Effects Of Service Quality On User Satisfaction As Mediated By Information Literacy Skills

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ABSTRACT

Libraries play a crucial role in the dissemination of information, yet they face increasing challenges from changing user expectations and rapid technological advancements. This research investigates how library service quality influences user satisfaction, with a particular focus on the role of information literacy skills at a private university in the Philippines. Employing SERVQUAL and Big6 frameworks, a quantitative methodology was used, incorporating descriptive-correlation and mediation research designs. The study involved undergraduate students, with a sample of 138 participants selected through purposive sampling and data collected via questionnaires. Results indicate a strong perception of library service quality across key dimensions, including Resources, Competency, Responsiveness, Demeanor, and Tangibles. Specifically, Tangibles, Responsiveness, and Resources were identified as significant factors influencing user satisfaction. Additionally, the research revealed important correlations among library service quality, information literacy skills, and user satisfaction. The study found out that higher levels of information literacy skills among users are associated with greater user satisfaction regarding library services. This study recommends continuous evaluation and improvement of library services, with a focus on enhancing Tangibles, Resources, and Responsiveness, while promoting information literacy education initiatives.

Keywords: service quality, user satisfaction, information literacy, library services.

INTRODUCTION

Libraries exist to collect, organize, and to disseminate information. It is a service center for supplying various kinds of information (Abraham & Sabu, 2022). The main role of the library is to provide information and resources, with the primary objective of meeting and satisfying the needs of its users. Libraries today face the challenge of ensuring user satisfaction in an era marked by changing user expectations. They are confronted with the task of meeting the expectations of their users in a time when those expectations are constantly evolving. Technological advancements affect how libraries assess quality and maintain user satisfaction (Chen, Ho Kuo, 2022). Existing researches highlights that users satisfaction is influences by various factors such as the library's size and collection, the efficiency of material organization, the effectiveness of catalogs and access tools, and the proficiency of and collaboration of library staff in guiding users (Patrick, Aghojare and Ferdinand (2015). The effectiveness of any library is a function of the quality of services rendered (Onwukanjo and Men 2017). Its effectiveness depends on how users can efficiently obtain information and the convenience with which these users can find, retrieve, and utilize information and services. Furthermore, the quality of services provided in any library is also determined by the expertise of qualified staff (Bua &Yawe, 2014).

User satisfaction is a cornerstone of successful library services. It ensures that libraries remain true to their purpose of providing knowledge and information. If library services meet users' expectations, they are more likely to utilize the library effectively. Researchers have explored various factors influencing user satisfaction in the context of the library. These factors include the quality of library services (Mohindra & Anil Kumar, 2015), library facilities (Iwhiwhu & Okorodudu, 2012), and library resources (Ezeala & Yusuff, 2011). The findings of this study have important implications for librarians and other library professionals. By evaluating the relationship of the service quality of the library and users satisfaction mediated by information literacy skills, libraries can better tailor their services to the needs of their users. This study aimed to answer the following problems (1) What is the level of user satisfaction on the library? (2) How do library users rate the quality of library services in terms of: (a) Resources, (b) Competency, (c) Responsiveness, (d) Demeanor, and (e) Tangibles. (3) What is the level of information literacy skills among library users? (4) Is there a significant relationship between quality of library services and information literacy skills? (5) Is there a significant relationship between quality of library services and user satisfaction? (6) Is there a significant relationship between information literacy skills and user satisfaction? (7) Does service quality significantly predict user satisfaction? (8) Does service quality significantly predict information literacy skills? (9) Do information literacy skills predict user satisfaction? (10) Does information literacy skill mediate the relationship between quality of library services and user satisfaction? The study focused on collecting and analyzing quantitative data, which was quantified and subjected to statistical analysis. This study examined the relationship between library service quality and user satisfaction, mediated by information literacy skills at a private university in the Philippines.

