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Library Service Quality and User Satisfaction: A Situational Analysis of Kitale National Polytechnic, Trans Nzoia County

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Abstract

Quality library services have a greater bearing on library users' satisfaction as well as the reputation of the institution offering learning services. Offering quality services to library users entails accessibility to the library facility, quality library resources, and the level of customer service provided. Normally, clients inclined to a particular service should be treated fairly and without discrimination. Fairness is an indicator of professionalism in public service provision. Academic institutions need to understand library users' satisfaction by measuring the service quality elements from the customer's point of view to help them provide and satisfy customers' needs. The study focused on Library Service Quality and User Satisfaction: A Situation Analysis of Kitale National Polytechnic, Trans Nzoia County. The study targeted a population of 300 Library Users at the Kitale National Polytechnic. A sample size of 105 respondents was conveniently selected. The questionnaire was approved by the management before testing, uploading and launching the Google form through WhatsApp and email to collect data. Data collected was analyzed, interpreted, and presented using descriptive statistics. The study adopted a library service quality model version of SERVQUAL. In conclusion, the findings indicated that there is relatively fair treatment of the users, library staff handle the users professionally as well as responding to the users' needs in a timely manner. The operation hours were relatively adequate for the library users. However, some library users are unaware of e-books as well as unable to use e-books. The users' satisfaction rate on average was 73 percent. This indicates that some of the library users are not fully satisfied with services offered. This study recommended a need to transform and re-engineer libraries by digitizing them to improve library services so as to conform to changing users' academic needs in the colleges.

Key Words: Library, Service, Quality, User, Resources

INTRODUCTION

1.1 Background to the study

Libraries provide information resources and services to satisfy the users through service provision. Library users have varying expectations and need to enhance their knowledge in different academic and professional fields. In the current academic arena, the need for information has ever been changing. Library users have a challenge in knowing the specific use of services offered in the library. The challenges are due to emerging technologies and difficulties accessing information resources using available platforms. Innovative systems bring immense complexity and challenge to librarians and library users (Hussain, 2019). The problems in accessing the information can bring about dissatisfaction among academic library users. According to Tan & Yang (2017), user satisfaction is considered reliable for measuring educational library effectiveness. User satisfaction lies in the customers' perception that the facilities, resources, and services available in a given library have met their expectations. Customer satisfaction is the consumer's fulfillment response and personal judgment of the product or service provided to the customer. Customer satisfaction is derived from the pleasurable level of consumption as a result of fulfillment. User satisfaction is essential in any library or organization that offers products or services as it helps the service provider know whether the customers appreciate the services.

Assessment of library services should be regarded as a management tool to determine how effectively and efficiently the library is serving the needs of its users by identifying the limitations and failures of service and finally recommending ways to improve such service. The extent to which the user's needs are satisfied depends on some aspects of the facility with respect to size of the facility, which determines the library users accommodated at the given time. More so, the adequacy and accuracy of materials available in the library, the arrangement of its materials, the usefulness of its inventory and finding systems in providing access to its collection, and in maximizing the exposure of the users to these resources and other library services. Some aspects of library service are more easily evaluated than others (Barad, 2019). The scholars posit that, the more concrete or specific the user requirement is, the easier it is to measure user satisfaction in absolute terms. Library usage reflects the user satisfaction level measured by subjective procedures such as questionnaires or interviews, objective analysis, and quantitative measures, such as percentage calculations and determination of capability indexes.

1.2 Statement of the Problem

Academic library users are in most cases dissatisfied due to low quality of the services offered to them. With the growing needs of the library users, the library service providers have to focus on resources availability, accessibility of the facility, size, its future expansion, which includes the growth of its customer base and must evaluate all its services to take care of customer satisfaction objectives (Mugo & Mathu, 2021). Scholarly, there have been few recorded responses by the customers to imply their level of satisfaction with the resources and services available, especially at National Polytechnics in Kenya. The responses could help the academic libraries to support the academic curriculum and research carried out by both the students and college staff. More so in playing a vital role in nation-building through disseminating knowledge to citizens. According to Wiercinski (2014), academic libraries are non-profit organizations aiming to enlighten, educate, provide recreation and inspire users through their information holdings. Evelyn & Lydia (2019) reiterated that academic libraries should embrace and understand their customer needs and come up with ways of satisfying both their user information and research needs. Therefore, the core purpose of this study was to determine the effect of library service quality on library user satisfaction at the Kitale National Polytechnic library and recommend various ways of improving quality of the service to enhance user satisfaction.

