Library service provision for improved satisfaction among library users in selected university libraries in Tanzania

Kaishe-Mulungu, Dativa Donati
Mzumbe University, ddkaishe@mzumbe.ac.tz

Lwehabura, Mugyabuso Julius Festo
Sokoine University of Agriculture, lwehabura@sua.ac.tz

Angello, Consolata
Sokoine University of Agriculture, angelo@sua.ac.tz

Abstract

Rationale of Study – Libraries play a crucial role in providing services and information resources. However, university libraries in Tanzania lack sufficient services, facilities, and resources to meet the needs of their users. Therefore, this study was conducted to assess the level of user satisfaction with library services in Tanzania. Specifically, to determine the existing library services provision in the selected universities, to determine the extent of users' satisfaction with library services, and to examine the influence of library service provision on user satisfaction.

Methodology – The sample size was 397 respondents, who were academic staff, library staff and students from five selected universities, selected through simple random sampling as per Israel (1992) sample determination table, and 68 key informants, who were heads of university departments, were selected through purposive sampling. Both qualitative and quantitative information were collected using questionnaires and interviews. The quantitative data were analysed using SPSS software, while the qualitative were analysed through content analysis.

Findings – The results indicated that the primary services provided by libraries were circulation (22.2%), internet (15.6%) and reference services (14.9%). Furthermore, the study found that the satisfaction levels were statistically significant at 5% and 1% levels of significance. The majority of respondents (53%) rated the service quality in terms of information availability as high.

Implications – The study also revealed that library service provision significantly influenced user satisfaction. These results imply that respondents were satisfied with library services. However, there are some challenges, such as internet connectivity, institutional repository and secretarial services, which were recommended for improvement.

Originality – This is an original study conducted in five selected universities in Tanzania.

Keywords

User satisfaction, service provision, university libraries, Tanzania

1 Introduction and background of the study

Libraries serve as the heart of universities, nurturing all the programs (Haiyan & Qing, 2023). The responsibility of university libraries is to cater to the needs of students, lecturers, and researchers. They should provide scholarly materials that align with the institution's mission, vision and academic needs. Thus, the role of the university library is to offer users information that fulfils their needs. As stated by (Ijiekhuamhen et al., 2015), libraries are the central entity of the university, along with well-equipped laboratories and faculties, which collectively determine the university's status. Furthermore, in order to satisfy users, it must provide appropriate services that meet their needs. Firstly, libraries should raise awareness about the available information resources and services. This will enable users to understand the types and kinds of resources and services that are available and accessible. According to O'Donnell and Anderson (2022), promotion involves effectively communicating information about general library services to potential users. Additionally, it is essential to identify the resources and services required by users. Igwe and Sulyman (2022) state that library resources and services include collection development, reader services, and ICT/multimedia. Guiding users on the utilisation of resources and services is another crucial aspect for library users. As Emeahara and Ajakaye (2022) suggest, librarians should provide instruction to users on how to use the facility in order to achieve the library's objectives. Lastly, library services and resources should be appropriately classified, organised and disseminated.

University libraries are responsible for catering to the information needs of their users by offering resources and services. These libraries allocate funds towards the acquisition, processing, organisation, and dissemination of information resources and services to serve their users effectively. However, the advancements in science and technology have made libraries more complex and challenging for users, leading to dissatisfaction with the available resources and services (Bea et al., 2018; Ocholla et al., 2021; and Wema, 2018). Hence, this study aimed to assess the level of user satisfaction with library services provision of library services in order to improve user satisfaction in five selected universities in Tanzania. Specifically, to determine the existing library services provision in the selected universities, determine the extent of users' satisfaction with library services, and examine the influence of library service provision on user satisfaction.

2 Literature review

Scholars (Ocholla et al., 2021; and Olubiyo & Jamogha, 2022) have identified various services offered by university libraries, including circulation, which entails the lending and returning of books, reference services where librarians assist users in locating existing resources, utilising the library catalogue, accessing them through computers, and utilising essential reference sources. Additionally, library services may encompass the provision of audio-visual facilities, internet access, and secretarial services like photocopying, printing, and faxing. Academic libraries offer orientation programs for newly enrolled users and current awareness services for newcomers. Furthermore, the library plays a role in assessing the information needs and usage patterns of its users.