LITERATURE REVIEW

This literature review explores the intersection of library service quality, user satisfaction, and information literacy, focusing on theoretical frameworks and empirical studies that illuminate these areas. It examines key concepts, models, and recent research findings, providing insights into how these elements interact and influence library user experiences. The SERVQUAL model, developed by Parasuraman, Zeithaml, and Berry (1988) is a prominent framework for assessing service quality across various sectors. This model identifies five critical dimensions—tangibles, reliability, responsiveness, assurance, and empathy—that influence customer perceptions and satisfaction. Andaleeb and Simmonds (1998) extended the SERVQUAL model to the academic library context, addressing limitations observed in prior studies. They introduced constructs more suited to academic libraries, such as resources and staff competence, to better capture the nuances of library service quality. Their study emphasized the need for context-specific adaptations to enhance the SERVQUAL model's applicability in different settings. Building on this, Alam (2020) adapted SERVQUAL to study library service quality in Bangladesh. His research utilized a modified SERVQUAL instrument with 30 statements across the five dimensions. The results highlighted significant impacts of tangibles, staff responsiveness, and resources on user satisfaction, demonstrating the model's effectiveness in identifying key areas for improvement in library services. Service quality is a multifaceted concept reflecting how well a service meets or exceeds customer expectations. It encompasses dimensions such as reliability, responsiveness, assurance, empathy, and tangibles, which collectively contribute to overall satisfaction. In the context of libraries, Ingaldi (2018) emphasizes the importance of assessing service quality to identify strengths and weaknesses, facilitating improvements. Kowsalya, et al. (2019) highlight that maintaining high service quality is vital for libraries to remain competitive and meet evolving user expectations. Library

resources include a diverse range of materials and tools available to users, including books, journals, electronic databases, and multimedia resources. Makinde et al. (2020) and Innocent (2022) underscore the significance of accessible and valuable resources in supporting academic research and learning. Nasallah et al. (2022) further emphasize that both printed and non-printed materials are essential for meeting user needs and achieving library goals. Competency in library services encompasses the skills and knowledge required to perform library tasks effectively. Metzger and Jackson (2022) define competency as a combination of knowledge, skills, and behaviors essential for effective job performance. Pandey and Prasad (2023) highlight that competencies are critical for librarians to provide high-quality services and adapt to new technologies. Responsiveness refers to the library's willingness to assist users and address their needs promptly. Kinya & Muthee (2022) emphasize the importance of responsiveness in delivering individualized service that meets users' unique requirements. Dugan & Hernon (2002) and Kumar & Mahajan (2019) note that responsiveness is a key determinant of service quality, reflecting how well an organization adapts to user needs. Demeanor involves the courtesy and professionalism of library staff, including their ability to provide individualized attention. Sharif et al. (2021) found that librarian behavior significantly impacts students' academic performance and satisfaction. Positive librarian behavior fosters a supportive learning environment, while negative behavior can hinder user satisfaction. Tangibles refer to the physical aspects of library services, such as facility appearance, equipment, and communication materials. Kinya & Muthee (2022) and Nur & Fritantus (2021) demonstrate that the tangible aspects of service play a crucial role in user satisfaction. Mamun-Ur-Rashid (2023) highlights that discrepancies between user expectations and actual tangible aspects indicate areas for improvement. User satisfaction reflects the contentment experienced by individuals after interacting with library services. Lawal & Kannan (2020) and Reyes (2019) emphasize that fulfilling user information needs is central to achieving high satisfaction levels. Taufiq et al. (2020) suggest that analyzing user feedback is essential for evaluating and enhancing library services. Information Literacy (IL) refers to the ability to effectively locate, evaluate, and use information. Nisha & Varghese (2021) and Ekong & Ekong (2018) highlight the critical role of IL in academic performance and lifelong learning. Schmidt Hanbidge et al. (2018) and Odede (2018) underscore the importance of IL in navigating complex digital environments and making informed decisions.

The Big6 model, developed by Eisenberg and Berkowitz (1980s), is a framework for information problem-solving. It includes six stages: Task Definition, Information Seeking Strategies, Location and Access, Use of Information, Synthesis, and Evaluation. Baji et al. (2018) and Singh & Grizzle (2021) highlight the model's effectiveness in guiding users through the information-seeking process, emphasizing its utility in educational settings.

METHODS

The study concentrated on undergraduate students enrolled at a specific university in Cavite, Philippines. To ensure the participants' well-being and the credibility of the findings, certain criteria have been established for exclusion. In this study, purposive sampling was utilized, specifically targeting officially enrolled undergraduate college students who frequently utilize/visit the library. The researchers endeavored to assess 138 respondents.