1.3 Objective of the Study

1. To determine the extent to which library service quality determines user satisfaction at the Kitale National Polytechnic library in Trans Nzoia County, Kenya.

1.4 Research Question

1. To what extent to which library service quality determines user satisfaction at the Kitale National Polytechnic library in Trans Nzoia County, Kenya?

LITERATURE REVIEW

The Researcher attempted to review the literature on library user satisfaction as a measure of library service quality with a focus on different areas at the global, regional, and national levels.

2.1 SERVQUAL Theory

The study adopted the SERVQUAL theory developed by Parasuraman, Zeithaml, and Berry in 1985. The authors describe service quality as the difference between customer expectations before service provision and customer perceptions after receiving the service. Based on the theory, organizations try to ascertain their level of performance in terms of service provision as perceived by service users. The theory provides instruments that measure the customer expectation-management perception gap. The gap arises when firms miss recognizing actual elements that indicate a high level of quality to consumers beforehand. The library staff and management have to understand such vital features that a service must have to meet the needs of the consumers and also what sort of performance these features need to have to provide a higher level of quality service (Dimiyati, & Subagio 2016).). More so, the theory measures the expected service-perceived service level, which supports that the best way to achieve exemplary service quality is by meeting or exceeding customer expectations.

2.2 Library Service Quality

Service quality in a library context means an evaluation to examine the difference between a user's expectations and the user's perceived sense of actual performance (Baryshev, 2017). Park (2018) argued that service quality focuses on the interaction between customers and service providers, and the gap or difference between expectations about service provision and perception about how the service was provided. Satisfaction, on the other hand, does not involve gap analysis (Phadermrod, Crowder & Wills, 2019). The library service quality (LibQual) model is one of the tools that libraries use to solicit, track, understand, and act upon users' opinions of service quality rendered. The three dimensions of service quality measured by LibQual are the effect of service, information control, and the library as a place (Kumar & Mahajan, 2019). The researcher adopted this model and modified it to suit the local environment through the use of information resources, services rendered, and library facilities available in the polytechnic library.

2.2.1 Library Resources

A study done by Singh (2018) in Punjab university library found that library users are contented with library resources and services but they needed more training in the use of online resources. Also, in the study of the availability of resources in some higher institutions of learning in Nigeria. Olajide and Adio (2017) opined that a library should have a variety of volumes in different faculties and related fields, volumes of reference materials, and reports

of student research, including theses and dissertations. The library has to be connected to the internet, and with subscriptions to more than 500 print journal titles, local and foreign, as well as national newspapers and magazines. According to Olubiyo & Ogunniyi (2017), the college library has been set up to build up a need-based, balanced and up-to-date collection of reading materials in both print and electronic formats as this will enable the library to serve as a reservoir of scholarly literature. Cox et al. (2017) state that the main purpose of a college library is to support the objective of a college in areas of teaching, research and service. The College library exists for the benefit of students and teachers. To function and serve the information needs of users, the library needs to have information resources (both print and electronic materials like CD-ROM database, e-journals, internet, etc.), render different services, and provide facilities for effective service delivery. To this end, Professional librarians continue to struggle to collect and organize printed and other forms of recorded knowledge to satisfy both present and future users (Gregory, 2019). Libraries and information centers are maintained for use.

2.2.2 Library Information Services

Libraries are established to render different kinds of services to users. Thus, services are the main product of the library system (Gyau, Liu & Kwakye, 2021). One of the most important tasks of a library as a resource center is to make information available and encourage people to use it, by offering a range of information services. Information services should improve access to information, not only for people who can come and visit the resource facility but also for those who cannot come into the information facility for different reasons. The most commonly provided services include lending, reservation, advisory services, literature searches, and photocopying. Reference service has direct encounters with customers, and the service quality depends highly on the performance of the reference librarians and their interactions with customers (Oh, 2022). According to Morudu (2019), academic library information services include document delivery/interlibrary loan transactions, the number of persons served in presentations, the number of presentations, and public service hours in a typical week. The primary function of academic libraries is to serve users by meeting their best academic commitments. They are the channel for academicians to impart education through means of teaching, learning, and research. Education can also fundamentally be developed through the optimal utilization of libraries and information services (Walton & McMullin, 2021). It is therefore important for academic libraries in Kenya to strive and

survive this pressure by focusing on meeting the expectations of their users (Mugo & Mathu, 2021). In addition, academic libraries should embrace diverse services to ensure the needs of the users are met.

