sustainability while promoting academic excellence (Tribelhorn, & Young, 2022). To remain responsive and essential in furthering academic goals, librarians must constantly evaluate the academic environment while keeping abreast of research trends, instructional strategies, technology, and information access.

According to Bachynska *et al.*, 2024; Donkor, *et al.*, 2024 on their studies observes that, librarians are essential to academic work because they give users access to high-quality learning materials, encourage critical thinking, teach them how to manage resources, conduct research, provide specialized subject knowledge, create customized resources, and keep ICTs up to date for efficient library operations.

Librarians are the key actors in developing collection that meets the needs of users by ensuring budget optimization, cooperate with faculty members and other professional communities and influence policies and other cross

cutting issues within the community based on goals and mission of the university thus ensures the library remains a central pillar of the university in the academic infrastructure and contribute in meeting accreditation standards by enhancing university good image and driving innovations (Antonia *et al.*, 2024).

Professionals in charge of providing information services and assisting academic communities in universities are librarians. Their tasks, responsibilities, and career advancement are influenced by their classification as academic or non-academic staff (Antonia *et al.*, 2024). Their efficacy hinges on attributes including expertise, reliability, responsiveness, and problem-solving skills, all of which have a big impact on customer satisfaction. According to research, librarians have a crucial role in promoting user-centered services because of their attitudes and interactions with patrons, which directly affect how the library is viewed.

In order to anticipate and meet user demands, modern librarians must actively interact with academics, researchers, and students. In order to ensure sustainability and academic success, they must use information resources that strike a compromise between cost and quality (Oguntuase *et al.*, 2024; Tribelhorn & Young, 2022). To stay responsive and flexible, librarians must continuously evaluate teaching strategies, academic trends, and technology developments. Librarians actively contribute to the advancement of institutional missions through creative service design, strategic partnerships, and effective resource management.

According to studies, librarians promote academic work by making sure that students have access to high-quality resources, encouraging critical thinking, teaching research techniques, maintaining databases and library systems, and giving individualized assistance (Bachynska *et al.*, 2024; Donkor *et al.*, 2024). Their duties include upholding academic integrity, carrying out research, gaining subject-matter expertise, and modernizing ICT tools to enhance library operations. By doing this, they improve educational opportunities and provide easy access to print and digital resources. In order to ensure conformity with institutional goals and accrediting criteria, librarians also play a crucial role in budget optimization, policy impact, and collection development (Antonia *et al.*, 2024). In addition to knowledgeable librarians, library infrastructure has a significant impact on how users interact with the institution. In order to improve resource availability, encourage cooperation, and establish a friendly learning environment for both staff and students, modern libraries are increasingly being developed with flexible, technologically advanced spaces, such as multimedia labs, electrical, computer terminals, and sustainable study areas (Miao *et al.*, 2024).

Library facilities: University library facilities comprise all of the technological, service, and physical infrastructures that contribute to a library environment which is favorable for learning, research and teaching. Their sufficiency, availability, and up to date have a direct impact on the quality of library services rendered and users' satisfaction. Studies shows difference between the expectations of library users and the perceived quality of services rendered. For instance, Simba's (2021) investigation of the University of Iringa library revealed that the magnitude of the gap varied depending on individual services given from library and that there was a gap between user's expectations and perceptions of service quality.

Furthermore, in Tanzanian academic libraries, technology resources and infrastructure are often important facilities that influence users' satisfaction. According to Kaishe-Mulungu and Lwehabura (2025) in their study found out that; unreliable ICT infrastructure hinders library service delivery and user satisfaction. They also claim that the use of (ICTs) resources in developing countries like Tanzania faces significant challenges. This is in line with other research that demonstrate how user views the library use are adversely affected by a lack of enough computer infrastructures, poor internet connectivity, and poor physical comforts such as reading space, lighting, and ventilation. Mulalike (2015) identified insufficient number of computers with internet connectivity and reading space compared to number of users as one of the main obstacles to user satisfaction.

Lastly, the empirical literature highlights a crucial detail: facilities' existence alone does not guarantee user satisfaction rather they also need to be functional, accessible, and in line with user needs. Mubofu (2023) observed that although users are satisfied with overall quality of the library services, the rates of satisfaction do not meet the maximum scale in the context of Tanzanian university libraries. This points to a situation where potential is unrealized yet satisfaction is moderate. Additionally, Simba (2021) noted that, from the standpoint of the user, electronic journals, photocopying, interlibrary loan, and the library webpage were some of the most troublesome services. For Tanzanian academic libraries to successfully improve their facilities, integrative techniques combining physical space, ICT infrastructure, staff support, and user-oriented service design are necessary.