In library and information sciences, there are terms used to describe individuals who utilise library services, including clients, customers, borrowers, members, and patrons. However, the most commonly used term is "user." Defining the term "library user" is not an easy task, as some individuals may visit the library frequently while others may not. Some users may take advantage of multiple library services, while others may only utilise one. However, a user can generally be defined as a person who utilises one or more of the library's services at least once a year (Onwubiko, 2021). User satisfaction refers to the extent to which a product or service meets a user's needs, expectations, and preferences. In any academic library, user satisfaction is a significant outcome of information services provision. Therefore, the plans of most university libraries prioritise a user-centred approach in all their services to align with the university's objectives (Anmol & Muhammad, 2021). Satisfaction reflects how users feel after utilising the library's information resources and services, plus their willingness to return for future use.

In Tanzania, libraries are essential instruments that aim to meet international, national, and institutional standards to ensure the achievement of their goals and missions. The Library Service Provision (LSP) in Tanzania adheres to specific standards. These standards include maintaining a library book-student ratio of 1:30, a library-computer-student ratio of 1:25, ensuring 12 hours of library internet connectivity, and providing at least five links to e-library resources (TCU 2018- These standards necessitate an evaluation of whether Tanzanian universities have been able to meet them. If not, it is crucial to identify the factors that have hindered their efforts in attaining these standards. Studies have been conducted on user satisfaction with library services in university libraries across different geographical settings, technological eras, and socio-cultural contexts. These studies have utilised various assessment methods (Elias & Lubua, 2021; Simba, 2020). However, to the

researcher's knowledge, no study has specifically assessed library services provision to improve user satisfaction in Tanzanian universities.

The provision of library services has undergone a significant transformation from traditional methods to a more efficient and speedy approach since the advent of the technological era (Sahabi & Otobo, 2021). However, in order to keep up with these changes, librarians are confronted with various challenges that need to be effectively addressed if they wish to remain relevant in the 21st-century information provision site (Ocholla et al., 2021) highlight several factors that influence user satisfaction in library service provision, such as limited access to information resources and services, lack of knowledge in information technology, insufficient technical skills, and technical malfunctions that hinder access to these resources.

According to (Wema, 2018), information literacy is a multifaceted concept that involves a wide range of skills, knowledge, assistance, and attitudes needed to successfully navigate the vast and complex information landscape of the modern world; it involves the capacity to locate, evaluate, interpret, and ethically use information from diverse sources and in various formats. Therefore, (Ocholla et al., 2021) revealed that information literacy skills are needed for library users and library personnel to gain maximum satisfaction in the use of library services and resources. Librarians must have specialised skills and knowledge that enhance the provision of effective and efficient library services to meet users' needs.

Ramachandrappa and Surwade (2020) suggest that the presence of library resources drives users to use the library. These resources encompass a wide range of up-to-date materials, including textbooks, dictionaries, encyclopedias, newspapers, magazines, e-resources, journals, indexes, CD-ROM databases, abstracts, bibliographies, conference papers, and proceedings. Igwe and Sulyman (2022), on the other hand, emphasise the significance of textbooks, dictionaries, and encyclopedias as the primary learning resources required within the library.

Library services encompass a range of services, including photocopying facilities, orientation sessions, book displays, internet access, reference assistance, specified opening hours, interlibrary loan services, institutional repositories, and the circulation desk. Additionally, there are supplementary services available, such as recreational amenities like a coffee shop, designated areas for reading magazines, and catering services. According to Shahzad and Khan (2023), another library service is the provision of high-speed internet for efficient access to information. The emergence of technologies has made information

readily available in various formats, including electronic formats. However, many users and service providers are not yet accustomed to these advancements. Therefore, both users and librarians need to acquire technological literacy in order to adapt to these changes.

Library facilities, including the location, buildings, atmosphere, opening hours, technical assistance, and reading areas. Factors such as the appearance of the facilities, the collections, the atmosphere, cleanliness, comfort, and the services provided play a significant role in attracting users' attention. Additionally, the speed of service delivery, value-added services like Current Awareness Services and Selective Dissemination of Information and the use of technology are important considerations. However, according to Buruga and Osamai (2019), the lack of adequately trained staff and outdated learning resources are significant obstacles to satisfactory library service provision.