2.2.3 Library Facilities

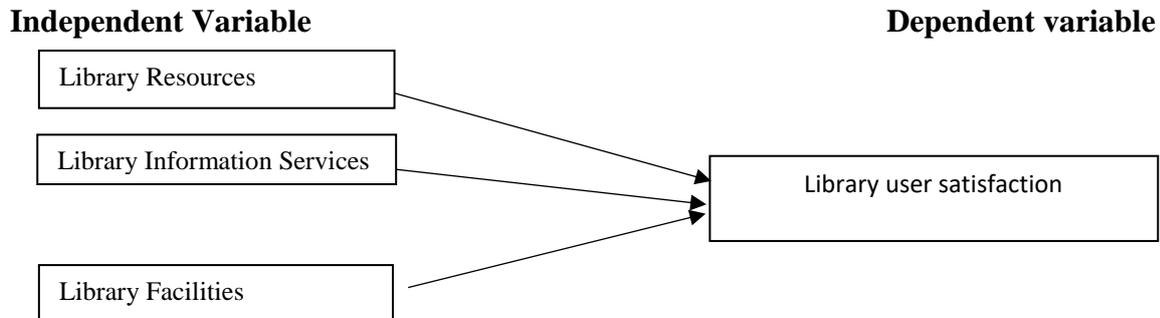
Library facilities should be relatively structured to meet customer expectations. College libraries have to derive their objectives to include the vision of materials for undergraduate instruction, term papers, and projects, support of faculty, external and collaborative research, personal development, leisure, and cooperation with other academic libraries with the view to developing a network of academic library resources that are at the disposal of all scholars. Therefore, services provided by the academic libraries must be planned about the other faculties in the community they serve. The quality and effectiveness of academic libraries are connected with services, products, as well as staff, facilities, and space (Gyau, Liu & Kwakye, 2021). Mathews (2017) is also of the opinion that quality in the context of a library is often treated as the quality of service which also affects the effectiveness of the library, is important for each library to survive. For library services to keep pace with the needs of students, the library should increase the number of employees' expert and skillful librarians who can provide user education programs.

2.4 User satisfaction

Library users can be described using various terms such as clients, customers, borrowers, members, patrons, etc. But the most frequently used term in libraries is the user. It represents a person who uses the library for his information needs. Users are the important factor without which an information system loses its whole purpose. In the library operation, it is extremely important to understand who the users are, what their needs are, and how those needs can be satisfied and fulfilled by the library. Xu and Du (2019) stated that users' satisfaction is one of the probably most complicated phenomena connected with measuring library quality is the issue of customer satisfaction in the libraries. According to Cambridge Dictionary, Satisfaction means, "a pleasant feeling that you get when you receive something you wanted, or when you have done something, you wanted to do." User satisfaction has been recognized as an important measure of library performance, in general, user satisfaction

has been defined as the degree to which the library can meet the demands of the user. User satisfaction is widely used by researchers and Information professionals to evaluate Information retrieval system success.

2.5 Conceptual Framework



METHODOLOGY

3.1 Research Design

The researcher adapted the version of SERVQUAL and LibQUAL + instrument developed by Parasuraman (Zeithamal, Parasuraman, & Verry, 2000) and the Association of Research Libraries (ARL) for assessing the quality of services offered by the Kitale National Polytechnic.

3.2 Target Population

The target population majorly was the library users at the Kitale National Polytechnic who comprised Trainers, Trainees, and staff. The library receives an approximate total of 300 users per day. A sample was conveniently selected from the population whereby 105 of the total population of library users was selected and constituted the sample size.

Table 3.2 Target Population and Sample Size

Category of Library Users	The population of Library Users	Sample Size Distribution	Proportion of Sample
Trainees	154	54	51.4
Staff	58	20	19.1
Trainers	88	31	29.5
Total	300	105	100

3.3 Data Collection

Data were collected by the use of a questionnaire divided into three quality areas; information on library resources, library information services, and library facilities. The respondents were required to rate their perceptions of the actual service provided. Each response was

scored on a 5-point Likert scale, where “1” Strongly disagreeing, “2” disagree, “3” neutral, “4” agree and “5” strongly agree for assessing the expectations and perceptions of the users respectively. The questionnaires were created on google forms whereby a link extracted from the internet platform carrying the information was shared through social media platforms and email addresses of the respondents.

3.4 Data Analysis and Presentations

In analyzing the data collected, the researcher adopted simple descriptive statistical techniques where the google platform was prompted to generate the analyzed data using the respondents’ feedback. Information was presented using percentages and pie charts.