The instruments that the study adapted, and used are parts of the SERVQUAL instrument by Andaleeb and Simmonds (1998) which was modified and used by Alam (2020) to measure library service quality and satisfaction; and the Big6 instrument that Musa et al. (2023) constructed to measure information literacy skills.

The study underwent ethical clearance and approval by the Ethical Regulatory Board. To survey the student population using the library, researchers obtained permission from library

management and identify key locations frequented by students. Participants were assured of anonymity, and completed surveys were securely sealed and stored before data encoding. Afterward, the survey forms were disposed of confidentially. The collected information was utilized to evaluate and establish a significant relationship between the quality of library services and user satisfaction.

The study used the combination of descriptive analysis, structural equation modeling (SEM), and multiple linear regressions to address the research questions. Descriptive statistics were employed to evaluate user satisfaction with the overall quality of library services and to analyze how library users perceive various service dimensions, including resources, competency, responsiveness, demeanor, and tangibles. As discussed by Hair et al. (2021), SEM allows researchers to estimate models that capture the interrelationships between multiple variables. In the context of exploring the relationships between service quality, information literacy skills, and user satisfaction, SEM allows for the testing of hypotheses regarding the direct and indirect effects of these variables on each other. Multiple linear regression is a widely used statistical technique for estimating the relationships between dependent and independent variables. As noted by Etemadi & Khashei (2021), regression modeling is extensively employed across various fields and applications due to its effectiveness in analyzing such relationships. In the context of assessing user satisfaction, multiple linear regressions allows researchers to examine the extent to which service quality dimensions and information literacy skills predict user satisfaction. By including service quality dimensions and information literacy skills as independent variables and user satisfaction as the dependent variable in the regression model, researchers can quantify the contributions of these factors to user satisfaction.

RESULTS AND DISCUSSION
Library Users' Level of User Satisfaction

The table below shows the results relating to the research question, "What is the level of user satisfaction?" The mean, standard deviation, scaled response and verbal interpretation. Table 1 presents the library users' overall satisfaction with the library.

Table 1
Library Users' Level of Satisfaction

No.	Items	Mean	SD	Scaled Response	Verbal Interpretation
1	Overall, I am satisfied with my library experience.	6.07	1.14	Agree	Satisfied
2	I am satisfied enough to want to use the library in the future.	6.13	1.13	Agree	Satisfied
3	I am satisfied enough to want to tell others about the services of the library.	6.00	1.13	Agree	Satisfied
4	Considering it is a university library, the quality of service satisfies me.	5.95	1.36	Somewhat agree	Somewhat Satisfied
	TOTAL	**6.08**	**1.14**	**Agree**	**Satisfied**

The results indicate that the overall level of user satisfaction *M = 6.08 (SD = 1.14)* is interpreted as *satisfied*. This means that on average, users perceive the library services positively and find them sufficient to meet their needs and expectations. This finding confirms the study of Gyau et al. (2021) who evaluated user satisfaction with academic libraries based on the student's perspectives and found that most respondents express satisfaction with the library.

User's Rating of the Quality of Library Services in terms of: (a) Resources, (b) Competency, (c) Responsiveness, (d) Demeanor, and (e) Tangibles

Table 2 presents the library users rating of Resources.

Table 2
Library Users' Rating of Resources

No.	Items	Mean	SD	Scaled Response	Verbal Interpretation
1	Online catalogue is easy to understand.	5.43	1.34	Somewhat agree	Good
2	Collections are conveniently accessible.	5.58	1.14	Agree	Very Good
3	E-resources are easily accessible from personal computer.	5.70	1.32	Agree	Very Good
4	Existing collections adequately fulfil your information needs.	5.51	1.26	Agree	Very Good
5	Digital institutional repository is rich and dynamic.	5.49	1.20	Somewhat agree	Good
6	Convenient remote access to subscribed e-resources through the library website.	5.43	1.39	Somewhat agree	Good
7	Existing collections adequately cover your field of study.	5.56	1.33	Agree	Very Good
	TOTAL	**5.53**	**1.07**	**Agree**	**Very Good**

The results indicate that the overall level of resources *M = 5.53 (SD = 1.07)* is interpreted as *very good*. This means that generally library users think that the resources provided by the library to be of high quality. This could include various aspects such as the availability and accessibility of books, journals, databases, digital resources, technology infrastructure, study spaces, and other materials or tools necessary for academic or research activities. Interpreting resources as *very good* implies that users are satisfied with the quantity, diversity, relevance, and usability of the resources offered by the library. In summary, if resources are interpreted as *very good*, it indicates a positive perception among users regarding the quality and adequacy of the resources available to them. This finding aligns with Palmer's research, where a novel methodology combining quantitative and qualitative profiling was devised and implemented. This approach aimed to identify distinctive characteristics of study units that significantly influence student ratings of library resource quality (Palmer, 2012).