Human resources officers within the university library play a crucial role in attracting, compensating, retaining, motivating, and developing the right talent to achieve the current and future goals of the library (Samzugi, 2019). The presence of well-informed and skilled human resources in the library is essential for enhancing the utilisation of library resources and services. Library staff must be helpful, polite, knowledgeable and skilled in order to effectively meet the needs of library users (Amarasekara & Marasinghe, 2020).

3 Theoretical framework

Some theories and models explain user satisfaction with library services. These include web-Qual, Lib-Qual, E-S-Qual, Site Qual, Dig-Qual and ServQual, which provide insights into user satisfaction with Library Service Provision (LSP). Studies by Simba (2020) and Thokoa et al. (2022) have utilised these models to assess user satisfaction with Library Service Provision. Among these models, the ServQUAL model was chosen for this study due to its effectiveness in measuring library service quality on a global scale. Within the Serv-Qual model, a service provider must excel in five critical elements of service, namely (RATER). Reliability is the ability to consistently and accurately deliver the promised service. Responsiveness and willingness to assist customers promptly. Empathy is providing personalised attention and care to customers. Assurance encompasses the knowledge, courtesy, and ability of employees to instil trust and confidence in customers.

In this framework, user satisfaction is considered the dependent variable, while library services provision is identified as the independent variable. The regression model, which is represented mathematically, is expressed as follows: $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 +$

β4X4 + β4X5 + ε, or User satisfaction = β0 + β1*information literacy + β2*library services + β3*library resources + β4*Human Resources + β5*Library facilities. In this equation, Y represents the dependent variable, which is user satisfaction, and X1, X2, X3, X4, and X5 represent the independent variables. β0 is a constant, representing the intercept of the model, and β1 to β5 are regression coefficients for the respective X variables. The error term is denoted as ε. The conceptual framework includes an additional variable, library resources, as the study recognises the significance of the availability of library service provision in user satisfaction.
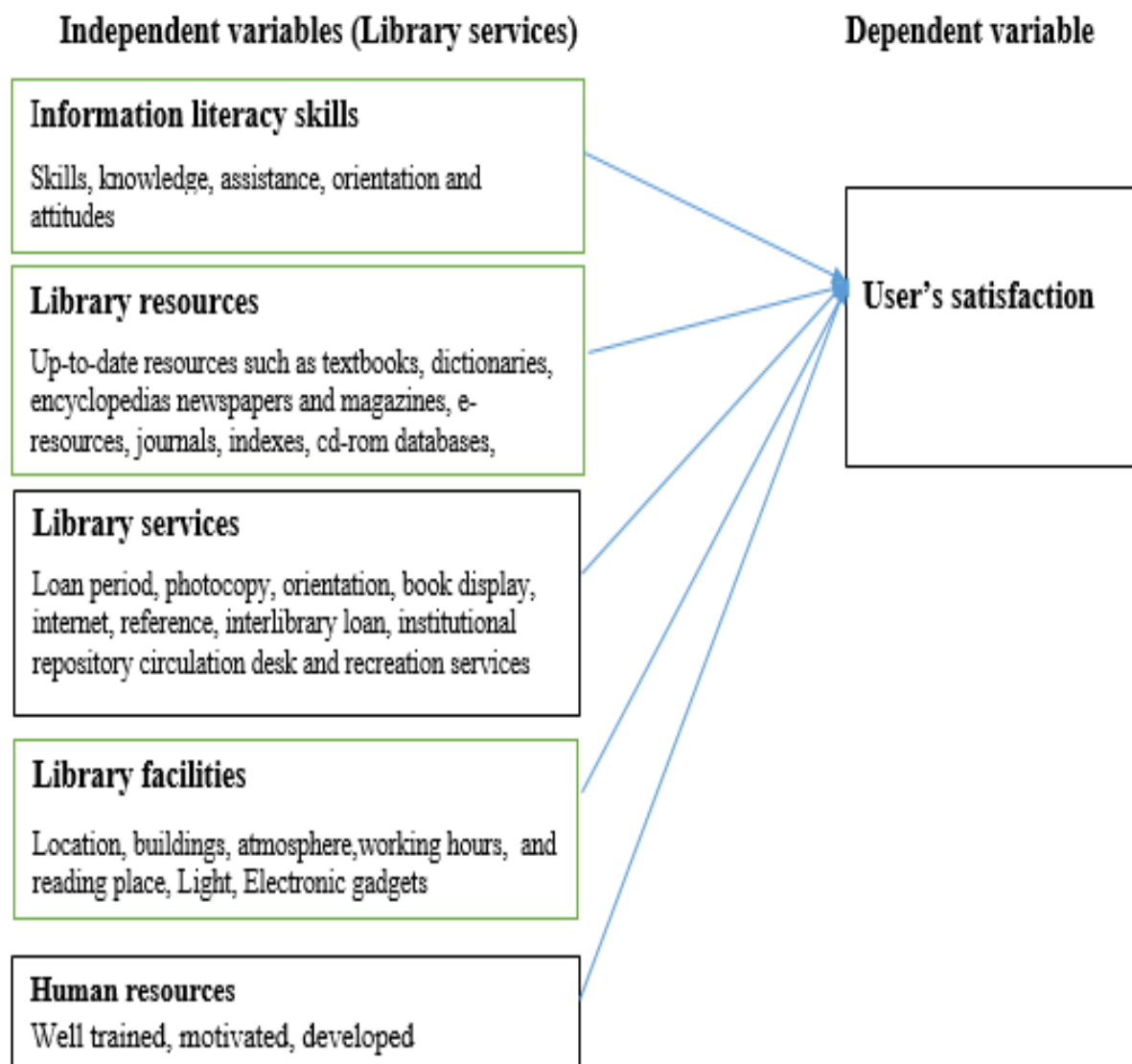
Figure 1: A modified conceptual framework

