

Students' Satisfaction with Library's Service Quality and Services in a Flexible Learning Environment

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Abstract

services of the library in selected private higher education institutions in Isabela, particularly during the COVID-19 pandemic. The research examines satisfaction levels in terms of affect of service, library as a place, and information control. It also investigates satisfaction with library services such as Library Information Service, Circulation Service, Reference Service, and Internet/Online/Web Service. The study further explores whether there are significant differences in satisfaction levels among students grouped by program. Results indicate that students are moderately satisfied with the library's service quality and very satisfied with specific services. No significant differences are observed based on program groups. Additionally, identified problems include a lack of electronic resources, slow internet, and difficulties accessing recent online journals. The findings underscore the importance of continuous assessment to enhance library services, improve staff training, and address technological challenges.

Keywords: Library services, Service quality, Users satisfaction, New normal, LibQual+TM, Flexible Learning

I. INTRODUCTION

Colleges and universities are essential to fostering the overall development of professionally adept, service-oriented, and productive individuals. The fundamental functions of a university include the preservation of existing knowledge, the dissemination of knowledge through teaching, and the generation of new knowledge. The effectiveness of higher education institutions is exemplified by their treatment of a central organ—the library.

A university library serves as the foundation of any educational institution, designed with primary goals of facilitating teaching and learning, supporting research, and providing community services. Often referred to as the heart of the learning community, a university library serves as a space for students, lecturers, and researchers to conduct research and enhance their knowledge.

Moreover, the university library is instrumental in systematically acquiring all forms of human communication records, whether published or unpublished, written or oral, that encapsulate the ideas and knowledge of the past. Recognizing that each new idea or invention evolves from accumulated and conserved knowledge, higher education institutions are obligated to offer quality services that reflect the accessibility and excellence of frontline services to cater to the needs of library users.

Lancaster studies (1977) indicate a shift in library surveys towards focusing on the library user, examining patterns of library use, and assessing the extent to which user needs are met. Busha and

Harter (1980) emphasize the necessity of user studies to justify and expand library services, explore communication patterns, and gain insights into why people use or do not use libraries. Thompson et al. (2005) suggest that satisfaction scores provide a more immediate and comprehensive evaluation than service quality scores, which typically represent a longer-lasting perception of library service quality. Ikenwa and Adegbilero-Iwari (2014) describe library user satisfaction as the users' feelings after using information resources and services, along with their willingness to return when in need of information. Ijiekhuamhen, Aghojare, and Lerdinand (2015) assert that library usage levels depend on users' satisfaction with available information resources and services. Similarly, Iwhiwhu and Okorodudu (2012) posit that users' satisfaction with library information resources and services serves as a gauge of adequacy and fulfillment of expectations.

While a great deal of research has examined many facets of libraries, limited research has been conducted during the COVID-19 pandemic, specifically regarding students' satisfaction with the service quality and services of libraries. Additionally, there is a notable absence of studies addressing library service quality and users' satisfaction in a private higher education institution in Northern Luzon. Therefore, the objective of this study is to assess students' satisfaction with the service quality and services of the library in selected private higher education institutions in Isabela.

Research Question

1. What is the level of satisfaction of students with the library's service quality in a flexible learning environment in terms of:
 - 1.1. affect of service
 - 1.2. library as a place
 - 1.3. information control
2. What is the level of satisfaction of students with the library services in a flexible learning environment in terms of:
 - 2.1. Library Information Service
 - 2.2. Circulation Service
 - 2.3. Reference Service
 - 2.4. Internet/Online/Web Service
3. Is there a significant difference in students' satisfaction with library's service quality when they are grouped by program?
4. Is there a significant difference in students' satisfaction with library's services when they are grouped by program?
5. What problems do students have with library services in a flexible learning environment?

Theoretical/Conceptual Background

Theoretical Framework

This study is based on the theory of SERVQUAL, introduced by Parasuraman, Zeithaml, and Berry in 1985 which was designed to measure service quality across the service industries. It has proved to have an established research history, and its merits and limitations have been widely tested and confirmed by both repeated practical activities across service industries and research findings. In conducting service quality assessment the field of library services, the largest and the new measures of service quality initiatives to date is LibQUAL+.

In this study, LibQUAL+ was used because it has been validated as the basic measuring tool for fostering a culture of easy information assessment and improvement in the library environment. In addition, it defines and measures library service quality across institutions and to create useful quality-assessment tools for local planning, such as the evaluation of a library's collections-related services from the users' point of view.

LibQUAL+ began in 1999 in response to members' desire for alternative assessment methods. The project was spearheaded by Texas A&M University Libraries, who had been using a modified version of the SERVQUAL instrument--a customer survey used widely in the private sector--to evaluate their library services since the early 1990s. LibQUAL +™ , expanded from SERVQUAL, now recognized as a standard tool for measuring library services.

LibQUAL+ is a suite of services or mechanism that the libraries use to solicit, track, understand and act upon users' opinion of service quality. The survey tool gauges the minimum, perceived, and desired service quality levels among library customers in three dimensions, i.e., Affect of Service, Information Control and Library as Place.

Affect of service refers to reflects to the human contribution to its service quality. Library as place refers to the library building tools and its environment for individual and group study. Information control measures the strength and ease of access to information and collection of information resources made available in the library.

Conceptual Framework

This study is based on the basic system framework of input-process and output. The input load include the student-library users of private higher education institution in Isabela as well as their program enrolled.

The process load include the determination of students' satisfaction with library's service quality, students' satisfaction with the library services and problems students have with library services in a flexible learning environment.

The output load is basis for improving the library's service quality and services.