Table 3 presents the library users' experience in terms of library competency.

Table 3
Library Users' Rating of Competency

No.	Items	Mean	SD	Scaled Response	Verbal Interpretation
1	Library staff are always available in the library to help the users.	6.12	1.25	Agree	Very Good
2	Library staff provide services as promised.	6.07	1.21	Agree	Very Good
3	Library staff are knowledgeable in answering user queries.	6.04	1.24	Agree	Very Good
4	Users feel relaxed when interacting with library staff.	6.04	1.24	Agree	Very Good
5	Providing services accurately with minimum interruption.	6.03	1.29	Agree	Very Good
	TOTAL	**6.06**	**1.15**	**Agree**	**Very Good**

The results indicate that the overall level of competency *M = 6.06 (SD = 1.15)* is interpreted as *very good*. This means that generally library users perceive the competency of library staff to be satisfactory. This competency could encompass various aspects such as the knowledge, skills, helpfulness, and professionalism demonstrated by library staff in assisting users with their information needs. Interpreting competency as *very good* implies that users find library staff to be proficient and effective in providing assistance, guidance, and support. This finding aligns with segments of the study conducted by Ramakrishna et al. (2019), which surveyed library users' opinions regarding professional staff assistance in academic libraries. Their research revealed that users generally hold a positive perception of library staff.

Table 4 presents the library users' experience in terms of library responsiveness.

Table 4
Library Users' Rating of Responsiveness

No.	Items	Mean	SD	Scaled Response	Verbal Interpretation
1	Prompt and timely service to users.	5.96	1.25	Agree	Very Good
2	Readiness to respond to users' questions.	6.01	1.25	Agree	Very Good
3	Giving priority to users' interests.	6.04	1.24	Agree	Very Good
4	Library staff have willingness to help users.	6.28	1.11	Agree	Very Good
5	Having sincerity in handling users' problems.	6.08	1.18	Agree	Very Good

No.	Items	Mean	SD	Scaled Response	Verbal Interpretation
6	Having suitable space that encourages study and research.	6.17	1.17	Agree	Very Good
	TOTAL	**6.09**	**1.20**	**Agree**	**Very Good**

The results indicate that the overall level of responsiveness *M = 6.09 (SD = 1.20)* stays interpreted as *very good*. This means that generally library users perceive the responsiveness of library services to be satisfactory. Responsiveness refers to the timeliness, efficiency, and effectiveness with which the library addresses user needs, inquiries, and requests. Interpreting responsiveness as *very good* suggests that users find the library to be highly attentive and prompt in addressing their concerns, providing assistance, and offering solutions to their queries. This finding corroborates the research conducted by Emiri and Olise (2022), who employed SERVQUAL to evaluate service delivery quality and anticipate library users' inclination to revisit the Delta State Polytechnic Library, Ogwashi-Uku, Nigeria. Regarding responsiveness, their study unveiled that librarians in the DSPG library demonstrate a high level of responsiveness. Users perceive them as accessible around the clock, providing timely services, and consistently willing to aid users encountering challenges in information searching and retrieval.

Table 5 presents the library users' experience in terms of library Demeanor.

Table 5
Library Users' Rating of Demeanor

No.	Items	Mean	SD	Scaled Response	Verbal Interpretation
1	Library staff are always courteous, showing friendly behavior.	6.09	1.30	Agree	Very Good
2	Library staff deal with users in a considerate manner.	6.21	1.17	Agree	Very Good
3	Library staff understand the needs of users.	6.11	1.17	Agree	Very Good
4	Library staff are giving individual attention to users.	6.06	1.18	Agree	Very Good
5	Users can complain and make suggestions easily.	5.73	1.28	Agree	Very Good
	TOTAL	**6.04**	**1.11**	**Agree**	**Very Good**

The results indicate that the overall level of demeanor *M = 6.04 (SD = 1.11)* is interpreted as *very good*. This means that generally library users perceive the demeanor of library staff to be satisfactory. Demeanor refers to the behavior, attitude, and professionalism displayed by library staff when interacting with users. Interpreting demeanor as *very good* suggests that users find the demeanor of library staff to be friendly, helpful, and professional. This finding appears consistent with the research conducted by Mugo and Mathu (2021) which evaluated customer service provision to enhance user satisfaction in academic libraries, focusing on St Paul's University Library. Their study revealed that library users were treated with respect and courtesy when seeking library services.