4 Research methodology

This research employed a pragmatic philosophical paradigm, prioritising the research problem and utilising various paradigms to comprehend the problem (Creswell & Poth, 2016; Kaushik & Walsh, 2019). It is known for its practical and logical responses and also serves as the underlying philosophical framework for mixed-methods research (Kothari, 2004)

The research study employed a combination of qualitative and quantitative research methodologies that allows the gathering of diverse information types, thereby enhancing the reliability of the conclusions drawn by leveraging the strengths of each method; any limitations or weaknesses are effectively compensated for (Kothari, 2016)

The study employed a cross-sectional research design, which involved collecting information in a single instance. This design proves advantageous in terms of time and resources, especially when they are limited (Merriam & Tisdell, 2015). The selection of participants in such studies is based on predetermined inclusion and exclusion criteria. Cross-sectional studies are known for their relatively quick execution and cost-effectiveness.

The research was conducted at five universities in Tanzania, including the University of Dar-es-Salaam, the University of Dodoma, St. Augustine University, the State University of Zanzibar and Zanzibar University. These universities were purposefully chosen due to their extensive experience, resources, services, and infrastructure, located in both the mainland and island parts of Tanzania, encompassing both private and public universities. Each university offers unique services and is regulated by the Tanzania Commission for Universities (TCU), ensuring that the study obtained the necessary and comprehensive information.

The study's population consisted of academic staff members, students, heads of higher learning institutions, Directors of Libraries, quality assurance officials, Heads of Departments in the libraries, and library staff, totalling 64,988 individuals (Table 1) and 68 respondents were purposefully selected due to their ability to give information based on their positions they held. These specific groups were chosen because they were believed to have the potential to offer relevant information and answers for the study. The university's academic staff and students served as the unit of analysis. They were selected using purposive sampling techniques and systematic random sampling techniques.

Table 1: Population of the Study

	Name of University	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 (2018)

The participants in this research were chosen through a combination of probability and non-probability sampling methods. The probability sampling methods employed included systematic random sampling, while purposive sampling techniques were used for non-probability sampling. Specifically, the purposive technique was used to select five universities and 68 critical informants for this study.

The total population was 64,988 (see Table 1). The sample size was obtained using the Sample Size Determination Table (Israel, 1992), which states that if the total population is between 50,000 and 100,000, the sample shall be 397 respondents (see Table 2).

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 (1992) **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 shows the sampling frame, which indicates how many respondents were selected from each university. It illustrates the number of respondents chosen from each university. The respondents were selected based on the formula: Number of Participants divided by the total population multiplied by the sample size, resulting in the number of respondents in each university category.

Table 3: Sampling frame

	Name of University	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 (2018)

This research utilised primary information collection techniques, which were obtained by using questionnaires and interviews. However, the questionnaires were pretested before being administered to the sample size, resulting in a reliability score of 0.72, indicating that the instrument used was reliable.