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

Table 4.1 Response Rate

Links	Frequency	Percentage (%)
Links Send	105	100%
Response	92	87.62%

The table above represents the response rate where by 105 questionnaires (links) were shared representing 100 percent and 92 responses were received representing 87.62 percent adequate for analysis and interpretation.

4.2 Accessing E-Books

4.2.1 Rate of Access

On accessing EBooks, 91 of 92 respondents participated in responding to the item. 59.3% (54) agreed to have accessed EBooks, whereas 40.7% (37) had never accessed EBooks. This indicates that EBooks are in use, and most library users can access them.

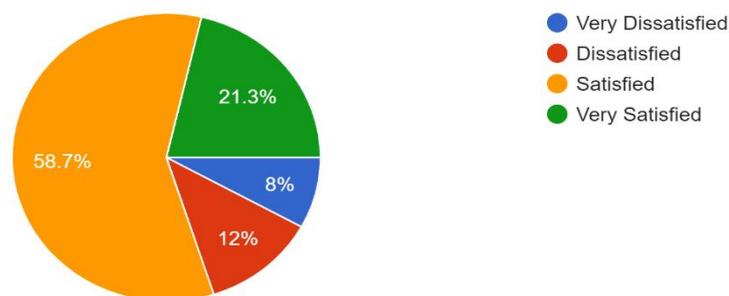
4.2.2 Reasons for not accessing EBooks

S/NO	Response	Frequency	Percentage (%)
1.	Already have them	3	15
2.	No proper guidance	5	25
3.	Not aware of them	7	35
4.	Computer illiterate	1	5
5.	No interest in EBooks	4	20
	Total	20	100

Out of 37 respondents who had not accessed eBooks, 20 gave reasons why they had not accessed the eBooks. 35% of the respondents were unaware of the eBooks, 25% lacked the proper guidance for accessing and using the resources, 20% recorded no interest in eBooks, 15% had the books on their devices, and 5% indicated that they were computer illiterate and thus unable to get the eBooks using the library computers. This shows that most library users are unaware of the eBook resources.

4.2.3 Rate of Satisfaction for Using eBooks

If you have accessed rate your degree of satisfaction
75 responses



The respondents who had accessed the eBooks were requested to indicate the level of satisfaction derived from using the books. As shown in the figure above, 58.7% (32) were satisfied, 21.3% (12) were very satisfied, 12% (6) were dissatisfied, and 8% (4) were very dissatisfied. This is an indication that most e-book users derive satisfaction from the use of the materials.

4.3 Customer Service

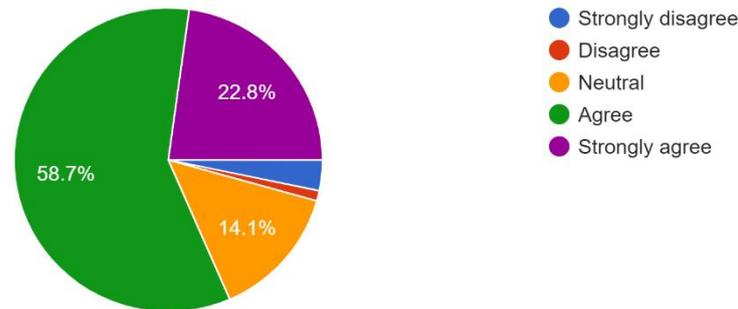
4.3.1 Staff Treatment

The study sought to establish how the Staff treated the library users regarding fairness and openness. Ninety-two (92) participants responded, of which 58.7% (54) agreed to be treated

fairly and without discrimination, 26% (24) strongly agreed, 6.55 (6) were neutral, 4.3% (4) disagreed, and strongly disagreed. This showed that library staff at the Kitale National Polytechnic treat most users fairly and without discrimination.

4.3.2 Staff Professionalism

b) Library staff are professional
92 responses



Regarding the professionalism of library staff, all the respondents indicated their opinions whereby; 58.7% (54) agreed that the library staff is professional, 22.8% (20) strongly agreed, 14.1% (13) were neutral, 3.3% (3) strongly disagreed and 1.1% (1) disagreed. This is evident that library staff at the Kitale National Polytechnic handle the library users professionally.

4.4 Library Facilities

4.4.1 Accessibility of Computers and ICT Equipment.

On the aspect of accessing the computers in the library, 56.5% (52) agreed that the computers and ICT equipment in the library are accessible; 28.3% (26) of the respondents strongly agreed, while 12% (11) were neutral. On the contrary, 2.2% (2) disagreed, and 1.1% (1) strongly disagreed. This implies that the computers in the library are accessible by the library users.

