

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Library Philosophy and Practice (e-journal)

Libraries at University of Nebraska-Lincoln

2-14-2021

When the "Library as Place" Matters: A Case Study of an Academic Library

Retno Sayekti

Department of Library and Information Science, Faculty of Social Sciences, Universitas Islam Negeri Sumatera Utara Medan, Indonesia, retnosayekti69@uinsu.ac.id

Abdul Karim Batubara

Department of Library and Information Science, Faculty of Social Sciences, Universitas Islam Negeri Sumatera Utara Medan, Indonesia, abdulkarimbatubara@uinsu.ac.id

Achiriah Achiriah

Department of History of Islamic Civilization, Faculty of Social Sciences, Universitas Islam Negeri Sumatera Utara Medan, Indonesia, achiriah63@gmail.com

Muhammad Aditya

Department of Library and Information Science, Faculty of Social Sciences, Universitas Islam Negeri Sumatera Utara Medan, Indonesia, muhammad.aditya@uinsu.ac.id

Franindya Purwaningtyas

Department of Library and Information Science, Faculty of Social Sciences, Universitas Islam Negeri Sumatera Utara Medan, Indonesia, franindya@uinsu.ac.id

See next page for additional authors

Follow this and additional works at: <https://digitalcommons.unl.edu/libphilprac>



Part of the [Educational Technology Commons](#), [Information Literacy Commons](#), [Scholarly Communication Commons](#), and the [University Extension Commons](#)

Sayekti, Retno; Batubara, Abdul Karim; Achiriah, Achiriah; Aditya, Muhammad; Purwaningtyas, Franindya; Syam, Abdi Mubarak; and Nur'aini, Nur'aini, "When the "Library as Place" Matters: A Case Study of an Academic Library" (2021). *Library Philosophy and Practice (e-journal)*. 5136.
<https://digitalcommons.unl.edu/libphilprac/5136>

Authors

Retno Sayekti, Abdul Karim Batubara, Achiriah Achiriah, Muhammad Aditya, Franindya Purwaningtyas, Abdi Mubarak Syam, and Nur'aini Nur'aini

When the "Library as place" Matters: A Case Study of an Academic Library

Retno Sayekti,

Department of Library and Information Science, Faculty of Social Sciences, Universitas Islam Negeri Sumatera Utara Medan, retnosayekti69@uinsu.ac.id

Abdul Karim

Department of Library and Information Science, Faculty of Social Sciences, Universitas Islam Negeri Sumatera Utara Medan, abdulkarimbatubara@uinsu.ac.id

Achiriah

Department of History of Islamic Civilization, Faculty of Social Sciences, Universitas Islam Negeri Sumatera Utara Medan, achiriah63@gmail.com

Muhammad Aditya

Department of Library and Information Science, Faculty of Social Sciences, Universitas Islam Negeri Sumatera Utara Medan, muhammad.aditya@uinsu.ac.id

Franindya Purwaningtyas

Department of Library and Information Science, Faculty of Social Sciences, Universitas Islam Negeri Sumatera Utara Medan, franindya@uinsu.ac.id

Abdi Mubarak Syam

Department of Library and Information Science, Faculty of Social Sciences, Universitas Islam Negeri Sumatera Utara Medan, abdimubaraksyam@uinsu.ac.id

Nur'aini

Department of Library and Information Science, Faculty of Cultural Studies, Universitas Sumatera Utara, nuraini@usu.ac.id

Abstract.

Changes in learning pattern, collection, technology and use have encouraged academic libraries to be reinvented in accordance with users' needs. Therefore, an assessment of how users perceive and expect for library as place to accommodate learning is necessary. This study aims at measuring the gap between the minimum perception, and desired levels of library as place dimension. This is a quantitative research with data obtained from the library of the State Islamic University of North Sumatra (UINSU), through descriptive survey techniques. The result showed that the utilitarian space and symbol aspects of the library met the minimum expectations of users, however in terms of accommodation, their expectations were not met. Therefore, this research suggests that institutions need to ensure their libraries have adequate rooms for users, encouraging the learning activities and creativity. Librarians need to consider providing space that allows collaborative works while supports flexibility for social meeting. Our findings confirm that the role of the library as a space for users, for individual and collaborative work, and as a space for social activity, will become increasingly important even in this digital era.