The information was analysed qualitatively and quantitatively (See Table 4 –analytical framework). SPSS software was used to analyse quantitative information and content analysis for qualitative

Table 4: Analytical framework

	Objective	How was analysed
1.	To determine the existing library services provision in the selected universities	Descriptive analysis
2.	To determine the extent of user satisfaction	Inferential and descriptive analysis
3.	To examine the influence of library service provision	Inferential analysis

5 Research findings and discussions

In this section, findings were presented based on specific objectives as follows:

5.1 The existing library services

Table 5 displays the outcomes of the survey, in which participants were requested to recognise the library services currently offered in their respective libraries. The findings reveal that the library services presently available consist of circulation (22.2%), internet services (15.6%), reference (14.9%), secretarial services encompassing photocopying,

scanning, faxing, and printing (13.9%), and digital archive services institutional repository (13.1%).

Table 5. The existing library service provisional (N=397)

Library services	Frequency	Percentage (%)
Circulation	88	22.2
Internet services	62	15.6
Reference	59	14.9
Secretarial services like photocopy, scanning, fax, printing	55	13.9
Institutional repository services	52	13.1
Binding	38	9.6
Current Awareness	23	5.7
Audio-visual	14	3.5
Reading space	04	1.0
Recreation services	02	0.5
Total	397	100

The results show that the majority of users are familiar with library services offered, like book lending and return, accessing e-books and e-journal articles, social media, and completing assignments. Therefore, it is crucial for library management to ensure that the current resources and services are sufficient to satisfy users. Additionally, libraries should acquire current resources that are unavailable, such as Current Awareness Services, Selective Dissemination of Information, online access to indexing/abstracting services, reference services through email, chat, and instant messaging, as well as expanding and updating the physical space with electronic devices conducive to online consultation and learning resources. These findings contradict the report by Caumont (2013) and Decker (2021), which stated that the most recognisable library services were book borrowing, free internet access, and free computer usage.

5.2 Satisfaction of university library services provision among library users

The participants were asked to evaluate their satisfaction with the provision of library services based on the accessibility of information. According to Table 6, satisfaction levels regarding library services are displayed. The findings revealed that the majority of the participants (53%) rated the quality of service in relation to information availability as high (within the range of 51-75%), followed by 28% of individuals who stated that the information materials were accessible within the range of 76-100%.

Table 6: Satisfaction of University Library Service Provisions (N=397)

S/N	Rating	Frequency	Per cent (%)
1	1-25%	24	6
2	26-50%	52	13
3	51-75%	211	53
4	76-100%	110	28
	Total	**397**	100

These findings suggest that a majority of users (53%) rated the service quality in terms of information availability as high (in the range of 51-75%). Consequently, users deemed the availability of library information satisfactory; however, 47% expressed dissatisfaction. Therefore, library management must increase awareness regarding information availability. These findings slightly contradict the results of a study conducted by R*amachandrappa* and Surwade (2020), where 50% of respondents expressed satisfaction with the overall facilities and services provided by their library.

5.3 Satisfaction of university library service provisions across university libraries

Participants were requested to assess the level of satisfaction across university libraries, and the outcomes are presented in Table 6. The results indicate that the level of satisfaction, as perceived by library users, exhibited a significant difference at $p=0.05$ and $p=0.001$.

Table 7: Inferential statistics to determine the level of satisfaction across university libraries

Statements on the satisfaction level	Chi-square p-values
If the library has the required information for you as a user	0.002*
If always get what is wanted from the library	0.013*
The rating that the library has information	0.009*
The rating that the library has limited information	0.000**
The rating that the library needs to be improved	0.016*

Note: * Statistically significant at 5% level; ** statistically significant at 1% level

The findings show that libraries hold the necessary information for users as they obtain the information they seek from the library. Statements such as the library having an abundance of information, the library having limited information, and the need for improvement in the library all impact the level of satisfaction among users. Therefore, library management must ensure that the library retains the required information. These study results align with a study conducted by (Samzugi, 2019), which concluded that university libraries possess the necessary information resources for users.