2.2.2 How Library Users, Perceive their Satisfaction with the Quality of Library Services.

Several empirical studies have observed at how satisfied library users are with the quality of services provided, exposing a range of variables that affect users' experiences in general. Service quality models like SERVQUAL, LibQUAL+, and E-S-QUAL, which gauge perceptions along dimensions including tangibility, assurance, responsiveness, empathy, and dependability, have been widely used to measure user satisfaction (Parasuraman *et al.*, 1988). Several research assessing users' expectations and perceptions of service delivery in academic library environments have been guided by these frameworks.

Owusu-Ansah (2024) in her investigation on the moderating influence of library size on the relationship between library space attributes and learning satisfaction, found that users of Ghanaian university libraries were somewhat satisfied with the services provided by the library, especially with regard to the availability of learning spaces and the helpfulness of the librarians. However, issues like access to up to date resources and ICT resources caused discontent. Similarly, Akande (2023) discovered that while librarians in Nigeria showed positive opinions toward users, user satisfaction was greatly lowered by bad infrastructure, slow internet access, and constrained hours. These results imply that the availability of current resources and the provision of human services are directly related to users' perceptions of satisfaction.

Empirical research suggests comparable tendencies in East Africa. Users were generally satisfied with librarians' competency and information literacy training, but they were less content with seating capacity, ventilation, and electronic resources, according to a study conducted by Ilako, *et al.* (2025) in Ugandan universities. Malik *et al.*, (2024) looked at academic library services in libraries and discovered that while users appreciated the availability of print materials and staff support, they continued to be dissatisfied with the insufficient study areas, noise levels, and digital resource access. Together, these studies show that in developing-nation settings, user happiness is significantly influenced by the standard of library infrastructure, staff-user interactions, and availability of contemporary information technology.

Important insights are also provided by research conducted outside of Africa. For example, Khan and Bhatti (2020) in Pakistan discovered that the attitude of library employees, the quality of online databases, and the convenience of access to information all had a significant impact on the satisfaction of library customers. According to Akande (2023), users at Nigerian institutions expressed satisfaction with the library's capacity to adjust to their evolving digital needs in addition to the quality of services provided. These results highlight how user-cantered service design and ICT integration are becoming increasingly important in influencing patron satisfaction in contemporary academic libraries.

Overall, empirical data shows that library users' satisfaction is multifaceted and includes both concrete and abstract elements of service quality. When libraries offer dependable physical and digital information resources, well-maintained, easily accessible facilities, and polite, attentive personnel, library users are more likely to be satisfied. On the other hand, poor infrastructure, scarce resources, and insufficient technical assistance frequently lead to dissatisfaction. In order to improve service delivery and make sure that libraries continue to be responsive to changing academic and informational needs, it is crucial to analyze users' feelings of satisfaction.

2.2.3 Perception on the Quality of Library Services among Library Users

The quality of collections, accessibility, technology infrastructure, study space, librarian expertise, and the library's prominence in national and international forums are some of the elements that influence how users perceive and understand a university library's services and environment (Kiriri, 2018). Positive opinions are largely shaped by current collections that are in line with academic programs and international standards, as well as knowledgeable librarians who encourage information literacy, critical thinking, and resource organizing (Chandrakar, 2024). Convenience and accessibility are also important factors in user happiness. Libraries are supposed to offer suitable learning environments, flexible operating hours, and cozy study areas (Saragih *et al.*, 2021). Digital resources, maker spaces, and virtual reference services are examples of technological infrastructure that improves user impressions and presents libraries as creative and progressive (Mushi *et al.*, 2023).

While collaborative spaces and international alliances enhance institutional reputation, a user-entered approach that incorporates feedback, friendly policies, and active interaction with academic communities further improves how libraries are seen (Ojei & Popoola, 2023). Research indicates that dependable services, well-designed buildings, and high-quality collections have a beneficial impact on impressions (Molson, 2022). User participation in the selection of materials, better reference services, handy locations, and subject-matter competence of librarians are all elements that contribute to increased satisfaction. Users' trust and enjoyment of the library increase when their needs and expectations are regularly satisfied, which supports the institution's academic mission and stellar reputation.

Universities must establish criteria for high-quality library services that facilitate academic activities in order to improve users' perspectives (Antonia *et al.*, 2024). Relevance and efficiency are guaranteed by appropriate resource allocation, data-driven decision-making, and effective collection development policies. In the end, extensive holdings and cutting-edge services not only raise users' satisfaction but also support academic reputation, university accreditation, and global ranking, establishing the library as an essential center for study and research.