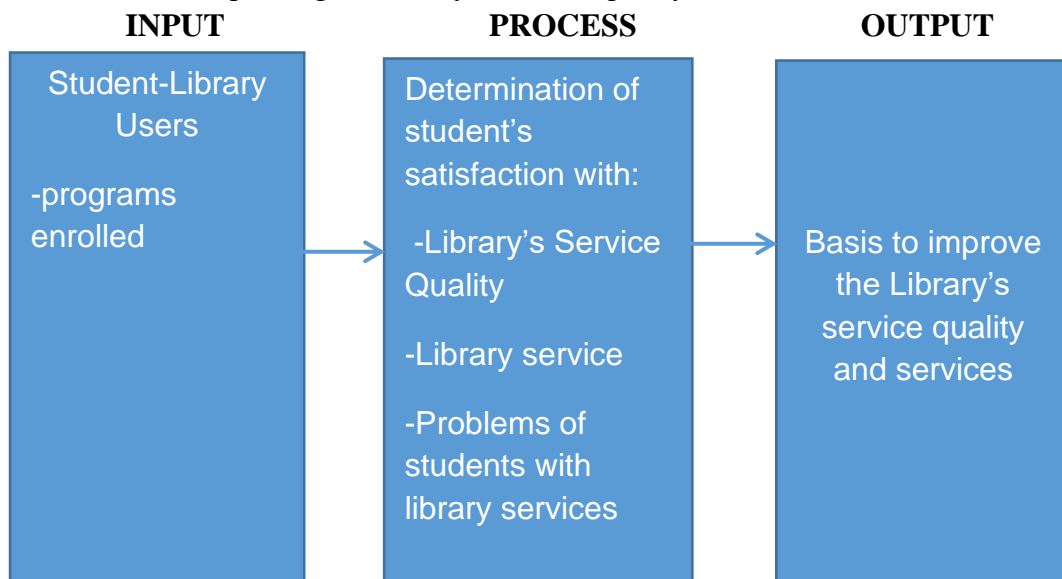


Figure 1 The schematic paradigm of the study.

Literature Review

A Literature review was conducted using systematic methodological review of literature and studies of library, library service quality, concept of LibQUAL +TM, concept of user satisfaction on libraries and relationship of service quality and users' satisfaction. To begin with, a review of definitions and some measurements of service quality and customer satisfaction.

Academic Library

The university library is an essential component of its parent institution, entrusted with the task of supporting the fundamental mission of teaching, learning, and research activities (Adam, 2017). Gunasekera (2010) characterizes academic libraries as the "heart" of the learning community, serving as a hub for students, faculty, and administrators to engage in research and enhance their knowledge across various fields. In the educational system, an academic library stands as the focal point of academic life, aiming to align with the vision, mission, goals, and objectives of its parent organization. Given the integral role of university libraries in higher education, they must offer support services for formal educational programs and facilitate research and knowledge generation. Understanding the genuine needs of the user community is crucial for information professionals working in academic or other libraries (Sharma & Attri, 2018).

Maidabino and Ladan (2015) emphasize the establishment of academic libraries to curate a need-based, balanced, and updated collection of reading materials in both print and electronic formats. Aina (2004) underscores that the primary purpose of an academic library is to bolster the university's objectives in teaching, research, and service. However, Cristobal's (2018) study reveals that academic libraries often focus internally, prioritizing work based on existing competencies, traditional processes, and limited resources. Customer satisfaction assessment is not commonly practiced, and libraries face challenges from various sources such as online information providers, e-learning platforms, and other competitive information sources. To navigate these challenges, academic libraries may need to adopt a more strategic approach that prioritizes creating and delivering satisfactory services to users while conforming to quality standards (national or international).

Recognizing libraries as integral to educational institutions, A working library is required for high-quality education by the Commission on Higher Education (CHED) in the Philippines. Orendain's research (as cited in Mayrena, 2009, and Cristobal, 2018) emphasizes the vital role of the library in utilizing diverse information sources for the intellectual, cultural, and technical development of the academic community. Terhile and Anthanisis (2013) stress the responsibility of libraries in contributing to and supporting the learning environment, meeting user needs in terms of access, ease of use, and updated content.

Peris and Olike (2016) point out that university libraries grapple with challenges like infrequent resource use due to a number of variables, including misinformation, perceived irrelevance, lack of time, and inadequate facilities. Chakrabarti and Pramanik (2014) and Motiang, Wallis, and Karodia (2014) outline the types of services provided by university libraries, including current awareness, selective dissemination of information, interlibrary loans, access to databases, and reference services. LRCN (2014) proposes an extensive list of services for university libraries, encompassing circulation, inter-library loans, reference and information services, current awareness, selective dissemination of information, user education, literature searching, preservation and conservation, knowledge management, consultancy, and various other services.

Library and Service Quality

The effectiveness of an organization relies on the contentment of its customers. Quality is an ongoing and limitless process, and there is often confusion about its meaning, especially among library professionals. While quality is commonly equated with excellence, it is crucial for proper quality management to establish a clear definition and measurement. Chakrabarti and Pramanik (2014) emphasize the necessity of defining and measuring quality for effective quality management.

Wicks and Roethlein (2009) argue that there is no universally accepted definition of quality due to its elusive nature and the varied perspectives and measures applied by different individuals in specific contexts. This subjectivity implies that what one person considers quality may not hold true for another. Consequently, all quality definitions are contingent on the evaluation by consumers, who assess quality based on their own satisfaction.

In the context of libraries, I-Ming and Shieh (2006) define service quality as the overall excellence of library services that meet users' expectations. For the purpose of this study, service quality is defined as the extent to which the delivered service level aligns with customer expectations, representing the difference between expected and perceived service levels (Zeithaml, 2001). Calvert (2001) emphasizes the importance of using this concept of service quality in library evaluation to analyze the variance between user expectations and perceived performance.