5.4 Satisfaction of university library service provisions across demographic characteristics of Respondents

The respondents were asked to provide information on demographic characteristics, including gender, age groups, educational level, user category, and work experience. The findings are presented in Table 8. The results revealed a statistically significant distinction between age groups and the availability of required information for use (0.020*), the assessment of the quantity of information accessible in the library (0.008**), and the evaluation of the need to enhance the library (0.049*). Additionally, there was a statistically significant difference in the assessment of limited information in the library (0.028*) and the need for library improvement based on user category. Similarly, the research discovered a statistically significant difference between user categories and the rating, indicating the necessity for library improvement (0.000**) (Table 8).

Table 8: Inferential statistics to determine the level of satisfaction across demographic characteristics of respondents N=397

Statement on the satisfaction level	Demographics and Chi-Square P-value				
	Sex	Age group	Education level	User category	Work experience
If the library has the required information for you as a user	0.528 ns	0.020*	0.429 ns	0.697 ns	0.675 ns
If always get what is wanted from the library	0.293 ns	0.342 ns	0.283 ns	0.758 ns	0.389 ns
The rating that the library has information	0.248 ns	0.008**	0.160 ns	0.192 ns	0.116 ns
The rating that the library has limited information	0.365 ns	0.053 ns	0.102 ns	0.028*	0.107 ns
The rating that the library needs to be improved	0.107 ns	0.049*	0.079 ns	0.000**	0.586 ns

Note: * Statistically significant at 5% level; ** statistically significant at 1% level. Ns = not significant

5.5 Frequency of the use of library services

Table 9 presents the participants' responses regarding the frequency of their library service use. According to the data, the majority of users (35.3%) preferred to utilise the library services on a daily basis. Additionally, 28.0% of the respondents indicated that they preferred to use the library services 2-3 times a week, while a smaller percentage (5.3%) preferred to use the library services only once per semester.

Table 9: Frequency use of library

S/No.	Frequency of use of library services	Frequency	Percentage (%)
1	Daily	140	35.3
2	Once a week	83	21.0
3	2-3 times a week	110	28.0
4	Once every two weeks	42	10.6
5	Once per semester	21	5.3
6	I do not remember	1	0.3
	Total	**397**	**100.0**

This result suggests that users have a strong preference for utilising the library services on a daily basis. This signifies the vital role of the library and highlights the users' preference to rely on it. Consequently, it is crucial for library management to ensure that the library is equipped with the necessary services and resources that cater to the users' needs. During an interview, one of the respondents expressed their observation, stating, "Most of the users are consistently present in the library, even when it is closed, as they engage in Web 2 services while taking advantage of the free Wi-Fi." This finding contradicts the results of a study conducted by (Muhammad et al. (2023), who reported that the frequency of library visits by users is not consistently regular. The study revealed that a few respondents visited the library on a daily basis. This indicates that the respondents utilise the library at varying times. Interestingly, this finding is in contrast to a study conducted by some scholars (Onwubiko, 2021; Ramachandrappa & Surwade, 2020) on users' satisfaction, which found that a high percentage of respondents preferred to visit the library once a week.

5.6 The influence of library service provision on user satisfaction

Table 10 presents the impact of library service provision on user contentment. The findings reveal that library patrons express satisfaction with circulation (73%), reference (44.8%), secretarial services (43.3%), reading space (42.6%), Internet services (42.3%), current awareness (40.9%), Institutional repository services (29.2%), Information literacy (23.4%), and binding (17.6%). Additionally, the results demonstrate that library services like circulation hold statistical significance (P ≤0.000).

Table 10: The influence of library service provision on user satisfaction (N= 397)

Library Services	Frequency	per cent	P value
Library resources			
Circulation	290	73.0	0.000
Library services			
Internet services	168	42.3	0.029
Reference	178	44.8	0.015
Secretarial services	172	43.3	0.218
Institutional repository services	116	29.2	0.197
Binding	70	17.6	0.266
Current Awareness	162	40.9	0.027
Audio-visual	50	12.6	0.938
Information literacy			
Skills, knowledge, assistance, and attitudes	93	23.4	0.865
Library facilities			
Skills, knowledge, assistance, and attitudes	169	42.6	0.754

The findings suggest that university library users express satisfaction with the circulation services and reference materials provided by the library. These findings contradict the results of previous studies conducted by Moustapha (2021) and Muhammad et al. (2023), which indicated that users were satisfied with various aspects such as the number of books borrowed, fines, periodicals, interlibrary loans, and internet speed. Consequently, university and library management must ensure an adequate collection of books, an efficient reminder system, and reasonable fines. Additionally, the library should offer up-to-date periodicals and interlibrary loans to cater to resources that are not available within the library, along with sufficient bandwidth.