III. METHODOLOGY

The study was carried out in Tanzanian universities libraries with primary data collected between September 2022 and August 2023 with mixed approach both qualitative and quantitative (Tashakkori, & Teddlie, 2008). It employed a cross-sectional research design, which involved collecting data at a single point in time. This design saves time and resource which are limited (Merriam & Tisdell, 2015). In a cross-sectional study, the researcher assesses both

the outcome and the exposures in the study participants simultaneously. The selection of participants in such a study is based solely on the predetermined inclusion and exclusion criteria. Cross-sectional studies are also recognized for their relatively swift execution and cost-effectiveness.

The study was carried out in five selected Universities in Tanzania, namely University of Dar-es-Salaam (UDSM), the University of Dodoma (UDOM) and St. Augustine University (SAUT) on Tanzania Mainland and the State University of Zanzibar (SUZA) and Zanzibar University (ZU) in Tanzania Islands. These five universities were selected purposefully because most of them are old enough in terms of experience, resources, services offered and its libraries and infrastructure. St. Augustine University (SAUT) and Zanzibar University (ZU) were privately owned while University of Dar-es-Salaam (UDSM), the University of Dodoma (UDOM) and State university of Zanzibar were government owned. All universities are rendering services which differs in one way or another. However, they are regulated by Tanzania Commission for Universities (TCU) and was accredited as per regulatory authority. It was therefore considered that the universities under study were applicable to give the required and adequate information under the study.

The population of this study was members of academic staff, students, heads of higher learning institutions, Directors of Libraries, quality assurance officials, Heads of Departments in the libraries and library staff amounting to 64,988 (Table 1). In addition, 68 respondents were selected purposely because they thought to provide important information related to the positions they held in their institutions that could enriching the research findings. These groups were chosen because they were considered as potential for providing relevant information and answers for the study. The unit of analysis was the university's academic staff and students who were selected by using purposive sampling techniques and systematic random Sampling techniques as explained in (Kothari, 2014).

Table 1
Population of the Study

Name of University	Category	Number of Participants
UDSM	Staff	1,538
	Students	28,625
UDOM	Staff	867
	Students	16398
SAUT	Staff	434
	Students	10,957
SUZA	Staff	230
	Students	3,984
ZU	Staff	93
	Students	1,995
	Total	64,988

Source: TCU, 2024

Respondents in this study were selected by using both probability and non-probability sampling techniques. Probability sampling techniques used were systematic random sampling while non-probability sampling was purposive sampling techniques. Purposively technique was used to select five universities of this study whereas systematic random sampling was used to obtain respondents of the population at regular intervals every after the 20th respondent on a list of the population.

The study had 68 key informant respondents of which Heads of university administrators were (20), Directors of libraries (5), Heads of Library Departments (20), Heads of Quality Assurance Units (5), Heads of Finance (5), heads of ICT units (5), and Building and Estate Managers (8). The key informants were selected purposely because they were thought to be well knowledgeable and with the required expertise in their respective areas of specialization. The total population was 64,988 (see table 1). The purpose of the study was to determine how satisfied library users of Tanzanian university libraries were with the quality of library services.

Table 2 below shows the sample size of the study with precision level of + or – 5. The Sample Size Determination Table created by Israel (1992) was used to establish the sample size in order to guarantee that the chosen sample accurately represented the target population. For different demographic ranges, this table offers suitable sample sizes at predetermined precision rates and confidence levels. In order to determine a representative sample size that would produce accurate and broadly applicable results about users' satisfaction with library services, the researcher first determined the entire population of possible library users and then consulted Israel's table. The sample size was obtained by using Sample Size Determination Table by Israel (1992) which state that; if the total population is between 50,000 to 100,000 the sample shall be 397 respondents. (See Table 2). So, since the total population was 64,988 then the ideal sample size should be 397

Table 2*The Sample Size of the Study*

	Precision level	Precision level	Precision level	Precision level
Population	±3%	±5%	±7%	±10%
15,000	1034	390	201	99
20,000	1053	392	204	100
25,000	1064	394	204	100
50,000	1087	397	204	100
100,000	1099	398	204	100
≥100,000	1111	400	204	100

Source: Israel (2003) Israel Sample Size Determination Table Sample size for ±3%, ±5%, ±7% and ±10% Precision Levels Where Confidence Level is 95% and P=.5

Table 3 below shows the sampling frame which indicate how many respondents were selected from each university. The respondents were selected by using a formula =Number of Participants/total population*sample size= number of respondents in each university categories of staff and students in each particular university.