Table 6 presents the library users' experience in terms of library Tangibles.

Table 6
Library Users' Rating of Tangibles

No.	Items	Mean	SD	Scaled Response	Verbal Interpretation
1	Library hours are convenient.	5.96	1.43	Agree	Very Good
2	Auto email alert service is available.	5.40	1.39	Somewhat agree	Good
3	Library website contains necessary information.	5.68	1.26	Agree	Very Good
4	Self-renewal service online is easy to use.	5.44	1.31	Somewhat agree	Good
5	Library is fully automated and in good condition.	5.70	1.32	Agree	Very Good
6	Appropriate study environment.	5.96	1.35	Agree	Very Good
	TOTAL	**5.62**	**1.13**	**Agree**	**Very Good**

The results indicate that the overall level of tangibles *M = 5.62 (SD = 1.13)* is interpreted as *very good*. This means that generally library users perceive the physical aspects of the library environment and its amenities to be satisfactory. Tangibles refer to the tangible or physical aspects of service delivery, including the facilities, equipment, and infrastructure available in the

library. It implies that users are satisfied with the quality of facilities such as seating arrangements, lighting, cleanliness, accessibility, and the availability of necessary equipment like computers, printers, and study spaces. This finding contrasts with the study by Lin and Foo(1999) who utilized an adapted SERVQUAL instrument to gauge the service quality of a special library, specifically a statutory board library.

Table 7 presents the library users' overall rating of the quality of library services.

Table 7
Library Users' Overall Rating of the Quality of Library Services

No.	Items	Mean	SD	Scaled Response	Verbal Interpretation
1	Resources	5.53	1.01	Agree	Very Good
2	Competency	6.06	1.15	Agree	Very Good
3	Responsiveness	6.09	1.20	Agree	Very Good
4	Demeanor	6.04	1.11	Agree	Very Good
5	Tangibles	5.62	1.13	Agree	Very Good
	TOTAL	**5.87**	**0.99**	**Agree**	**Very Good**

The results indicate that the library users' overall rating of the quality of library services *M = 5.87 (SD = 0.99)* is interpreted as *very good*. This means that generally library users perceive the quality of services provided by the library to be one step before excellent. A *very good* rating for library service quality implies that users find the library to be efficient, effective, and responsive to their needs. This finding remains consistent with the study conducted by Adamu(2017) which investigated undergraduate students' perceptions of library service quality across three dimensions: library information resources, services, and facilities available for use at YMSU Library. Their findings indicated that undergraduate students generally hold highly satisfactory perceptions regarding the facilities, resources, and services offered at the YMSU library, city campus.

Library Users' Level of Information Literacy Skills

The table below displays the results relating to the research question, "What is the level of information literacy skills among library users?" The mean, standard deviation, scaled response and verbal interpretation. Table 8 presents the library users' overall level of information literacy skills.

Table 8
Library Users' Overall Level of Information Literacy Skills

No.	Items	Mean	SD	Verbal Interpretation
1	Task Definition	2.77	0.86	High
2	Information Seeking Strategy	2.12	0.91	Low
3	Location and Access	2.83	0.86	High
4	Use of Information	2.61	0.81	High
5	Synthesis	2.98	0.88	High
6	Evaluation	2.22	0.94	Low
	TOTAL	**2.58**	**0.32**	**High**

The results indicate that the library users' overall level information literacy skills *M = 2.59 (SD = 0.32)* is interpreted as *high*. This means that generally library users possess a strong foundation of competencies and abilities related to finding, evaluating, using, and creating information effectively. This result varies from the study of Majid et al. (2020) who appraised the information literacy skills of students in Singapore and found that students have a middling level of information literacy skills.