Academic libraries, in response to the growing online information landscape, are transforming spaces to accommodate document and media production, technology, group study areas, and even coffee shops. Accardi, Cordova, and Leeder (2010) advocate for the adoption of marketing models to enhance quality systems in academic libraries. Castilla and Ruiz (2008) attribute this shift to the increasing globalization and complexity of the world economy, advocating for integrated management models like bench-marking and the expectancy dis-confirmation theory.

Kitana and Saydam (2014) posit that providing precise information when needed and in the desired form constitutes quality service in libraries. According to Sahu (2007), service quality in the context of library and information science is the discrepancy between what users expect and what is actually provided.

Nzivo (2012) identifies factors influencing service quality in Kenyan libraries, such as challenges in user education, outdated printed collections, lack of electronic resources, and user retrieval skills. Burke (2011) asserts that Kenyan Public Libraries have not achieved world-class status despite global library evolution.

Contrary to some librarians' beliefs, users are the ultimate judges of service quality. Kulkarni and Deshpande (2012) note that some librarians assume they can determine service quality without considering users' perspectives. However, Parasuraman et al. (n.d.) argue that only users' judgments are relevant in evaluating service quality, as they are the primary stakeholders. Ashaver and Bem Bura's (2013) study on students' perceptions in Benue State universities reveals negative opinions due to students' lack of awareness and frustration with outdated materials.

In evaluating service quality, only users' opinions matter, as they are the library's most important stakeholders. The success of a library should be measured not by its inputs but by its activities and outputs, such as circulation transactions, reference questions answered, classes taught, and students enrolled (Forrest, 2009). This underscores the pivotal role of library staff in treating users as significant guests to contribute to their satisfaction.

Concept of (Library Quality) LibQUAL +™

The Library Service Quality (LibQual) model serves as a tool for libraries to gather, assess, comprehend, and respond to user opinions regarding the quality of services provided. LibQual evaluates three dimensions of service quality: the impact of service, information control, and the library as a physical space (LibQUAL, 2015).

LibQUAL+ enables libraries to grasp how users perceive and assess their services. It employs a scalable framework based on user perceptions and expectations, facilitating improvements in libraries. This model gauges user perceptions of library service quality comprehensively, considering both expectations and actual experiences. Numerous research articles have been published to evaluate its effectiveness in different service settings.

Introduced in 2000 and initially applied in 13 research libraries, LibQUAL+ underwent modifications to accommodate various library types, including smaller colleges and public libraries. It has since been widely adopted, with increasing participation across diverse library categories. The model's adaptation from the SERVQUAL instrument, a marketing research tool, was driven by the Texas A&M University Libraries' pursuit of enhanced measures for library service quality.

LibQUAL+ refines the SERVQUAL model, tailoring it to assess service quality in any library setting. It focuses on three key aspects: the impact of service, information control, and the library as a physical space. LibQual's fundamental premise is that only users can accurately judge quality. It employs specific dimensions such as the human aspect of service quality, content accessibility and format, and the physical environment's suitability for different activities.

According to Johnson (2007), LibQUAL investigates three dimensions: the quality of services provided by staff, information control, and the library as a physical place. Each dimension addresses specific aspects, such as staff competence, resource availability, and the overall ambiance of the library.

The Association of Research Libraries (ARL) (2013) outlines LibQUAL+'s objectives, including fostering a culture of excellence, understanding user perceptions, systematic collection of feedback, providing comparative data, identifying best practices, and enhancing staff analytical skills.

Developed collaboratively by ARL and Texas A&M University, LibQUAL+ is a standardized yet flexible survey tool that helps libraries identify strengths and weaknesses. It is widely recognized and applies the Gap theory to highlight discrepancies between user expectations and actual experiences.

Kyrillidou and Yeager (2011) report that over 1,200 libraries have utilized LibQUAL+ since 2000. This includes various library types, with the model facilitating a deeper understanding of user expectations. Libraries leverage assessment data to pinpoint strengths and areas for improvement, informing strategic planning aligned with patron expectations.

In conclusion, a critical review of literature highlights the interconnections of service quality and customer satisfaction. However, there is a need for more research in Kenya, as existing studies are limited and have not explored the use of the SERVQUAL model in the local context. Addressing these knowledge gaps will contribute to a more comprehensive understanding of service quality and customer satisfaction.

Concept of User Satisfaction on libraries

Motiang, Wallis, and Karodia (2014) define user satisfaction as the assessment of a product or service in terms of its alignment with users' needs and expectations. Assessing user satisfaction is

essential for maintaining user contentment, especially in university libraries where methods like user surveys are employed to understand customers' expectations and perceptions of offered services.

Adam (2017) underscores that meeting users' needs in university libraries is a primary objective for both libraries and librarians. The continuous influx of new students with diverse needs, coupled with technological advancements, poses challenges for library staff and users alike. Issues such as unfriendly treatment from staff, an abundance of resources, and difficulties in resource identification can create obstacles for users.

Giese and Cote (2000) explain that user satisfaction is a specific response related to a user's focus during or after service delivery, indicating its subjective nature. According to the study of Herson and Altman (2010) highlight the importance of user experience and satisfaction, noting that a positive encounter with staff can compensate for a lack of direct answers to user requests.

Kassim, Zakari, & Mohamed (2008) identify determinants of customer satisfaction, including the provision of the latest materials, guides on information searching skills, extended opening hours, and friendly and knowledgeable staff. These findings align with Kassim's (2009) conclusions.