Table 3*Sampling Frame*

Name of University	Category	Number of Participants
UDSM	Staff	9
	Students	175
UDOM	Staff	5
	Students	100
SAUT	Staff	3
	Students	67
SUZA	Staff	1
	Students	24
ZU	Staff	1
	Students	12
	Total	397

Source: TCU, 2024

The primary data for the study were collected using questionnaire and interviews. Questionnaires with closed and open-ended questions were administered to the unity of analysis category which was students and university staff. Questions were set based on constructs extracted from the conceptual framework and specific objectives of the study. Questions required respondents to select answers from the list provided and Likert scale questions to rate numbers in matching statements. Other questions required respondents to explain, and express their views or opinion on related matters in each section. The questions focused on the main and specific objectives of this study. Questions were distributed to each specific group. Open questions were used because they allowed respondents to express their views independently and hence reduce biases and subjectivity. However, questionnaire was pretested before being administered to the respondents. The results obtained were 0.72 that means the instrument were reliable.

The interview is a qualitative research technique that involves conducting intensive individual interviews with a small number of respondents to explore their perspectives on a particular idea, program or situation. In this study, interviews were administered to the key informants who were 68 participants. Quantitative data were analysed by using SPSS software where descriptive data analysed. The results were presented in the form of tables and figures indicating frequencies, percentages. Content analysis was used to analyse qualitative data gathered from key informants and open-ended questions obtained from the unity of analysis which was the respondents. The researcher collected the information with the related ideas from open-ended questions and interviews.

IV. FINDINGS & DISCUSSION

4.1 The Extent to Which Users are Satisfied with Library Collection

The respondents were asked to indicate how they perceive Library collection on a 5-point likert scale where SA=Strongly Agree; A=Agree; N=Neutral; D=Disagree and; SD=Strongly Disagree. 33.8% indicated that they find library collection books in their programs sufficiently in their library, 31% were satisfied with collection of theses & dissertations in their discipline are sufficient in this library, 30% find Journals, newspapers, magazines & printed

resources sufficient, 28.3% reported that they find the library having extensive subscribed databases and e-learning resources, 23% find e-resources portals easy to access, informative and easy to navigate, 20.6% find the library to provide sufficient CD, DVD, VHS, photos & other digital resources (Table 4).

However, 21.6% disagreed that they find the library to provide sufficient CD, DVD, VHS, photos & other digital resources. These results are contrary to a study done by Elias and Lubua (2024) who indicated that the library contained e-resources organized by their college libraries were proprietary online e-resources, Open-source online e-resources, Off-line database and CD/DVD collection. Interviews with staff from quality assurance unit (key informants) had this to comment on how they perceive Library collection.

“Librarians are doing their work professionally; the problem is the number of library users at once which makes them seem less efficient. Dodoma and Dar es salaam Universities (2023).

“Most of library staff are competent with ICT technology therefore they perceive that library provide services they wanted.” Zanzibar University (2023).

Table 4

Library Collection as Perceived by Library Users

Statement	SA		A		N		D		SD		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
I find Journals, newspapers, magazines & printed resources Sufficient	119	30	112	28	114	29	46	11.6	6	1.5	397	100
Satisfying collection of theses & dissertations in my discipline are sufficient in this library	123	31	112	28	115	29	44	11	3	0.6	397	100
I find library collection books in my programs sufficient in this library	134	33.8	105	26	114	28.8	38	9.6	5	1.2	397	100
I find records of the collection are kept consistent with actual holding/status in this library	103	26.0	112	28.1	139	35	39	9.8	3	0.6	397	100
I find this library has extensive subscribed databases and e-learning resources	113	28.3	105	26.4	121	30.4	50	12.4	9	2.1	397	100
I find this library to provide sufficient CD, DVD, VHS, photos & other digital resources	82	20.6	81	20.4	138	34.8	86	21.6	9	2.3	397	100
I find e-resources portals are easy to access, informative & easy to navigate in this library	94	23	120	30.3	120	30.3	63	16	3	0.6	397	100

4.2 The Extent to Which Users are Satisfied with Library Services

The respondents were asked to indicate how they perceive library services. The results show that 38% reported that a good library provides users with advisory services to assist them to use the collection efficiently, 35% reported that a good library provides interlibrary loans request thoroughly and promptly, 34% said that in an efficient library, library books are re-shelved promptly and are neat free from dust. Additionally, 30.2% indicated that timely library opening hours meets their time table needs, 29 % indicated that an information-rich library, online catalogue e-portal is easy to use and to learn how to use it, and 28.7% said that an information-rich library website is easy to access, impressive looking, informative and easy to navigate. However, 13% disagreed that a good library provides reservation/booking services. These results are similar to study done by Bamkin (2020) who indicated that the participants identified the benefits of interlibrary lending and generally acknowledged that resource-sharing was important. However, interviews with staff (key informants) commented that most students are satisfied with services rendered by their library, however some of them were not satisfied with the library services categorically in availability of computers and most of them are restricted for typing, inserting external gadgets they are just there for catalogue access only, so they perceive library service as not satisfactorily at all