Relationship Between Quality of Library Services and Information Literacy Skills

The table below exhibits the results relating to the research question, "Is there a significant relationship between quality of library services and information literacy skills?" Results show that there appears a significant positive weak correlation between library service quality and information literacy skills *(r = .282, p <.001)* This implies that better rating of library service

quality is associated with higher information literacy skills. Table 9 presents the relationship between Library Service Quality dimensions and information literacy skills.

Table 9

Relationship Between Library Service Quality Dimensions and Information Literacy Skills

	Library Service Quality	Information Literacy Skills
Library Service Quality	1	.282**
Information Literacy Skills	.282**	1

**. *Correlation is significant at the 0.01 level (2-tailed).*

A Pearson correlation coefficient of 0.282 indicates a weak positive correlation between Library Service Quality and information literacy skills. Since the correlation is significant at the 0.01 level (2-tailed), it suggests that this relationship remains unlikely to have occurred by random chance. Overall, this finding supports the idea that investing in improving Library Service Quality may contribute to enhancing information literacy skills among users, which can ultimately lead to more effective use of library resources and better outcomes in information-seeking tasks.

This result corroborates the findings of Lourdes and Marzo (2001), whose study investigated the potential mediating role of the electronic information environment in the relationship between librarians' information literacy skills and the quality of library services in private basic education institutions in Davao City, Philippines.

Relationship between Quality of Library Services and User Satisfaction

The table below reveals the results relating to the research question, "Is there a significant relationship between quality of library services and user satisfaction?" Results show that there is a significant positive strong correlation between library service quality and user satisfaction *(r = .838, p <.001)* This implies that better rating of library service quality is associated with higher user satisfaction. Table 10 presents the relationship between library service quality and user satisfaction.

Table 10

Relationship Between Library Service Quality Dimensions and User Satisfaction

	Library Service Quality	User Satisfaction
Library Service Quality	1	.838**
User Satisfaction	.838**	1

**. *Correlation is significant at the 0.01 level (2-tailed)*

A Pearson correlation coefficient of 0.838 indicates a strong positive correlation between Library Service Quality and user satisfaction. Since the correlation proves significant at the 0.01 level (2-tailed), it suggests that this relationship appears highly unlikely to have occurred by random chance. This finding manifests important implication for libraries and information institutions. This result deems supported by the findings of several studies in the field observing and confirming the relationship between service quality and user satisfaction (Nur & Fritantus, 2021; Afthanorhan et al., 2019; Alam, 2021; Amarasekara & Marasinghe, 2020).

Relationship Between Information Literacy Skills and User Satisfaction

The table below shows the results relating to the research question, "Is there a significant relationship between information literacy skills and user satisfaction?" Results show that there is a significant positive weak correlation between information literacy skills and user satisfaction *(r = .348, p <.001)* This implies that better rating of information literacy skills indicates associated with higher user satisfaction. Table 11 presents the relationship between information literacy skills and user satisfaction.

Table 11

Relationship Between Information Literacy Skills and User Satisfaction

	Information Literacy Skills	User Satisfaction
Information Literacy Skills	1	.348**

User Satisfaction	.348**				1

**. *Correlation is significant at the 0.01 level (2-tailed).*

A Pearson correlation coefficient of 0.348 indicates a weakly positive correlation between information literacy skills and user satisfaction. Since the correlation is significant at the 0.01 level (2-tailed), it suggests that this relationship appears highly unlikely to have occurred by random chance. The finding underscores the importance of promoting and fostering information literacy skills among library users. This finding aligns with the research conducted by Okuonghae and Ogiamien (2017) which investigated information literacy skills as factors influencing library user satisfaction.

Predictors of User Satisfaction by Library Service Quality

The table below indicates the results relating to the research question, "Do service quality significantly predict user satisfaction?" Multiple regression analysis was used to test if library service quality dimensions significantly predicted user satisfaction among library users. Table 12 displays the statistical findings regarding the extent to which service quality dimensions predict user satisfaction.