User satisfaction serves as a critical metric for assessing service quality in libraries, providing valuable feedback for continuous improvement (Kumar, 2012). Ijiekhuamhen, Aghojare, and Ferdinand (2015) conducted a study on users' satisfaction with academic library performance, revealing satisfaction with services such as photocopying, access to electronic resources, relevant journals, and convenient opening hours. However, Ikolo's (2015) study identified dissatisfaction with specific services like reference services, inter-library loans, electronic databases, and the availability of textbooks.

In summary, various studies highlight the multifaceted nature of user satisfaction in libraries, emphasizing the importance of factors such as staff behavior, information currency, resource availability, and accessibility in shaping users' overall satisfaction.

Relationship of Service Quality and Users' Satisfaction

Service quality and customer satisfaction, though distinct, are closely related concepts, and an examination of service quality does not necessarily encompass an evaluation of customer satisfaction, and vice versa. When considering service quality as a strategic planning tool, it involves identifying the attributes that customers associate with an ideal library and the expectations deemed essential by the library to fulfill. The conventional method of gauging service quality is through gap analysis. On the other hand, customer satisfaction is a measure of how customers perceive the delivery of services and any potential shortcomings at a given moment. Assessing customer satisfaction is crucial as a management tool and can be done efficiently and inexpensively. Traditional views of service quality often involve gap analysis between the ideal and actual service expectations, while satisfaction, defined as the service provided minus customers' expectations, offers a complementary perspective. Together, service quality and satisfaction provide the customer's viewpoint on quality (Herson and Whitman, 2002).

Various scholars have proposed different definitions for quality, such as conforming to requirements, the degree of discrepancy between customers' service perceptions and expectations, and customers' judgment of the extent to which their needs and expectations are met Nunkoo, Teeroovengadam, Ringle, & Sunnassee (2020). Bakti and Sumaedi's (2013) study explored the relationship between library customer loyalty, service quality, and customer satisfaction in an Indonesian university library service. The findings indicated that service quality directly affects customer

satisfaction, subsequently influencing library customers' loyalty. Notably, service quality did not have a significant direct impact on customer loyalty in a library service. A recent literature review by Heradio et al. (2013) focused on the quality evaluation of digital libraries (DLs) based on users' perceptions, contributing to the integration of previously disparate research streams in this field.

Bakti and Sunaedi's (2013) findings supported the direct impact of service quality on customer satisfaction, subsequently influencing library customers' loyalty. Similarly, Hernon and Whitman (2001) emphasized that service quality and satisfaction collectively represent the customers' perspective on quality, affirming that user satisfaction is contingent on the library's service quality.

Library services in the new normal

Libraries worldwide are grappling with the challenging task of delivering services amidst the ongoing global crisis. The dilemma involves deciding whether to maintain existing services, modify some, or opt for complete closure. Aligning library services with government directives, considering the varying intensities of the pandemic across different regions, poses a considerable challenge. Governments employ diverse strategies, ranging from ordering the closure of all institutions to advocating for business as usual, with some leaving decisions to library directors (Mestri, 2020).

According to Mestri (2020), 150 countries have closed school libraries globally, and a similar situation is observed with university libraries in many countries. On a global scale, 84 countries across all continents have shuttered public libraries, while 98 countries have closed national libraries (UNESCO, 2020).

Libraries have also grappled with existential challenges in recent decades, with the internet and the proliferation of digital media altering reading and information-gathering habits. The advent of Amazon.com has provided higher-income individuals with the convenience of ordering books for rapid delivery or immediate access via e-readers (Guernsey, Prescott, & Park, 2021).

Guernsey, Prescott, & Park (2021) reported that a relatively small percentage, no more than 1 in 4 respondents, were aware of library initiatives such as curbside delivery, the elimination of late fees, or the provision of WiFi outside of library buildings during the pandemic. Thirty-six percent expressed uncertainty about whether such measures were implemented.

The post-lockdown period, as highlighted in Mestri's study (2020), presented a transformed library environment with revised rules and regulations. Changes encompassed guidelines, brochures, study room facilities, restrictions on outside visitors and staff relatives. Library policies were adapted to ensure safety, acknowledging the transitional phase that libraries are experiencing until the end of the COVID-19 era. Mestri (2020) emphasized the need for protective measures, including necessary equipment for staff, such as transparent screens, reconfigured furniture to maintain distance, and the promotion of remote work when feasible.

Ocks' study (2020) emphasized the significant impact of perceived ease of use and usefulness of Information and Communication Technologies (ICTs) on behavioral intentions. Despite these positive aspects, libraries encounter barriers to ICT adoption, including inadequate computer resources and online tools.

Chu and Du (2013) noted that social networking tools can facilitate the training of library staff in new technologies, keeping abreast of activities, and ensuring up-to-date resources. Social media platforms' impact has made it possible for libraries to embrace new technologies and communicate effectively with users (Shafawi and Hassan, 2018).

Synthesis

The foreign research is focused on LibQual (Library Quality Services), user satisfaction, and the relationship between user service quality and customer satisfaction. In contrast, the current study attempts to evaluate the standard of library services and user contentment in a flexible learning environment. The similarities and differences of these studies are reviewed, and they were carefully chosen to determine how foreign and local studies might be used to improve the library's quality services. To explain the similarity between the previous and current studies, they use the same variables, such as library service, user satisfaction, and library quality services (LIBQUAL). The situation is what distinguishes the previous study from the current study. The last study was conducted in a typical library set-up, traditional library situation, or pre-pandemic condition. In contrast, the present study was conducted in a new normal set-up during the pandemic, where library services are available online.

METHODS

Research Design

The research design adopted for this study is descriptive research design. According to McCombes (2019), descriptive research aims to accurately and systematically describe a population, situation or phenomenon.

The descriptive method was used in this study because the purpose was to determine the students' satisfaction with library service quality and library services in a private higher education institution in Isabela in a flexible learning environment.