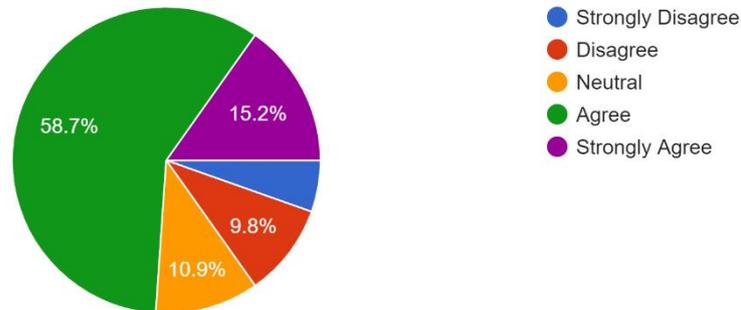
4.4.2 Adequacy of Printing and Photocopying services

The study tested the adequacy of printing and photocopying services; all the respondents participated in the concept whereby: 56.5% (52) agreed that the printing and photocopying services are adequate; 17.4% (16) strongly agreed; 14.1% (13) were neutral; 9.8% (9) disagreed and 2.2% (2) strongly disagreed.

4.4.3 Collections in the Library

c) The library's collection meets my needs

92 responses

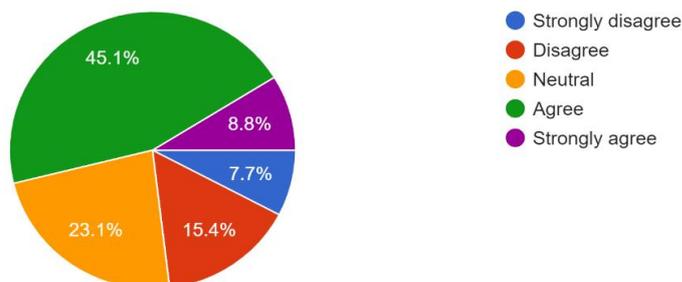


The study also sought to investigate if the library collections meet the users' needs. Out of the 92 respondents, 58.7% (54) agreed that the collections in the library meet their needs, 15.2% (14) strongly agreed, 10.9% (10) were neutral, 9.8% (9) disagreed, and 5.4% (5) strongly disagreed. It implies that the library collections meet the users' needs.

4.4.4 Information on New Services and Collections

d) Library staff keep me informed about new services& collections

91 responses

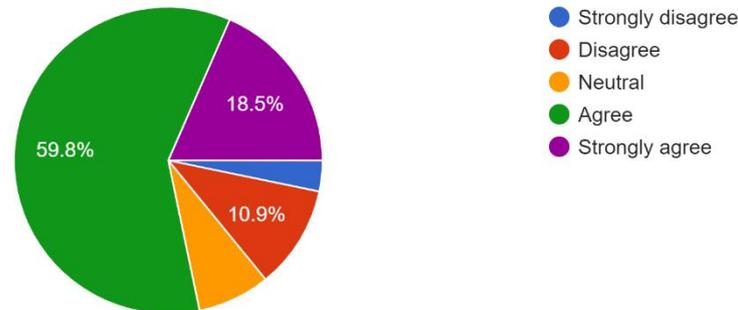


On the issue of informing library users about the new collections, 45.15 (41) agreed that they are usually informed about new arrivals, 23.1 (21) were neutral, 15.4% (14) disagreed, 8.8% strongly agreed, and 7.7% (7) strongly disagreed. This indicates that the library staff passes information to the library users about new library arrivals.

4.4.5 Adequacy of Sitting Space

e) Library sitting space is adequate

92 responses



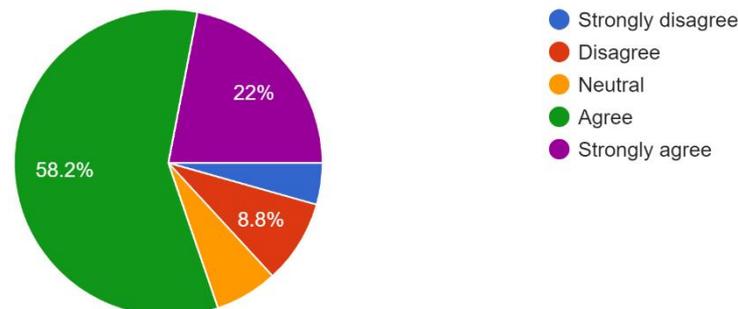
Regarding the adequacy of the sitting space; 59.8% (55) agreed that the space is adequate, 18.5% (17) strongly agreed, 10.9% (10) disagreed that the space is adequate, 7.6% (7) were neutral and 3.3% (3) strongly disagreed. This shows that the library space available at the Kitale National Polytechnic is satisfactorily adequate to serve the users.