Table 12
Predictors of User Satisfaction by Library Service Quality

Independent Variables	Unstandardized Coefficients	t-value	p-value	Verbal Interpretation	R-Squared Change
Constant	1.588	5.191	<.001	Significant	
Tangibles	0.792	14.828	<.001	Significant	0.618
Responsiveness	0.415	6.558	<.001	Significant	0.092
Resources	0.183	2.314	0.022	Marginally Significant	0.011

Dependent Variable: User Satisfaction, R-Squared = 0.721, F = 115.616, p = <.001

The regression analysis revealed that three dimensions of service quality significantly predicted user satisfaction *(R^2 = 0.721, F = 115.616, p < .001)*, jointly explaining 72.1% of the variance in user satisfaction. Specifically, Tangibles *(β = 0.792, p < .001)*, Responsiveness *(β = 0.415, p < .001)*, and Resources *(β = 0.183, p 0.022)* positively influenced user satisfaction, indicating that higher perceived quality in these areas led to greater satisfaction among library users. Therefore, the hypothesis which says, "Service quality does not significantly predict user satisfaction." is *rejected.* This result confirms the study of Mohindra and Kumar (2015) that aimed to assess library service quality (LSQ) associated with user satisfaction of AC Joshi Library, Panjab University, Chandigarh, India.

Predictors of Information Literacy Skills by Library Service Quality

The table below displays the results relating to the research question, "Does service quality significantly predict information literacy skills?" Multiple regression analysis was used to test if library service quality dimensions significantly predicted information literacy skills among library users. Table 13 displays the statistical findings regarding the extent to which library service quality domains predict information literacy skills.

Table 13
Predictors of Information Literacy Skills by Library Service Quality

Independent Variables	Unstandardized Coefficients	t-value	p-value	Verbal Interpretation	R-Squared Change
Constant	16.343	11.580	<.001	Significant	
Responsiveness	0.862	3.777	<.001	Significant	0.095

Dependent Variable Information Literacy Skills, R-Squared = 0.095, F = 14.269, p = <.001

The regression results indicate that a single predictor accounted for 9.5% of the variance in information literacy skills *(R^2= 0.095, F = 14.269, p <.001)*. Responsiveness *(β = 0.862, p <.001)*. Higher perceived responsiveness correlated positively with increased information

literacy skill levels among library users. This finding obtains support in the research conducted by Sayekti et al.(2022), which employed the LibQual survey instrument to gauge library users' perceptions regarding information control quality.

Predictors of User Satisfaction by Information Literacy Skills

The table below shows the results relating to the research question, "Does information literacy skills significantly predict user satisfaction?" Regression analysis was used to test if information literacy skills significantly predicted user satisfaction among library users.

Table 14 displays the statistical findings regarding the extent to which information literacy skills predict user satisfaction.

Table 14
Predictors of User Satisfaction by Information Literacy Skills

Independent Variables	Unstandardized Coefficients	t-value	p-value	Verbal Interpretation	R-Squared Change
Constant	3.269	5.063	<.001	Significant	
Information Literacy Skills	0.128	4.332	<.001	Significant	0.121

Dependent Variable: User Satisfaction, R-Squared = 0.121, F = 18.769,   p =.001

Results of the regression indicate that the predictor explained 12.8% of the variance in user satisfaction *(R²= 0.121, F = 18.769, p < .001)*. Information literacy skills *(β = 0.128, p < .001)* positively influenced user satisfaction. High information literacy skills resulted in higher user satisfaction among library users. These results support the study by Okuonghae and Ogiamien (2016) which examined information literacy skills as correlates of Library user satisfaction among undergraduates in selected university Libraries in Niger Delta Area of Nigeria.

Mediation Analysis of Information Literacy Skills Between Quality of Library Services and User Satisfaction

The table below shows the results relating to the final research question, "Does information literacy skills mediate the relationship between quality of library services and user satisfaction?" The path name, total effect, direct effect, indirect effect, mediation effect, and interpretation are presented side by side to be compared. Table 15 displays the findings from the mediation analysis, examining the role of information literacy skills in mediating the relationship between quality of library services and user satisfaction.

Table 15
Mediation Effects of Information Literacy Skills in the Effects of Library Service Quality on User Satisfaction

Path Name	Total Effect			Direct Effect			Indirect Effect		
	Coefficient	t	p-value	Coefficient	t	p-value	Coefficient	t	p-value
LSQ ->ILS-> US	0.839	19.404	0	0.805	19.48	0	0.034	1.97	0.049

Legend: LSQ=Library Service Quality, ILS=Information Literacy Skills, US=User Satisfaction

Mediation analysis was performed to assess the mediating effects of Information Literacy Skills on the linkage between Library Service Quality and User Satisfaction. The results (see table 13) revealed that the effect of Library Service Quality on User Satisfaction was significant *(H1: β = 0.805, t = 19.48, 0)*. This shows that the relationship between Library Service Quality and User Satisfaction is partially mediated by Information Literacy Skills.