Keywords: library as place, academic library, LibQual, utilitarian of library space, library facilities.

Introduction

The LibQual model is one of the strategies used to measure library services quality. According to Green & Kyriallidou (2012), LibQual has been used by more than 1200 libraries since its inception. In 2020, a total of 76 studies on the library services quality, were carried out using the LibQual method, which comprises of 3 special dimensions that make it different from other service quality measurement methods such as ServQual (Services Quality). These dimensions are attitudes and interpersonal skills of librarians in service (Aspect of Services), Information Control, and Library as Place. This research was carried out in the library of the State Islamic University of North Sumatra (UINSU), Indonesia, which is one of the Islamic-based academic libraries. The UINSU library has undergone many changes over the past 2 years, including the creation of new rooms such as the Oman Corner, spatial arrangements to symbols in supporting the library room design. However, high performance needs to be measured based on user needs. The LibQual method tends to comprehensively map the performance of the library as place that prioritizes utility factors and other things such as comfort, security, etc. in order to determine its quality.

Previous researches dealing with evaluating the academic Library service quality from the user perspective (Tessa, 2018), showed that the Library as Place has outstanding insight and understanding by librarians, however, access to information is still lacking. This research is very good as a reference for improving the quality of academic library services, however, it is limited in terms of user expectations.

Therefore, based on the facts above, studies need to be conducted to further determine the service quality of the UINSU Library, by making user's perceptions and expectations as the main parameters. The factors used to carry out this research makes it different from previous studies. The measurement of library service quality in 2020 is still considered relevant quality control efforts in UINSU Library management. In addition, excellent service for visitors is one of the significant missions of the UINSU Library.

Therefore, the research question of this study is: what is users' perception and expectation of the quality of UINSU library service in terms of library as place? Meanwhile, the purpose of this study is:

1. To measure users' perception of library as place,
2. To measure users' minimum expectation of library as place
3. To measure users' desired levels of library as place .

Values of academic library

According to the American Library Association (ALA) (2009), a University library is defined as a library associated with higher education degree-granting institutions. ALA (2009) defined a university library as a section of an institution in higher education institutions, universities, and colleges. There are several characteristics of an academic library, which includes an organized collection of printed and digital materials. Staffs are trained to provide and interpret materials needed for information, cultural, recreational, and educational purposes to visitors. The academic library has a fixed schedule showing where the staff is available to serve visitors. (American Library Association, 2009).

Libraries have developed as an important part of the academic institution and are required to contribute to the fast-growing higher education environment. The phenomenon of higher

education model development that is increasingly diverse, and the world of research that is increasingly advanced and complex makes university libraries more than a repository (information warehouse). It currently experienced a shift in paradigm, from being a warehouse or information repository to a learning enterprise (Bennett, 2009) as well as a learning laboratory (Silver, 2005) where users can create innovations (maker space) (Julian and Parrott, 2017)

The expected contribution of today's university libraries is more complex. This is because it does not only convert printed documents into electronic collections, rather it also directly contributes to the university's success in shaping learning, research, and community service environment for the entire campus and academic community.

In 2012, the Society of College, National and University Libraries (SCONUL), an institution that continues to promote the awareness and role of higher education libraries, identified 16 reasons higher education libraries are valuable. Among these reasons, the most essential is that the library quality is more important than classroom teaching activities and is part of the top 10 factors prospective students choose universities (SCONUL, 2012).

Libraries and the managers often fail to interpret the true value of the library, such as their inability to interpret the beneficial values. Dag Naslund (2006) stated that libraries represent the meaning of use and utility, while reported that university libraries provide more beneficial values. However, the library's tendency to determine the value of this benefit is usually more towards library managers or stakeholders in the university than to users. According to Simmons (2008), this occurred due to external pressure from various parties.

Currently, university libraries are experiencing external pressure. According to Pinfield (2017), contextual, economic and political pressures on the financing of higher education libraries are some of the challenges of higher education libraries. Therefore, Michael (2005) stated that higher education is affected by the demands that arise from various forces, including increasing criticism. According to Michael (2005), this is influenced by increased government awareness, competition among educational institutions, greater consumer understanding, and rise in institutional costs.