Study Site and Participant

The study was conducted at a selected private higher education institution in Isabela. The participants of the study are 497 undergraduate students enrolled in the university during Summer 2021 with the following breakdown: 168 Bachelor of Science in Nursing (BSN); 96 Bachelor of Science in Accountancy (BSA); 94 Bachelor of Science in Pharmacy (BSPharma); 73 Bachelor of Science Civil Engineering (BSCE); and 1 each from the Bachelor Physical Education (BPED); Bachelor of Science Accounting Technology (BSAT); and Bachelor of Science Computer Engineering (BSCPE). It shows that 98.99% of the undergraduate students enrolled in the university during Summer 2021 participate in and answer the questionnaire through Google Meet.

Research Instrument

The researcher used the LibQUAL +TM questionnaire produced by the Association Research Library, but modified it to fit the needs of the current investigation. A pilot test was conducted to assess the relevancy and clarity of the questions as a basis for further development to minimize misunderstanding. A sample data of 10 students was randomly selected to be part of the pilot testing. The result of the pilot test was treated using Cronbach alpha tool to ensure its validity and reliability. The questionnaire consisted of three parts. Part 1 focused on the assessment of students' satisfaction with the library's service quality in terms of: affect of service, library as a place, and information control, which was adopted from LibQUAL +TM, however it was modified to suit the need of the study. Part 2 elicited information on students' satisfaction with library services in terms of: library information service, circulation service, reference service, and internet/online/web service, which was adopted from the questionnaire of Cristobal (2018) and was also modified for the study. Part 3 gathered

information about problems students have with library services in a flexible learning environment, which was adopted from the study of Adam (2017) and modified by the researcher. The instrument was constructed based on a 5-point Likert rating scale of: 5–Extremely Satisfied (ES), 4-Very Satisfied (VS), 3-Moderately Satisfied (MS), 2-Slightly Satisfied (SS), and 1-Not at all Satisfied (NAS).

Scale	Range	Interpretation
5	4.21 – 5.00	Extremely Satisfied
4	3.41 – 4.20	Very Satisfied
3	2.61 – 3.40	Moderately Satisfied
2	1.81 – 2.60	Slightly Satisfied
1	1.00 – 1.80	Not at all Satisfied

Data Gathering Procedure

Before the start of the study, the researcher obtained permission from the university President to conduct the study. Upon approval, the researcher distributed the questionnaires through an online survey using Google platforms and messaged potential participants of the study.

The participants' right to self-determination, anonymity and confidentiality were all protected by the researcher. As a result, the participants were given complete information about the nature of the study through written informed consent which were distributed along with the questionnaire. The participants were given three weeks to answer the survey questionnaire. After three weeks, the researcher tallied, classified and presented the results in a table format for data analysis.

Data analysis

After the retrieval of the questionnaire, the gathered data were tallied, presented in table form, and interpreted by the researcher. The statistical analysis, such as percentage, mean, and standard deviation (SD), The revised Expectations on Library Services, Library Quality (LibQual) Dimension, and Library Customer Satisfaction: Relationship to Customer Loyalty Survey Questionnaire used a Likert Scale. Therefore, mean values were used to calculate the composite score of individual responses, while the median and mode were used to calculate the individual scores for each response. To analyze the results for the five subscales of the revised Expectations on Library Services, Library Quality (LibQual) Dimension and Library Customer Satisfaction: Relationship to Customer Loyalty Survey Questionnaire, the means of the items under each subscale were added and divided by the number of items in the subscale to give each subscale a score of 1–5. To determine whether there were any statistically significant differences between the means of two or more independent studies, the one-way ANOVA and the Chi-Square Test were used.

Ethical Considerations

For the study, the following ethical considerations were in place for the study: all individuals were respected throughout the data collections process. The respondents were informed of their options to participate or not to participate. Protocols were put in place to protect the respondents' anonymity and confidentiality. The researcher obtained consent from the respondents of the study.

RESULTS

The purpose of this study is to assess the students’ satisfaction with the library’s’ service quality and services in a flexible learning environment.

1. Students’ Satisfaction with Library’s Service Quality in a Flexible Learning Environment

1.1 Affect of Service

Table 1 shows the mean responses of students’ satisfaction with library’s service quality in terms of affect of service in a flexible learning environment.

Table 1. Mean Responses of Students’ Satisfaction with the Library’s service quality in terms of Affect of Service in Flexible Learning Environment.

Affect of Service	Weighted Mean	SD	Qualitative Interpretation
Library staff instill confidence in users	2.91	0.967	Moderately Satisfied
Library staff are ready to respond to users' questions	2.83	1.045	Moderately Satisfied
Library staff are willing to help users	2.74	1.090	Moderately Satisfied
Library staff can be depended in handling users' service problems	2.84	1.032	Moderately Satisfied
Library staff give users individual attention	2.75	1.055	Moderately Satisfied
Library staff have the knowledge to answer user questions	2.73	1.086	Moderately Satisfied
Library staff are consistently courteous	2.76	1.095	Moderately Satisfied
Library staff deal with users in a caring fashion	2.81	1.116	Moderately Satisfied
Library staff understand the needs of users	2.83	1.069	Moderately Satisfied
Composite Mean	2.80	1.062	Moderately Satisfied

As gleaned on Table 1, majority of the students agreed that they are moderately satisfied with the library’s service quality in terms of affect of services particularly : library staff instill confidence in users (M= 2.91, SD= 0.967); Library staff can be depended in handling users' service problems (M=2.84, SD= 1.032); Library staff are ready to respond to users' questions and understand the needs of their users (M=2.83, SD= 1.069) respectively; Library staff deal with users in a caring fashion (M=2.81, SD=1.116); Library staff are consistently courteous (M=2.76, SD=1.095); Library staff give users individual attention (M=2.75, SD=1.055); and Library staff are willing to help users (M=2.73, SD-1.055). With a composite mean of 2.80, it implies that the students are moderately satisfied with the library’s service quality in terms of affect of service in a flexible learning environment.