4.4.6 Library Operating Hours

4.4.6.1 Adequacy of Operating Hours

f) Operating hours are adequate

91 responses

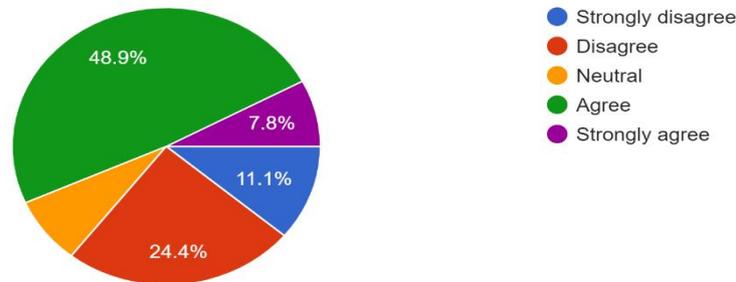


The findings of the study on adequacy of operating hours 91 out of 92 respondents responded whereby: 53 respondents representing 58.2% agreed, 20 respondents representing 22% strongly agreed, 8 respondents representing 8.8 percent disagreed, 6 respondents representing 6.6 percent were neutral and 4 respondents representing 4.4 percent strongly disagreed. This indicates that the operating hours were relatively adequate.

4.5 Library Resources

4.5.1 Appropriation of the Resources

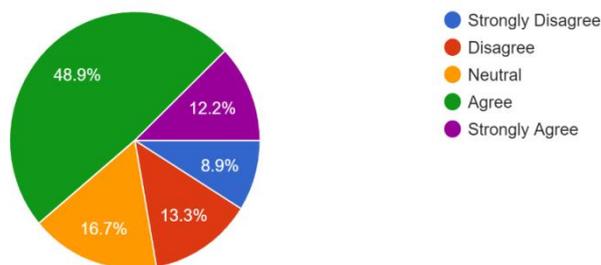
a) Resources are appropriate for my course
90 responses



The study inquired to know if the resources available in the library were appropriate for the individual user's course: 90 out of 92 participants responded whereby; 44 respondents representing 48.9 percent agreed that the resources were appropriate for their courses. 22 respondents representing 24.4 % of the respondents disagreed, 10 respondents represented 11.1 percent strongly disagreed that resources are appropriate for their courses whereas 7 respondents represented 7.8 percent for each case strongly agreed and were neutral. This indicates that the library sources satisfy relatively 66 percent of the library users.

4.5.2 Finding the Resources

c) Resources are easy to find
90 responses



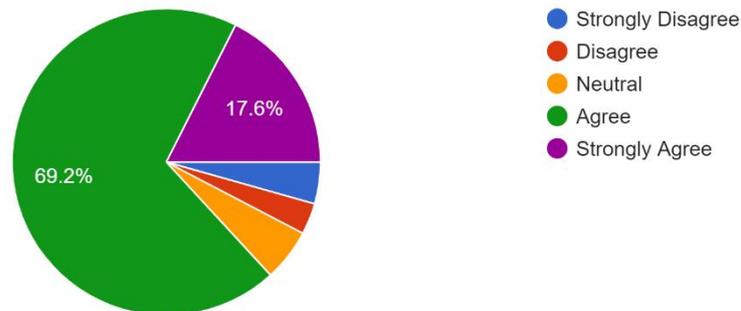
The respondents were asked to indicate how easy they find it when looking for resources in the library. 44 respondents represented by 48.9% agreed that it is easy to get the resources in the library. 15 respondents represented 16.7% were neutral, 12 respondents represented

13.3% disagreed, 11 respondents had 12.2% strongly agreed and 8 respondents represented 8.9% strongly disagreed.

4.5.3 Nature of the Borrowing Procedures and Policies

d) Policies and procedures for borrowing are clearly stated

91 responses



91 out of the 92 respondents gave their opinions on the issue of the policies and procedures. 63 respondents represented by 69.2% agreed that the policies and procedures for borrowing materials in the library are clearly stated. 16 respondents' 17.6 percent strongly agreed that the policies and procedures are clearly stated of 5 respondents' 5.5 percent were neutral, 4 respondents 4.4% strongly disagreed and 3 respondents 3.3% disagreed. This is an indication that the borrowing policies and procedures are clearly stated.