External pressure on higher education leads to demands for effectiveness and efficiency. According to Keeling (2008), this pressure affects university libraries in terms of accountability. Therefore, it continues to be committed to sustainable institutional improvement. In general, higher education libraries are affected by external pressures which lead to greater accountability data production. Therefore, according to Simmons-Welburn et al. (2008), stakeholders in higher education are less interested in making university libraries transformative to improve learning, research, and services.

Oakleaf (2010) stated that libraries are more often interested in taking measurements which tend to focus on library managers. Statistical measurement assumptions are logic assuming more collections are served, or adequate instruction programs are offered to make the library better. According to Oakleaf (2010) a concept of value is that not in favor of library customers, or users. According to Clay III & Bangs (2006), the statistical data collection process is traditional and retrospective by putting aside the quality of learning and teaching functionally (Biggs, 2001).

In understanding library value, it is important to analyze the customer value concept (Butz et al., 1996; Woodruff, 1997). Therefore, in understanding an organization's value, an emotional

bond needs to be built between the customer as the recipient and the producer as the provider of the product or service. A value is termed a customer value when the emotional bond between the customer and producer adds more value to the product or service (Butz et al., 1996). Therefore, a moderate step that can be taken in understanding the library value is to emphasize the side of the user as the service recipient.

Quality of library services

As a measure of the good and bad library services, the university library staffs, such as librarians and technical officers, are obliged to provide the best possible service to users and also confirm their service results. Roberts (1989) stated that professional librarians always need proof of their services. Therefore, it is important to develop library services in higher education from the user's point of view. Hernon et al. (2015) stated that "Quality is in the eyes of the beholders," and the recipients of these services, in this case, are library users.

Due to the importance of creating a library for study and research, it is necessary to provide a proper and comfortable place for users. According to the National Research Council (1999), providing a comfortable place for visitors is one form of quality assurance in creating a physical environment and service representation. Unfortunately, librarians are often too focused on ritual knowledge activities, while users aim at obtaining concrete knowledge (Plum, 1994).

Library as place

The inception of technology and technological devices has significantly impacted many sectors, including libraries. According to the Research Library UK (2011), the physical library has the ability to go into extinction due to the inception of the automated library services, which is easier for visitors to access. However, despite this new development, there are some strategies used to keep the library physically connected to users, such as creating a library as a flexible place to hold meetings and allow access to information.

Furthermore, libraries play an important role and act as a social relationship where users meet, discuss, and create new ideas for knowledge development. Therefore, the library needs to provide a comfortable place to support the productive and innovative activities of users. Libraries also reflect the vision and values of the socio-political community. Therefore, librarians need to use a variety of innovative methods to create the best approach in planning and viewing its function and conducting tests (Hanson and Abresch, 2016).

In the LibQual Method, the physical library is one of the dimensions used to assess the quality of the service. This dimension is referred to as the Library as Place, consisting of 3 main attributes, including, utilitarian space, which is a room in the library that can be used to learn and discuss by the entire academic community. The second attribute is symbol that includes physical facilities, communication equipment. The last attribute is refuge which means providing a study room that gives the impression of being safe, comfortable, relaxed and stimulates creativity for visitors. The library as place measures how the physical environment is perceived both pragmatically, usefully, and symbolically which includes defining it as a safe and comfortable place (Thompson et al., 2009).

Given the explanation of the library as place above, the hypotheses of this study are as follows:

1. There is a difference between the perception of the library as place and the user's minimum expectations.
2. There is a difference between the perception of the library as place and the desired expectations of users.

Research Methodology

Sampling and Data Collection

The target population of the present study included all students of the State Islamic University of North Sumatra Medan (UINSU) that are active members of the UINSU Library (N=48,596). The number distribution of library active user is presented in Table 1 (see Appendix 3). Of these, 100 sample were drawn using Slovin formula (see Appendix 2). The proportional random sampling technique (Salkind, 2010) was used to obtain data from students where the number of samples in each predetermined stratum is proportional to the members in each population stratum (see Table 2 Appendix 3). A total of 5 question items measuring library as place were administered.

Measures

This research uses a quantitative descriptive survey approach to measure users' satisfaction in terms of library as place. Data collection using the LibQual method questionnaire was based on a written questionnaire tailored to the 3-dimensional attributes used to measure the service quality (See Appendix 1). The instrument's content validity, i.e. 'the subjective agreement among respondents that a scale logically appears to reflect accurately what it purports to measure' was assessed through rigorous pre-testing. Five students participated in the pre-testing, which concentrated on question wording, in terms of clarity and readability

The scaling technique in this study uses 9 levels of semantic differential, which consists of two polar opposing adjectives, examined and evaluated by a concept closest to the feeling of the "respondent" (De Lima Lopes, 2011).