1.2 Library as Place

Table 2 shows the mean responses of students’ satisfaction with library’s service quality in terms of library as a space in a flexible learning environment.

Table 2. Mean Responses of Students’ Satisfaction with Library’s Service Quality in terms of the Library as Place in a Flexible Learning Environment.

Library as Place	Mean	SD	Qualitative Interpretation
Quiet space for individual activities	2.91	1.217	Moderately Satisfied

A comfortable and inviting location	2.89	1.219	Moderately Satisfied
Inspires study and learning	2.96	1.166	Moderately Satisfied
Composite I Mean	2.91	1.162	Moderately Satisfied

As shown in Table 2, majority of the students agreed that they are moderately satisfied with the library's service quality in terms of library as a space, particularly: inspires study and learning (M=2.96,SD=1.166); a quiet space for individual activities (M=.91, SD=1.217); a comfortable and inviting location (M=2.89, SD=1.219); With a composite mean of 2.91, it implies that the students are moderately satisfied with the library's service quality in terms of library as a space in a flexible learning environment.

1.3 Information Control

Table 3 shows the mean responses of students' satisfaction with library's service quality in terms of information control in a flexible learning environment.

Table 3. Mean Responses of Students' Satisfaction with Library's Service Quality in terms of Information Control in a Flexible Learning Environment

Information Control	Mean	SD	Qualitative Interpretation
Easy-to-use access tools that allow me to find things on my own	2.71	1.059	Moderately Satisfied
Convenient access to library collections	2.69	1.038	Moderately Satisfied
Library Web site enables me to locate information on my own	2.93	1.120	Moderately Satisfied
Modern equipment lets me easily access needed information	2.92	1.123	Moderately Satisfied
Makes information easily accessible for independent use	2.84	1.097	Moderately Satisfied
Makes electronic resources accessible from my home or office	2.92	1.064	Moderately Satisfied
Composite Mean	2.84	1.084	Moderately Satisfied

As presented in Table 3, majority of the students agreed that they are moderately satisfied with the library's service quality in terms of information control particularly: Library Web site enables me to locate information on my own (M= 2.93,SD= 1.120); modern equipment lets me easily access needed information and makes electronic resources accessible from my home or office (M= 2.92, SD= 1.123) respectively; makes information easily accessible for independent use (M=2.84,SD=1.097); easy-to-use access tools that allow me to find things on my own (M=2.71, SD=1.059); and convenient access to library collections (M= 2.69,SD=1.038). With a composite mean of 2.84, it implies that the students are moderately satisfied with the library's service quality in terms of information control in a flexible learning environment.

Summary Table on the assessment of Students' Satisfaction with Library's Service Quality in flexible learning environment.

Table 4 shows the summary table of Students’ Satisfaction with the Library’s service quality in flexible learning environment.

Table 4. Summary Table of Students’ Satisfaction with the Library’ service quality.

Librarys’ Services Quality	Mean	SD	Qualitative Interpretation
Affect of service	2.80	1.062	Moderately Satisfied
Library as Place	2.91	1.162	Moderately Satisfied
Information Control	2.84	1.084	Moderately Satisfied
Composite Mean	2.85	1.103	Moderately Satisfied

As shown in Table 4, majority of the students agreed that they moderately satisfied with the Library’s service quality in terms of: library as a place (M=2.91, SD=1.162); information control (M=2.84, SD=1/103; and affect of service (M=2.80,SD=1.062). With a composite mean of 2.85, it implies that the students are moderately satisfied with the library’s service quality in a flexible learning environment.

2. Students’ Satisfaction with Library Services in a Flexible Learning Environment

2.1 Library Information Service

Table 5 shows the mean responses of students’ satisfaction with library service in terms of library information service in a flexible learning environment.

Table 5. Mean Responses of Students’ Satisfaction with Library Services Quality in terms of Library Information Service in a Flexible Learning Environment

Library Information Service	Mean	SD	Qualitative Interpretation
Usefulness of the information posted on the ULS-IMC College Dept. Facebook Page, LMS, and ULS Website	3.51	0.941	Very Satisfied
Relevance and appropriateness of the information for my research/academic needs and personal development	3.62	0.949	Very Satisfied
Provision of notices on newly acquired materials (listings posted in FB Page the ULS-IMC College Dept. LMS and ULS Website)	3.53	0.910	Very Satisfied
Notifications and updates on new policies, procedures, and services using school publications, websites, and social networking sites	3.44	0.911	Very Satisfied
Composite Mean	3.52	0.928	Very Satisfied

As revealed in Table 5, majority of the students said that they are very satisfied with library information service in terms of library information service particularly on: relevance and appropriateness of the information for my research/academic needs and personal development (M=3.62, SD=.0.949); provision of notices on newly acquired materials (listings posted in FB Page the ULS-IMC College Dept. LMS and ULS Website) (M=3.53, SD=.0.910); usefulness of the information posted on the ULS-IMC College Dept.; Facebook Page, LMS, and ULS Website)M=3.51,SD=0.941); and notifications and updates on

new policies, procedures, and services using school publications, websites, and social networking sites (M=3.44, SD=0.911). With a composite mean of 3.52, it implies that the students are very satisfied with the library services in terms of library information service in a flexible learning environment.

2.2 Circulation Service

Table 6 shows the mean responses of students' satisfaction with library service in terms of circulation service in a flexible learning environment.

Table 6. Mean Responses of Students' Satisfaction with Library Service in terms of Circulation Service in a Flexible Learning Environment.