4.3 The Extent to Which Users are Satisfied with Library as a Place

The respondents were asked to indicate how they perceive and satisfied by library as a place and services provided. 47.9% of the respondent indicated that the seating arrangement of the library is attractive, 38.9% cleanliness of the library and its conducive environment enhance learning, 33.8% library as a place provides sufficient cloakrooms/lockers, 37.4% lighting of the library building is conducive, 36.6% library is comfortable, clean and well lighted with clean air, 33.8% library as a place provides sufficient cloakrooms/lockers. Furthermore, 30.5% library as a place provides reliable wireless connections to the internet, 30.5% library as a place provides reliable wireless connections to the internet, 30.3% directional and warning sign, emergence doors/windows in case of fire alarm 29.4%.

Library as a place provides sufficient computer workstation for users, 29% library place provides sufficient book borrowing and returning kiosks, 28.8% library provides timely and clear information about equipment which is not working and 28% library reference services (Current awareness Services and Selective Dissemination of Information). This result shows that most users strongly agree with the service provided in the library as a place. However other users disagree with the service provided for example 20.8% of users disagree that the library offers enough secretarial services, 13.9% think the sitting arrangement is attractive, and 11.8% think there are enough book borrowing and return kiosks. These findings are consistent with research by Kekana and Kheswa (2020), which found that students' opinions of the services they received at (CRM) Cecil Renaud Main library were less favourable than what they had anticipated. Interviews with directors (key informants) had this to comment on how they perceive Library as a place (**See table 10**).

"Most of Library users perceive library as a place not conducive for having discuss and others are complained that the atmospheric condition is not pleasant for study. "Dodoma University and University of Dar es salaam (2023).

"Most of library users requesting that the library should have a coffee shop and soft drinks" Zanzibar University and State university of Zanzibar (2023).

4.4 The Extent to Which Users are Satisfied with Library Staff

The respondents were asked to indicate how they perceive library staff on the services provided in the library. 40% indicated that library staff are approachable, polite, friendly and empathetic, 35% library staff are available to respond timely and in humble manner, 29.9% indicated that library staff were competent in professionalism, 28.9% were of the view that library staff makes relevant information about its services available, 28% library staff provide printed or electronic resource guidance, 27.5% the behaviour of the library staff were impressive, 27% library staff are competent in communication while 26.7% said library staff provide sufficient library user education. However, 14.1% of the respondents disagreed that the behaviour of the Library Staff is impressive. This result corresponds to findings from a study by Ojei and Popoola (2023) who indicated that the library staff delivers the library services with positive attitude, prompt and are always ready to respond to users' query, assurance, access, good communications skills and empathy, Library staff positively influences the users' access to effective library services. However, interviews with staff from quality assurance unit (key informants) commented on how they perceive library staff on services provision (**See table 7**).

"Most of library staff perform their duties properly but they complain that they have so many costumers to serve at one time therefore they find themselves exhausted with duties. Dodoma University (2023).

"Most of library staff are competent with ICT technology therefore they library users perceive the library to be providing services they wanted." Zanzibar University (2023).

4.5 The Extent to Which Users are Satisfied with Library Facilities

Respondents were asked to give their views during in depth interview on to what extent they are satisfied with library facilities; they had differing perspectives about how satisfied they were with the facilities available to their libraries. According to a significant percentage of respondents, their libraries offer enough reading areas, convenient seating, enough lighting, and an all-around tidy and orderly setting that is ideal for research and study. Access to information resources was also emphasized as being improved by the availability of necessary facilities including computers, internet access, and photocopying services. Other patrons, however, complained about the lack of computer terminals, low ventilation, crowded study areas during busy times, and poor upkeep of the library's furnishings and equipment.

Some respondents also mentioned that the library's atmosphere was less conducive due to noise, a lack of group study spaces, and uncomfortable hot tropical climatic condition while air conditioning and fans were not working in some areas. Interviews with library directors (key informants) had this to say in relation factors that the level of satisfaction of library services,

"Library users were not satisfied with overcrowding and hot climatic condition, lack of chairs, and early closing time especially during university preparation weeks which negatively affects concentration of their studies given the fact that most of them are staying off campuses." University of Dar es salaam, (key informant 3, 2023).

These results are in line with earlier research, like that of (Simba 2021; Omar, 2023 and Mubofu, 2025), which found that user satisfaction in Tanzanian university libraries is highly influenced by the availability and state of library facilities. Overall, the degree of satisfaction with library facilities is mostly determined by its sufficiency, usefulness, accessibility, and upkeep, all of which together impact how comfortable and productive the learning environment is.