4.5.4 Accessing E-book Database

On the issue of accessing the e-books database, 90 respondents participated whereby 39 of them 43.3% agreed that the database is easy to access whereas 21 with 23.3% were neutral on the issue. 12 respondents represented 13.3% disagreed and 9 respondents represented 10% in each case strongly agreed and strongly disagreed.

4.5.5 Uptake of Recommendations for New Resources

The research sought to establish whether the library staff listen to recommendations by the user about new resources. 91 of 92 respondents participated whereby; with 52 respondents with 57.1% agreeing that recommendations are listened to by the library staff. 12 respondents represented by 13.2% gave a neutral response, 10 respondents represented by 11% in each case strongly agreed and disagreed, and 7 respondents represented by 7.7% strongly disagreed.

4.6 Library User Recommendations

Most of the respondents indicated that the library should purchase additional books that are more current and for all subjects.

4.4 Summary of Findings

The study sought to give empirical evidence on library user satisfaction with academic library services by rating the quality of the library service. The research tool was grouped into three sections; customer service, library facilities, and library resources. Most of the library users visit the library to get a quiet studying environment (73 percent). For this reason, there should be existence of library rules and policies stipulating the observance of silence and quietness in the library. The rules can be communicated to the users through memos and social media platforms. The study indicated that academic library users are satisfied with customer service, library facilities, and library resources. More than three-quarters of the respondents strongly agreed and agreed respectively about the elements tested which are statistically evident that the users are satisfied with both three aspects. According to the findings, e-books have greater importance as they complement other study materials thus satisfying most of the library users (80%). However, some respondents were neutral and others disagreed and strongly disagreed with satisfaction derived from library service factors. The disagreement indicates that there is a problem that should be looked into. The library services' minor flaws may be associated with how the staff treats and communicate with users. The obstacles may also relate to materials, tools, equipment, and facilities, which can be looked into to obtain maximum satisfaction for the few who are not satisfied with the services.

Lastly, the study shows that academic library users' satisfaction has a positive and significant relationship and effect with the overall quality of services the library provides. This means that an increase in service quality will increase user satisfaction significantly and a decrease in service quality will also significantly decrease user satisfaction. This is a scientific advantage and reference to academic libraries to render better and quality services for maximum user satisfaction. It is therefore important that the library maintains its current performance while innovating to better service quality levels from time to time to satisfy the needs of the users.

4.5 Conclusion

Accessing e-books in any library contributes much more to library user satisfaction. Library users need to be trained on how to access the e-books as some indicated that they had no idea how to access the e-books because there is no proper guidance on how to get the resources. The library staff should carry out regular orientations to inform new library staff and the users on how to serve and deal with users/staff depicting different characters and how to better understand the services provided respectively. This will improve the library staff's knowledge of how to handle users and understand their diverse views and needs and also treat them politely. The findings indicated that 84.7% of library users are treated fairly and without discrimination. As a public policy, clients inclined to a particular service should receive the service fairly and without discrimination. Fairness is an indicator of professionalism as indicated by 81.5% of the library users, translating to friendliness (80.2%).

4.6 Recommendation

Based on the findings of this study, the following recommendations were made: The polytechnic management should ensure proper funding of the college library to purchase materials suggested by the users. The staff should be trained on communication skills and good human relationships that will promote and encourage users' patronage of the library resources and services. Recent reference materials/resources in form of hard and soft copies should be acquired to update the obsolete ones and add to the existing materials in the library.

REFERENCES

- Barad, P. (2019). User Satisfaction with Library Resources and Services in Himachal Pradesh University. *Library Progress (International)*, 39(1), 102-109. DOI: 10.5958/2320-317x.2019.00010.2
- Baryshev, R. (2017). An electronic university library user's status: developing a concept and evaluation criteria. *Bibliosphere*, (3), 15-21. doi: 10.20913/1815-3186-2017-3-15-21
- Cox, A. M., Kennan, M. A., Lyon, L., & Pinfield, S. (2017). Developments in research data management in academic libraries: Towards an understanding of research data service maturity. *Journal of the Association for Information Science and Technology*, 68(9), 2182-2200.
- Gregory, V. L. (2019). *Collection development and management for 21st-century library collections: an introduction*. American Library Association.