Table 16 displays the summary of the mediation results.

Table 16
Summary Table for Mediation Results

IV	Mediator	DV	Type

Service Quality	Information Literacy Skills	User Satisfaction	Partial

This result is supported by the study of Ng'ang'a (2020) which assessed the effect of reader services, digital information services, circulation services and information literacy training on students' satisfaction at KSL library. The findings highlight the importance of information services in enhancing user satisfaction at the library, aligning with this study's result regarding the mediation effects of information literacy skills on the relationship between library service quality and user satisfaction.

CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATIONS

This study significantly advances understanding of user satisfaction dynamics in library settings by examining library service quality and the mediating role of information literacy skills. It reveals the library's success in meeting user needs across various dimensions, with strengths identified in resources, responsiveness, and tangibles. Additionally, users demonstrate proficiency in information literacy skills, underscoring the effectiveness of efforts to promote these skills. The study expounds complex relationships between service quality, information literacy skills, and user satisfaction, emphasizing the need for targeted improvements to foster positive user experiences. Recommendations include continuously assessing and enhancing library services, improving accessibility to e-resources, prioritizing improvements in tangibles and responsiveness, promoting information literacy education, integrating information literacy principles into service provisions, establishing strong mechanisms for monitoring service improvements and information literacy initiatives, and exploring collaboration opportunities with stakeholders to enhance service offerings and address emerging user needs effectively.

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APPENDIX

TABLE 1 Library Users' Rating of Resources
    Legend:1.00-1.49: Very Poor, 1.50-2.49: Poor, 2.50-3.49: Fair, 3.50-4.49: Neutral, 4.50-5.49: Good, 5.50-6.49: Very Good, 6.50-7.00: Excellent

TABLE 2 Library Users' Rating of Competency
    Legend:1.00-1.49: Very Poor, 1.50-2.49: Poor, 2.50-3.49: Fair, 3.50-4.49: Neutral, 4.50-5.49: Good, 5.50-6.49: Very Good, 6.50-7.00: Excellent

TABLE 3 Library Users' Rating of Responsiveness
    Legend:1.00-1.49: Very Poor, 1.50-2.49: Poor, 2.50-3.49: Fair, 3.50-4.49: Neutral, 4.50-5.49: Good, 5.50-6.49: Very Good, 6.50-7.00: Excellent

TABLE 4 Library Users' Rating of Demeanor
Legend:1.00-1.49: Very Poor, 1.50-2.49: Poor, 2.50-3.49: Fair, 3.50-4.49: Neutral, 4.50-5.49: Good, 5.50-6.49: Very Good, 6.50-7.00: Excellent

TABLE 5 Library Users' Rating of Tangibles
    Legend:1.00-1.49: Very Poor, 1.50-2.49: Poor, 2.50-3.49: Fair, 3.50-4.49: Neutral, 4.50-5.49: Good, 5.50-6.49: Very Good, 6.50-7.00: Excellent

TABLE 6 Library Users' Overall Rating of the Quality of Library Services
    Legend:1.00-1.49: Very Poor, 1.50-2.49: Poor, 2.50-3.49: Fair, 3.50-4.49: Neutral, 4.50-5.49: Good, 5.50-6.49: Very Good, 6.50-7.00: Excellent

TABLE 7 Library Users' Level of Satisfaction
    Legend: 1.00-1.49: Highly Dissatisfied, 1.50-2.49: Dissatisfied, 2.50-3.49: Somewhat Dissatisfied, 3.59-4.49: Neither Satisfied nor Dissatisfied, 4.50-5.49: Somewhat Satisfied, 5.50-6.49: Satisfied, 6.50-7.00: Highly Satisfied

TABLE 8 Library Users' Overall Level of Information Literacy Skills
    Legend: 1.00–1.74 = Very low, 1.75–2.49 = Low, 2.50–3.24 = High, 3.25–4.00 Very High