Circulation Service	Mean	SD	Qualitative Interpretation
Number of books allowed for borrowing (other references and fiction books) and range of periodicals	3.42	0.945	Very Satisfied
Schedule and waiting time of borrowing and returning of books	3.46	0.962	Very Satisfied
Availability and range of books (titles and volumes) for circulation	3.46	0.945	Very Satisfied
Arrangement system and proper shelving of books, including signage	3.58	0.927	Very Satisfied
Automated/computerized loaning procedure	3.44	0.881	Very Satisfied
Composite Mean	3.47	0.932	Very Satisfied

As gleaned in Table 6, majority of the students said that they are very satisfied with library services in terms of circulation service particularly on: arrangement system and proper shelving of books, including signage (M=3.58, SD=0.927); schedule and waiting time of borrowing and returning of books and availability and range of books (titles and volumes) for circulation (M=3.46, SD= 0.962) each respectively, automated/computerized loaning procedure (M=3.44, SD=0.881); and number of books allowed for borrowing (other references and fiction books) and range of periodicals (M=3.42,SD=0.945). With a composite mean of 3.47, it implies that the students are very satisfied with the library services in terms of circulation service in a flexible learning environment.

2.3 Reference Service

Table 7 shows the mean responses of students' satisfaction with library service in terms of reference service in a flexible learning environment.

Table 7. Mean Responses of Students' Satisfaction with Library Service in terms of Reference Service in a Flexible Learning Environment.

Reference Service	Mean	SD	Qualitative Interpretation
Library staff that are knowledgeable to answer inquiries timely, accurately, and clearly	3.41	0.838	Very Satisfied
Library staff is readily available to assist in locating information needed	3.53	0.838	Very Satisfied
Library staff that assist and teach in using OPAC/online encyclopedias/reference materials	3.52	0.930	Very Satisfied

Provision of alternative/supplement reference materials	3.34	0.956	Moderately Satisfied
Overall Mean	3.45	0.890	Very Satisfied

As presented in Table 7, majority of the students said that they are very satisfied with library services in terms of circulation service, particularly: Library staff is readily available to assist in locating information needed (M=3.53,SD=0.838); Library staff that assist and teach in using OPAC/online encyclopedias/reference materials (M=3.52, SD=0.930); Library staff that are knowledgeable to answer inquiries timely, accurately, and clearly (M=3.41,SD=0.838) and moderately satisfied on provision of alternative/supplement reference materials (M=3.34,SD=0.956). With a composite mean of 3.45, it implies that the students are very satisfied with the library services in terms of reference service in a flexible learning environment.

2.4 Internet/Online/Web Services

Table 8 shows the mean responses of students’ satisfaction with in terms of Internet/Online/Web Services in a flexible learning environment.

Table 8. Mean Responses of Students’ Satisfaction with Library Service in terms Internet/Online/Web of Service in a Flexible Learning Environment.

Internet/Online/Web Services	Mean	SD	Qualitative Interpretation
Range of electronic information services (online journals such as open access journals, electronic newspapers, etc.	3.35	0.967	Moderately Satisfied
Range of computer units for internet and Online Public Access Catalog (OPAC) searching	3.34	1.017	Moderately Satisfied
Accessibility and availability of online services on and off-campus Web OPAC, library website, etc.	3.32	0.917	Moderately Satisfied
Composite Mean	3.33	0.967	Moderately Satisfied

As shown in Table 8, majority of the students said that they are moderately satisfied with library services in terms of Internet/Online/Web Services particularly on: the range of electronic information services (online journals such as open access journals, electronic newspapers, etc.(M=3.35,SD=0.947); the range of computer units for internet and Online Public Access Catalog (OPAC) searching (M=3.34,SD=1.017); and the accessibility and availability of online services on and off-campus Web OPAC, library website, etc.(M=3.32,SD=0.917). With a composite mean of 3.33, it implies that the students are moderately satisfied with the library services in terms of Internet/Online/Web Services service in a flexible learning environment.

Summary table of the students’ satisfaction with the library services in a flexible learning environment.

Table 9 shows the summary table of students’ satisfaction with the library services in a flexible learning environment.

Table 9. Summary Table of Students’ Satisfaction with the Library Services in a Flexible Learning Environment

Library Services	Mean	SD	Qualitative Interpretation
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Library Information Service	3.52	0.928	Very Satisfied
Circulation Service	3.47	0.932	Very Satisfied
Reference Service	3.45	0.890	Very Satisfied
Internet/Online/Web Services	3.33	0.967	Moderately Satisfied
Composite Mean	3.44	1.103	Very Satisfied

As gleaned in Table 9, majority of the students agreed that they are very satisfied with the library services in terms of Library Information Service (M=3.52,SD=.0.028), Circulation Service (M=3.47,SD=0,932), Reference Service (3.45, SD=.890), and moderately satisfied with Internet/Online/Web Services (3.33,SD= 0.967). With a composite mean of 3.44, it implies that the students are very satisfied with the library services in a flexible learning environment.

3. Significant difference in students ‘satisfaction with library’s service quality when grouped by program

Table 10 shows the significant difference in students ‘satisfaction with library’s service quality when they are grouped by program.

Table 10 Significant Difference in Students’ Satisfaction with Library’s Service Quality when grouped by Program

Library’s Service Quality	df	F	p-value	Remarks
Affect of service	17	0.92	0.55	Not significant
Library as place	17	0.65	0.85	Not significant
Information control	17	0.85	0.64	Not significant

.05 level of significant

As shown in Table 10, the test revealed that with the affect of service (F (17) = 0.92, p=0.55), library as a place (F (17) = 0.65, p=0.85) and information control (F (17) = 0.85, p=0.64), there is no significant difference in the students’ satisfaction with library’s service quality when they are grouped by program. It implies that the students’ satisfaction with the quality of library service is seemingly similar regardless of the program in which they are enrolled.