6 Discussion

University libraries provide services to a wide range of users in academic categories, both within and outside Tanzania. Since the library is the backbone of any university, as it supports its programs, the primary responsibility is to provide services and resources that aim to enhance the satisfaction of its users through service quality based on international and Tanzanian contexts. This study provides insight into the need for library management to assess library services in order to improve user satisfaction. The findings of this study reveal that circulation, internet, reference and secretarial services and digital archive services are the existing library services. This shows that libraries are striving to provide good services. However, most of the unsatisfactory services can be attributed to insufficient budget allocation and lack of awareness of existing resources and services. This

is confirmed by a study by Gyau et al. (2021), which found that some current services and resources are satisfactory and easy to access. However, some are outdated and lack awareness of the new services. The low budget allocated to the library impairs the satisfaction of some users. Therefore, it is crucial for library management to ensure that the current resources and services are sufficient and updated to satisfy their needs.

Also, the study found that the majority of the participants rated the quality of service in relation to information availability as high. This implies that libraries strive to ensure there are available learning resources in terms of quantity. Therefore, library management should continue to provide enough learning resources based on the needs of users. This is slightly similar to the study done by other scholars (Dube & Jacobs, 2023; Mubofu, 2024), as they revealed that information resources are made available to meet users' needs. Moreover, the study found that the level of satisfaction, as perceived by library users, is positively significant. These results are similar to the study by (Yuan & Yang, 2023), who revealed that most library users perceive that they are positively satisfied with library services. Therefore, library management must ensure that the library possesses the required information as per the university curriculum.

The results showed a statistically significant difference between age groups in the availability of the required information for use, the assessment of the amount of information available in the library and the evaluation of the need to improve the library. This is similar to the study by (Walters, 2023), whose review observes that demographic characteristics of users have statistical significance distinction in assessing diversity in academic library book collections. Also, the frequency of the use of library facilities was found to be on a daily basis. This is similar to the study by Oliveira et al. (2022), which revealed that most library users use the library on a daily basis. This indicates that the respondents use the library for academic purposes daily. Last, the study found some factors that influence library service provision on user satisfaction and suggested university library users point out satisfaction with the circulation services and reference materials provided by the library.

7 Conclusion

The research thus concluded that the majority of libraries offer limited services and resources that are insufficient to satisfy users. Additionally, the research revealed that user satisfaction with library resources and services varied significantly based on demographic characteristics. Furthermore, the research identified several factors that influence user

satisfaction, including the availability of resources, infrastructure, human resources, internet connectivity, and lack of awareness regarding certain library services. Consequently, the study concluded that in order to enhance user satisfaction in Tanzanian university libraries, it is imperative to ensure that the available resources and services are provided in accordance with user requirements.

8 Recommendations

Library management must ensure that current resources and services are adequate to meet user needs. They should procure additional resources like updated materials, Current Awareness Service, Selective Dissemination of Information, online access to indexing and abstracting services, and reference services. Additionally, they should expand and rehouse the library with electronic devices for online consultation and a conducive environment for learning, research, consultancy, and teaching.

The university must ensure that libraries possess a sufficient amount of books, up-to-date periodicals, and interlibrary loans for materials that are not readily accessible within the library. Additionally, the library should offer services such as a reminder system and manageable fines and provide information literacy support in the form of skills, knowledge, and assistance to its users. Furthermore, the library facilities should include a comfortable reading space that is suitable for tropical environmental conditions.

The study evaluates library services in five Tanzanian universities for improved user satisfaction. It found that most users are familiar with these services, including book lending, e-book access, social media usage, and assignment completion. However, the findings cannot be generalised to all libraries in Tanzania. The majority of participants were undergraduate students, with a more miniature representation of postgraduate students, lecturers, and library staff. Future research should include a fair representation of all user categories and use more extensive secondary data. The study also suggested using observation and focus group discussions to gain deeper insights into user needs. Libraries should also consider incorporating more user-friendly tools and resources.

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