The LibQual method classifies the expectations into 2 parts, namely minimum and desired. Technically, the LibQual survey instrument measures the quality level of library services by capturing perceptions, minimum and desired expectations on each dimension. Minimum expectation means the minimum level of service adequate for users. Furthermore, the desired expectations are the level of service that users expect from the library (Sajna and Haneefa, 2016).

The questionnaire was distributed manually to students as the library users by physically visiting the library. There were 100 respondents to this questionnaire, giving a response rate of 90%.

Data analysis and results

A Superiority and Adequacy Gap analysis is used to measure the quality of library services. Furthermore, it provides perceptions results of service quality from the user point of view with the difference between expectations and perceptions of users on the service that has been felt (the actual performance of the library).

There are 3 main formulas used to determine the level of service quality in the library using LibQual gap analysis, as follows:

1. Understanding the zone of tolerance, which is an area, formed from the average minimum expectation and desired scores. Therefore, the tolerance zone is between the minimum and desired expectation values (Green and Kyrillidou, 2012).
2. The superiority gap can be seen from the difference (the result of reduction) between the perception and desired expectations.

$$\textit{Superiority Gap} = \textit{perception} - \textit{desired expectations}$$

3. Adequacy Gap is obtained by determining the difference (reduction results) between perceptions and minimum expectations.

$$\textit{Adequacy Gap} = \textit{perception} - \textit{minimum expectations}$$

LibQual is an international method standardized by the Association of Research Libraries (ARL). Several studies show that the validity tests of 22 LibQual items were valid (Natesan and Aerts, 2016; Rehman et al., 2014; Thompson et al., 2008). This study uses 3 items from the 22 that assess library as place. The Cronbach's alpha (α) coefficient on the LibQual Library as Place dimension of this study is 0.89 ($\alpha = 0.89$) thereby, indicating a very high level of reliability.

Hypothesis testing was carried out with the help of SPSS software version 25 and using a parametric statistical technique. The paired t-test technique is used because the hypothesis testing is carried out on two variables (expectations and perceptions) that are on the same sample continuum.

This normality test is carried out using the Kolmogorov-Smirnov method with the help of SPSS version 25 software. This method provides a more appropriate result on samples above 50. All normality test results on each variable indicate that the data distribution is normal. Therefore, the research hypothesis test can then be carried out with a paired parametric statistical approach.

After testing the hypothesis of library as place, it was found that the average perception of Library as Place (LP) and minimum service level of Library as Place are 6.22 and 6.19. The paired t-test shows a significant result of 0.769. Furthermore, contrary to the basic provisions of the paired t-test hypothesis, the significance results indicate that the perception of Library as Place (LP) is different from the minimum service level of Library as Place.

The average perception of library as place (LP) and desired Perception of Library as Place are 6.22 and 8.15. The paired t-test shows a significant result of 0.000. Furthermore, contrary to the basic provisions of the paired t-test hypothesis, the significance results prove that the Perception of Library as Place is different from the desired level of Library as Place.

Differences in the perceptions and minimum expectations of users on the library as a place dimension

Table 4 (see Appendix 3) shows the adequacy gap score in the library as place dimensions.

To determine the sufficiency of the quality of UINSU library services in the dimension of the Library as Place (LP), data are discussed by examining the adequacy gap analysis value. The results of statistical data processing show that there is a significant difference between the average perception and minimum expectations of library users regarding library as place. The t-test result with a positive value of 0.03 from the difference provides a mean value of the library as place perception by 6.22 with a minimum expectation of 6.19.

The result of a positive adequacy gap analysis of 0.03 indicates that the performance of the UINSU Library as a place, in general, has been able to exceed the minimum expectations of users. This is because the mean value between users' feelings (perception, P) and wants (minimum expectation, ME) is insignificantly different. Therefore, the hypothesis that there are differences in perceptions and minimum expectations of users on the LP dimension is rejected. In the end, the positive adequacy gap value on the library as place dimension still shows an area of improvement in service quality.