4. Significant difference in students ‘satisfaction with library services when grouped by program

Table 11 shows the significant difference in students ‘satisfaction with library services when they are grouped by program.

Table 11. Significant Difference in Students’ Satisfaction with Library Services when grouped by Program

Library Services	df	F	p-value	Remarks
Library Information Service	17	1.00	0.46	Not significant
Circulation service	17	0.84	0.65	Not significant
Reference Service	17	0.78	0.72	Not significant
Internet/online/web services	17	0.69	0.81	Not significant

As presented in Table 11, the test revealed that with library information service ($F(17) = 1.00, p=0.46$), circulation service ($F(17) = 0.84, p=0.65$), reference service ($F(17) = 0.78, p=0.72$), and internet/online/web services ($F(17) = 0.69, p=0.81$) there is no significant difference in the students' satisfaction with library service when they are grouped by program. It implies that the students are seemingly similarly satisfied with the library services regardless of the program in which they are enrolled.

5. Problems encountered by students with library services in a flexible learning environment

Table 12 shows the frequency and ranking distribution of problems of students with library services in a flexible learning environment.

Table 12. Frequency and Ranking Distribution of Problems Encountered by Students with Library Services in a Flexible Learning Environment.

Problems of Students	Frequency	Ranking
Lack of electronic resources that are useful for the users	288	1.5
Lack of library website	288	1.5
Lack of fast internet connection	287	3
Lack of Access to recent and relevant online journals.	286	4
Lack of eBooks/electronic versions of books when hard copies are unavailable	275	5
Lack of Open Educational Resources (OER) for the users	252	6
Slow response to the queries about library services	216	7
Lack of online information about news in the library	210	8
Lack of additional relevant and current library collections(on Christian studies, Economics, Education statistics, International Relations, Linguistics, African Literature, & References Books)	158	9
Hard in finding a book online using ULS LIS Online.	130	10
Impoliteness of some library staff towards users queries	128	11

As gleaned on Table 12, the problems of students with library services in a flexible learning environment were as follows: lack of electronic resources that are useful for the users and lack of library website (R= 1.5), lack of fast internet connection (R=3), lack of Access to recent and relevant online journals (R=4), lack of eBooks/electronic versions of books when hard copies are unavailable (R=5), lack of Open Educational Resources (OER) for the users (R=6), slow response to the queries about library services (R=7), lack of online information about news in the library (R=8), lack of additional relevant and current library collections(on Christian studies, Economics, Education statistics, International Relations, Linguistics, African Literature, & References Books) (R=9), hard in finding a book online using ULS LIS Online (R=10) and impoliteness of some library staff towards users queries (R=11).

DISCUSSION

This study aimed to determine the students' satisfaction with the library's service quality and services in a flexible learning environment in a private higher education institution in Isabela.

Based on the results of the study, the students are moderately satisfied with the library's service quality in terms of affect of service, library as a space and information control in a flexible learning environment. The findings are related to the study Cristobal (2018) that their respondents were satisfied using a scale of 10 in which the results place between 4 to 7 of the scale.

Furthermore, the results revealed that the students are very satisfied with the library services in terms of library information service, circulation service, reference service and moderately satisfied with Internet/online/web services. It confirms with the study of (Adam, 2017) that the users of Yusuf Maitama Sule University Library were satisfied with the library information services. In addition, the study of (Tiemo, 2016) also affirms that the respondents are satisfied on the lending services of the library. The finding also agrees with the finding of (Cabfilan, 2012) that the library customers are satisfied with the Reference and Instruction services of the BSU Main library.

Moreover, there is no significant difference in the students' satisfaction with the library's service quality and library service when they are grouped by program. It implies that the students are equally satisfied with the library services regardless of the program in which they are enrolled.

Meanwhile, the main problems of students with library services in a flexible learning environment are: lack of electronic resources that are useful for the users; lack of fast internet connection; and lack of access to recent and relevant online journals.

Conclusion

A library is a backbone for any educational institution built to achieve the primary goal of teaching and learning, research and community services even in this difficult and uncertain time.

Based on the findings of the study, the students are moderately satisfied with the library's service quality and very satisfied with the services provided by the library. There is no significant difference in the students' satisfaction with library's service quality and library service when they are grouped by program. The main problems encountered of students with library services in a flexible learning environment are: lack of electronic resources that are useful for the users; lack of fast internet connection; and lack of access to recent and relevant online journals.

Recommendation

The concept and practice of providing remote access of electronic resources may be new to some educational institutions, but the user friendly way can be adopted by libraries and the number of resources made available by them during flexible learning environment is exemplary.

It is imperative therefore that continuous assessment of library service quality and services is necessary where the goals are to provide and ensure improved library information service and access to academic resources necessary for learning and facilitating.

The researcher recommends the following:

1. The Director of Library is encouraged to conduct training on customer relations and effective library service for library staff in collaboration with the Human Resource Management Department in order to improve their knowledge and skills and meet new demands for library and educational services for students to become fully satisfied in a flexible learning environment.
2. The Library Director should design a library layout at least every two years to maximize space, create a relaxing environment for readers and promote a welcoming ambiance like home when doing their library and research works.

3. For the Library staff to maintain a constantly update library collection of e-resources, print, and non-print materials and supplemental readings for different programs courses for the students, faculty, researchers, and administrators.
4. For school's ICT Manager to provide technical assistance to the Director for Libraries in order to assist in the creation of a separate website and link from the institution's main website in order to provide more library information updates to online library users as well as access to recent and relevant online journals.
5. For future researchers to conduct similar studies focusing on variables not covered in this study.

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