4.6 Extent to Which the Library Services Influence Library Users' Level of Satisfaction

The respondents were asked to indicate to what extent library services influences users' level of satisfaction based on time, accessibility and time spent to reach library and the results are indicated in table 5. These results show

that 61.2% indicated that time provided for using the library is adequate for users, 58.7% indicated that they access library any time they need and 54.6% indicated users who may want to come to the library but are not able because of distance.

Table 5

Extent to which the Library Services Influences Library Users' Level of Satisfaction

Extent to which the library services influences library users' level of satisfaction	F	%
Access library any time they need.	233	58.7
Time provided for using the library is adequate for users	243	61.2
Users are not able to use the because of distance	217	54.6

These results show that the majority of users are using the library adequately once the library was open. This implies that libraries are open at the required time and the staff are there to provide the students with the services they needed. Therefore, the library management should make sure that the library is open on time and skilled staff are available to give services and provide the required assistance to users. The findings are similar to those from the study done by Nzewi (2023) who found out that library staff through their professional skill are able to guide and support student get the needed information resource to achieve their educational goal.

Interviews with library directors (key informants) had this to say in relation to the extent library services influence users' level of satisfaction;

"Library users are satisfied with the availability of learning resources both print and online but the frequent electricity cut off is affecting its effectiveness, efficient careful use of our library facility." St. Augustine and Dodoma University, (key informant 1, 2023).

"Most of students reported that they are not satisfy with the library because it does not have enough computers and most of them use their own electronic gadgets to brows online resources which is difficult as there are no enough charging sources" State University of Zanzibar and Zanzibar university, (key informant 2, 2023).

To ascertain the factors that influenced the level of satisfaction of library services, a binary logistic regression model was used. The results are presented in Table 6.

Table 6

Factors Influencing the User Satisfaction Level of Library Services

Variable	B	S.E.	Wald	df	Sig.	Exp(B)	95.0% C.I. for EXP(B)	
							Lower	Upper
Lack of relevant resource	.447	.238	3.526	1	.060	1.563	.981	2.492
Noise	-.526	.260	4.106	1	.043*	.591	.355	.983
impoliteness	-.013	.328	.002	1	.968	.987	.519	1.878
No computers	.005	.243	.000	1	.985	1.005	.624	1.617
bad photocopy	-.620	.276	5.052	1	.025*	.538	.313	.924
Lack of air conditioners	.684	.288	5.628	1	.018*	1.982	1.126	3.488
Lack wireless connectivity	.363	.256	2.010	1	.156	1.437	.870	2.372
Poor toilets	.391	.282	1.931	1	.165	1.479	.852	2.569
congestion	.437	.271	2.596	1	.107	1.547	.910	2.631
lack enough staff	.466	.273	2.918	1	.088	1.594	.934	2.720
lack printing services	-.154	.247	.389	1	.533	.857	.528	1.391
lack weekend services	-.579	.287	4.070	1	.044*	.560	.319	.984
early closing time	.781	.349	5.020	1	.025*	2.184	1.103	4.326
Constant	-1.441	.563	6.541	1	.011	.237		

Note: * Statistically significant at 5% level of significance

Results from binary logistic regression indicate that several factors had a statistically significance influence on the user satisfaction with library services. Among them with their corresponding probabilities are noise ($p = 0.043$), bad photocopy ($p = 0.025$), lack of air conditioners ($p = 0.018$), lack weekend services ($p = 0.044$), early closing time ($p = 0.025$).

Interviews with library directors (key informants) had this to say in relation factors that the level of satisfaction of library services,

"Library users were not satisfied with overcrowding and hot climatic condition, lack of chairs, and early closing time especially during university preparation weeks which negatively affects concentration of their studies given the fact that most of them are staying off campuses." University of Dar es salaam, (key informant 3, 2023).