Furthermore, the adequacy of quality service of the UINSU Library is discussed on 3 indicators as shown in Table 5 (see Appendix 3). It shows that, out of the 3 indicators that exist in the library as place dimension, only the refuge indicators whose perception values are below the minimum expectations was possessed by the user. Meanwhile, in the utilitarian space and symbol indicators, the value of the perceptions of users is in the tolerance zone. This is in line with the results of the previous general data which show that the library as place dimension has the highest quality value of the 3 service dimensions measured in this study.

It is known that the user perception score on the utilitarian space indicator is 6.38, which is between the minimum and desired expectations of 6.30 and 8.34, respectively. Furthermore, the symbol indicator has a perspective score of 6.36, which is between the minimum and desired expectations of 6.20 and 8.13. This shows that the perception of the utilitarian indicators of space and symbols falls into the tolerance zone.

From the forementioned conditions, the adequacy gap analysis on the utilitarian space and symbol indicators has positive results, of 0.08 and 0.16, which show that the service quality of the UINSU Library in terms of useful space aspects and the meaning of the library as an open, comfortable and inspiring place is good by users. On the other hand, users' perceptions of the protection indicators do not succeed in exceeding the minimum expectations with a score of 6.01, which is below the standard minimum and desired expectation, values of 6.13 and 8.09. This indicates that the perceptions of displacement indicators are outside and below the tolerance zone. The adequacy gap analysis on the refuge indicator showing -0.12 indicates that the quality services of library from the aspect of serenity and comfort of the place are not considered good by users.

Furthermore, the adequacy gap of the service quality of UINSU Library is discussed in 5 items in the library as place dimension (see Table 6 Appendix 3).

It shows that there are 4 question items whose perceptions are in the tolerance zone, while only 1 question is under the tolerance zone. This results in 4 and 1 items with positive and negative adequacy gap values, respectively. The question item regarding the availability of quiet spaces for individual activities received a score of -0.37. This means that although UINSU's library services as a place are considered good in almost all indicators, it still lacks a quiet place to study. This is evidenced by the positive adequacy gap value in the aspects of useful space, various meanings of libraries as a place, as well as a comfortable and attractive library location according to users.

Meanwhile, in terms of the tranquility of the library location for individual activities, the UINSU Library is still considered poor by its users. Availability of quiet space (LP4), as one

of the indicators for evaluation items, is an area that needs to be improved in library services and cannot be tolerated by users. This is due to two factors. Firstly, the perception value on the availability of quiet space (LP4), which shows the results is below the tolerance zone. Secondly, the results of the adequacy gap analysis for the availability of quiet space items were negative.

Differences in perceptions and desired expectations of users on the library as place dimension

To measure the difference in perception and desired expectation of library as place data was analyzed by reviewing the value of the superiority gap analysis. The t-test indicates that there is a significant difference between the mean score of perceptions and desired expectations of users on the LP dimension. The analysis result of superiority gap on library as place dimension yields a value of -1.93, which is obtained from the difference in the mean value of perception by 6.22 and desired expectation by 8.15 (see Table 7 Appendix 3).

The negative results of superiority gap analysis in the LP dimension indicate that the performance of UINSU Library has not been able to generally pass the desired expectations of users. However, the negative superiority gap value on the LP dimension can make the quality of service within tolerance limits or adequate according to the user. This is because the condition for LP's perception value is within the tolerance zone, which is between LP's minimum and desired expectations, with scores of 6.19 and 8.15, respectively.

Furthermore, the superior quality of UINSU Library services is discussed on 3 indicators in the library as place dimension, as shown in Table 8 (see Appendix 3).

Based on the superiority gap analysis, the utilitarian space and symbol indicators were -1.96 and -1.77, respectively. The negative result on the superiority gap for utilitarian space and symbol shows that the desired expectations of the user have not been fulfilled, however, the value is still within the limits that can be tolerated by the user. This is because the perception scores on utilitarian space and symbol indicators exceeded the minimum expectations of the user.

It is known that the user perception score on the utilitarian space indicator is 6.38. This is between the minimum and desired expectation of 6.30 and 8.34. Furthermore, the symbol indicator has a perception score of 6.36, which is between the minimum and desired values of 6.20 and 8.13. This shows that the perception of space utilitarian and symbol indicators is included in the tolerance zone.