- Dimiyati, M., & Subagio, N. A. (2016). Impact of service quality, price, and brand on loyalty with the mediation of customer satisfaction on Pos Ekspres in East Java. *Mediterranean Journal of Social Sciences*, 7(4), 74.
- Kumar, A., & Mahajan, P. (2019). Library performance assessment of service quality through LibQUAL: The case of Maharshi Dayanand University (MDU), Rohtak (India). *Library Philosophy and Practice*, 1-17.). Library performance assessment of service quality through LibQUAL: The case of Maharshi Dayanand University (MDU), Rohtak (India). *Library Philosophy and Practice*, 1-17.
- Gyau, E., Liu, J., & Kwakye, O. (2021). Evaluation of User Satisfaction with Academic Libraries Services Based on Students' Perspectives. *Oalib*, 08(08), 1-17. doi: 10.4236/oalib.1107783
- Hussain, A. (2019). Industrial revolution 4.0: implication to libraries and librarians. *Library hi tech news*, 37(1), 1-5.
- Matthews, J. R. (2017). *The evaluation and measurement of library services*. ABC-CLIO.
- Mugo, G., & Mathu, M. (2021). Assessment of Customer Service Provision for Enhanced User Satisfaction in Academic Libraries: A Case Study of St Paul's University Library, Kiambu County, Kenya. *International Journal Of Current Aspects*, 5(1), 20-34. doi: 10.35942/ijcab.v 5i1.155
- Morudu, S. A. (2019). *The relationship between the use of information and communication technologies (ICTs) and document delivery service at an open distance learning institution* (Doctoral dissertation).
- Musyoka, S., Ochieng, D., & Nzioki, D. (2016). Factors Affecting Provision of Quality Service in the Public Health Sector: A Case of Nyahururu District Hospital, Kenya. *International Journal of Management and Economics Invention*. doi: 10.18535/ijmei/v2i9.09
- Oh, D. (2022). How to measure service quality, customer satisfaction, and loyalty of public library users: Application of library customer satisfaction index (LCSD) lite model. *Journal Of Librarianship And Information Science*, 096100062211011. doi:0.1177/09610006221101193
- Olajide, O., & Adio, G. (2017). Effective utilization of university library resources by undergraduate students: A case study of Federal University Oye-Ekiti, Nigeria. *Library Philosophy and practice*.

- Olubiyo, P. O., & Ogunniyi, S. O. (2017). Awareness and use of information resources for research by final year students in Adeyemi College of Education, Ondo. *Library Philosophy and Practice (e-journal)*, 1666.
- O'Kelly, M. (2017). Community Success: Rethinking Public Services in Academic Libraries. *International Information & Library Review*, 49(3), 225-229. doi: 10.1080/10572317.2017.1353372
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (2000). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49(4), 41-50.
- Phadermrod, B., Crowder, R., & Wills, G. (2019). Importance-Performance Analysis based SWOT analysis. *International Journal of Information Management*, 44, 194-203. doi: 10.1016/j.ijinfomgt.2016.03.009
- Reddy, P. R. (2017). Measuring quality services in the libraries. *International Journal of Library and Information Studies*, 7(1), 144-149.
- Rout, R., & Panigrahi, P. (2018). Online Public Access Catalogue (Opac) Usage patterns among the library users of Odisha: A Study. *International Journal of Library and Information Science*, 7(1). doi: 10.34218/ijlis.7.1.2018.005
- Singh, I. (2018). Use of Library Resources and Services of Punjabi University Patiala by the Research Scholars and Postgraduate Students. *Library Progress (International)*, 38(1), 89. doi: 10.5958/2320-317x.2018.00009.0
- Tan, T. S., Chen, T. L., & Yang, P. H. (2017). User satisfaction and loyalty in a public library setting. *Social Behavior and Personality: an international journal*, 45(5), 741-756.
- Ullah, S., Jan, S., Khan, S. A. S., Khan, R., & Jan, M. Y. (2021). Postgraduate research and Medical libraries: An analytical study of the library of Postgraduate Medical Institute, Peshawar. *Pak J Surg*, 37(2), 100-104.
- Walton, K., & McMullin, R. (2021). Welcoming autistic students to academic libraries through innovative space utilization. *Pennsylvania Libraries: Research & Practice*, 9(2), 83-100. doi: 10.5195/palrap.2021.259
- Wiercinski, A. (2014). Management of Information Organizations. *Australian Academic & Research Libraries*, 45(2), 153-154. doi: 10.1080/00048623.2014.915507
- Xu, F., & Du, J. T. (2019). Examining differences and similarities between graduate and undergraduate students' user satisfaction with digital libraries. *The Journal of Academic Librarianship*, 45(6), 102072.

Xu, F., & Du, J. (2018). Factors influencing users' satisfaction and loyalty to digital libraries in Chinese universities. *Computers in Human Behavior*, 83, 64-72. doi: 10.1016/j.chb.2018.01.029