Library Users' Satisfaction with the Quality of Library Services Perception to library staff

Table 7 presents respondents' perceptions of library staff competence, professionalism, and user interaction quality

Table 7

Library Staff as Perceived by Library Users

Statement	SA		A		N		D		SD		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
Library staff are approachable, polite, friendly and empathetic	158	40	93	23.4	99	24.8	29.9	7.5	0.9	0.2	397	100
Library staff makes relevant information about its services available	137	35	106	26.6	98	24.7	38.4	9.7	17.1	4.3	397	100
Library staff are competent in the communication	108	27	91	23	116	29.2	32.4	8.2	14.5	3.7	397	100
Library staff provide sufficient library user education	106	26.7	90	22.6	110.9	27.9	42.7	10.7	13.6	3.4	397	100
Library staff provide printed or electronic resource guidance	113	28	91	23.	127	31.9	52	13	13.4	3.4	397	100
Library staff makes relevant information about its services available	115	28.9	114	28.7	107	26.9	52	13	11	2.7	397	100
Library staff competence in professionalism	119	29.9	100	25.2	122	30.7	42	10.5	2	0.5	397	96.8
The behaviour of the Library Staff is impressive	109	27.5	113	28.4	117	29.4	56	14.1	2	0.5	397	99.8

Table 8 summarizes how library users perceive the effectiveness, accessibility, and reliability of various library services.

Table 8

Library Services as Perceived by Library Users

Statement	SA		A		N		D		SD		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
An information-rich library website is easy to access, impressive looking, informative and easy to navigate	114	28.7	122	30.7	111	27.9	50	13	1	0.2	397	100
Timely library opening hours meet my time table needs	120	30.2	88	22	107	27	44	11	2	0.5	397	100
An information-rich library online catalog e-portal is easy to use and to learn how to use	117	29	102	25.6	108	27	41	10	3	0.6	397	100
A good library provides reservation/booking services	108	27	98	25	118	30	51	13	3	0.8	397	100
A good library provides interlibrary loans request thoroughly and promptly	140	35	78	20	131	33	47	12	0.8	0.2	397	100
In an efficient library books are re-shelved promptly and are neat free from dust	136	34	116	29	114	29	28	7	3	0.6	397	100
A good library provides users advisory services to assist them to use the collection efficiently	150	38	95	24	118	30	31	7.8	3	0.6	397	100

Table 9 presents respondents' perceptions of library collections and electronic resources.

Table 9*Library Collection as Perceived by Library Users*

Statement	SA		A		N		D		SD		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
I find Journals, newspapers, magazines & printed resources Sufficient	119	30	112	28	114	29	46	11.6	6	1.5	397	100
Satisfying collection of theses & dissertations in my discipline are sufficient in this library	123	31	112	28	115	29	44	11	3	0.6	397	100
I find library collection books in my programs sufficient in this library	134	33.8	105	26	114	28.8	38	9.6	5	1.2	397	100
I find records of the collection are kept consistent with actual holding/status in this library	103	26.0	112	28.1	139	35	39	9.8	3	0.6	397	100
I find this library has extensive subscribed databases and e-learning resources	113	28.3	105	26.4	121	30.4	50	12.4	9	2.1	397	100
I find this library to provide sufficient CD, DVD, VHS, photos & other digital resources	82	20.6	81	20.4	138	34.8	86	21.6	9	2.3	397	100
I find e-resources portals are easy to access, informative & easy to navigate in this library	94	23	120	30.3	120	30.3	63	16	3	0.6	397	100

Table 10 presents respondents' perceptions of the library's physical environment and facilities.

Table 10*Library as a Place and Services as Perceived by Library Users*

Statement	SA		A		N		D		SD		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
Library as a place provides sufficient secretarial services	102	25.5	70	17.6	30	7.5	83	20.8	6	1.2	397	100
lighting of the Library Building is conducive	149	37.4	84	21	129	32.4	33	8.3	3	0.6	397	100
Cleanliness of the Library and its conducive environment enhance learning	155	38.9	140	35.2	31	7.7	2	0.4	11	2.7	397	100
Library as a place provides sufficient computer workstation for users	117	29.4	86	21.7	159	40.0	33	8.3	2	0.4	397	100
Library as a place provides reliable wireless connections to the internet	121	30.5	90	22.5	155	38.9	26	6.6	4	1.1	397	100
Library has sufficient seating, carrels, discussion rooms & study areas	126	31.8	71	17.8	149	37.4	44	11	7	1.7	397	100
Library place provides sufficient book borrowing and returning kiosks	114	29	76	19	157	39	47	11.8	4	1.1	397	100
Library as a place provides sufficient cloakrooms/lockers	157	33.8	85	18.3	171	36.8	40	10.3	4	1.1	397	100
Library is comfortable, clean & well lighted with clean air	145	36.6	73	18.4	141	35	37	9.2	1	0.2	397	100
Library provides timely and clear information about equipment which is not working	114	28.8	95	23.8	154	38.7	30	7.5	4	1.1	397	100
Directional and warning sign, emergence doors/windows in case of fire alarm	120	30.3	81	20.4	159	40	32	7.9	5	1.2	397	100
Library Reference Services (Current awareness Services and Selective Dissemination of information etc. CAS, SDI	130	28.0	89	19.1	194	41.7	50	10.8	2	0.4	397	100
The seating arrangement of the library is attractive	190	47.9	75	19.1	16	4	55	13.9	1	0.2	397	100

4.7 Discussion

University libraries in Tanzania provides services mainly to students and academic staff. Since the libraries are the heart of any university in enhancing its activities to realize its missions/vision through quality library service provision (QLSP) then they should be observing global /Tanzanians standards. The findings revealed that 61.2% are

using library adequately as it opens on time and time provided for using it is adequate. This implies that university libraries are striving to provide information resources and services as per local and international standard. Therefore, the library management should ensure that library is opened on time and skilled staff are available to give services to users. This is similar to the study done by Nzewi (2023) who found out that library staff through their professional skills are able to guide and support users to get the needed information resource to achieve their educational goal. Therefore libraries should ensure the library facilities have the required trained staff which enhance the utilization of the resource and facility on given time.

Again, to ascertain the factors that influenced the level of satisfaction of library services, a binary logistic regression model was used and the results indicate that several factors had a statistically significance influence on the user satisfaction with library services. Among them with their corresponding probabilities are noise ($p = 0.043$), bad photocopy ($p = 0.025$), lack of air conditioners ($p = 0.018$), lack weekend services ($p = 0.044$), early closing time ($p = 0.025$). This implies that, users across all universities have been affected by noise, poor photocopy services, lack of cool environment given the hot climate condition in East Africa, lack of week end services and early closing of the library. This leads to dissatisfaction with library services

The study found that noise levels, poor photocopying services, lack of air conditioning, lack of weekend services, and early closing times are significant factors affecting user satisfaction in libraries. Reducing noise levels and providing quieter areas and improving photocopying facilities could improve satisfaction. Expanding hours to include weekends and extending operating hours could also improve satisfaction. Addressing these issues could lead to better library experiences for users. This results are similar and a bit contrary on sounds to the study by Peng *et al.* (2022) on university library space renovation based on user learning experience in two Wuhan universities and found out that library design should abide with some elements that affects learning experience of university library users, the results of binary logistic regression shows that elements such as indoor physical space comfort and indoor sounds environment comfort have a positive effects on the frequency and length visits to the library.

On the perception of level of satisfaction on the quality of library services among library users is influenced by five aspects of library updated library collection, conducive library place, reliable library services, well trained and skilful staff as well as functioning library facilities. The majority of respondents 75% perceive library staff as approachable, polite, friendly and empathetic, and are available to respond timely and in humble manner. These results are almost similar to study done by Ojei and Popoola (2023) who indicated that the library staff provides the library services with positive attitudes, prompt and are always ready to respond to users' query, responsiveness, assurance, access, good communications skills and empathy, library staff positively influences the users access to effective library services. However, most of the library staff perform their duties properly but the complaint that they have so many users to serve at one therefore they found they are exhausted with duties, with this observation library management should balance staff and user's ratio in service-oriented category.

V. CONCLUSION & RECOMMENDATIONS

5.1 Conclusion

The study therefore concluded that library staff, services, collection and place are the major essentials features that affect the perception of the library users in utilization of library facilities in general. Also, the study found out library users indicated that library staff are approachable, polite, friendly and empathetic. Moreover, the study found out that library books collection in various programs was sufficient in the library, the seating arrangement was attractive and library collection such as books in a given program are sufficient. Therefore, the study concluded that library users were satisfied by the services in terms of library collection, library environment, staff, facilities and services provided.

5.2 Recommendations

Based on the study's findings, several suggestions are made to increase satisfaction levels and improve Tanzanian university libraries' satisfactory perceptions. These include; a number of actions are suggested to improve library services in order to boost users' satisfaction and encourage academic performance. First, in order to foster an environment that is conducive to teaching, learning, and research, the university library should guarantee the ongoing provision of current educational learning resources. In addition to increasing academic productivity, having access to up to date and relevant information resources will solidify the library's position as a key part of the university's knowledge base and good quality service provider.

Second, the administration of the library should create a welcoming and encouraging atmosphere that invites library users to freely engage with its resources and its librarians. A friendly environment increases user involvement and makes an important contribution to favorable opinions about the quality of the services. In addition, the library should hire and maintain competent librarians who have the professional skills necessary to provide users with knowledgeable advice and support on how to use its resources and technology available in their libraries. Lastly, focus should be directed on enhancing the physical infrastructure of the library. To guarantee comfort, accessibility, and

functionality in the library space, sufficient and practical fittings such as computer workstations, study carrels, discussion tables, and lounge chairs should be provided. All of these enhancements are necessary to increase patron users' satisfaction and strengthen the library's support of the university's main academic purpose.

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