The superiority gap analysis on the refuge indicator also produced a negative value of -2.08, which indicates that the expectation of the user on the refuge indicator has not been fulfilled. In the end, it shows that there is space for improvement in the safety and comfort aspects of UINSU Library as a place.

The superiority gap analysis of the each desired expectation item shows that all items in the LP dimension are negative. Four of the five-question items show superiority gap results inside the tolerance zone, while only one is under the tolerance zone. Therefore, based on the Superiority gap, the most negative score is also found in the question item "Libraries have quiet space for individual activities" with a score of -2.32. The negative results of superiority gap analysis on all LP dimension items generally indicate that the service quality of UINSU Library in the aspect of the place has not been able to fulfill the desired expectations of users (see Table 9).

Based on the superiority gap analysis, LP2, LP3, LP5, and LP1 are tolerable items despite having a negative superiority gap value in the tolerance zone. This is because the four items have perception scores exceeding the minimum expectation scores of the users in the LP dimension. Furthermore, negative scores on LP4 items are areas that need to be improved on library services and cannot be tolerated by UINSU Library users.

Therefore, users tolerate in terms of the condition of UINSU Library space from 4 aspects, starting from the inspirational space for learning activities, are interesting, open to learning, and carry out research, to the space conditions that allows for group learning. Meanwhile, from the space quietness aspect for individuals, the UINSU Library is considered inadequate and unable to be tolerated by users. The quietness aspect is also a contributing factor to the unfulfilled expectations of users in the LP dimension.

Discussion

Based on the results of adequacy and superiority gaps, the service quality of UINSU Library as place dimension generally has a good performance in the perception of the users. The aspects of place in the UINSU Library that are considered good by users include the meaning aspect, where the library as space is considered sufficiently inspiring in learning and is open for students to carry out research. Secondly, it is the comfort aspect, where the UINSU Library location is considered comfortable and attractive. The last is the useful space aspect, where users consider the UINSU Library to be good in providing group and community study spaces. However, the good performance is inadequate in exceeding the minimum expectations of users on the aspect of UINSU Library as place.

Out of the entire library as place indicators that exceeded the minimum expectations of users, utilitarian space had the least value. The acquisition of low utilitarian space indicators in the adequacy and superiority gap analysis shows that the condition of the community or learning in groups at the UINSU Library is an aspect that is highly expected by users because only a few exceeded the minimum expectations. The library space should be arranged in such a way that differs floor loading requirements, book stack spacing, furniture and equipment section, as well as power and energy requirements while takes into consideration in the allocation of study and research areas in academic libraries. This is to accommodate the functionality, aesthetic and behavioural principles of library building. This calls for collaboration among the librarians, interior designers and architects in library building design and space management (Ugwuanyi et al., 2011).

The refuge indicator which represents the physical library as a comfortable and quiet place to study, needs to be improved. Specifically, the noise of the library for individual user activities contributes to the weaknesses of the library service. A quiet space where lighting is adequate makes it easier for people to concentrate in the library than in a perpetually noisy and dimly lit place (Ugwuanyi et al., 2011). The condition of the library location which is comfortable and attractive, as another aspect of the refuge indicator that indicates a good library service quality.

In recent years, the university library has experienced significant changes. According to Head (2016), it is a "reinventing physical space," where major changes in the design of Academic library space and building, including the ways libraries serve current users, have also been influenced by technological advances and the development of constructivist learning models in the academic world. Furthermore, technological advances that allow learning to be carried out in real-time, asynchronously need university libraries to allocate space to support collaborative and individual learning activities for users and educators.

Regarding the findings on the low quality of individual space on the refuge indicator, Head (2016) stated that it is damaged due to noise. This also occurs due to the misconception between architects and librarians when planning spatial library designs. According to Head (2016), architects prioritize aesthetic values when librarians try to protect users from noise. In most cases described by Head (2016), noise problems often arise from the boundary between collaborative and individual spaces. Head's (2016) study states that solving the noise problem is usually overcome by installing a divider between the collaborative and the individual spaces. Furthermore, differentiating the two on different building floors also helps reduce noise problems.

Libraries are a reflection of the visions and values held by the user community and the social-political environment where it is located (Hanson and Abresch, 2016). Higher education is a physical manifestation of existing academic values and knowledge. The Research Library UK (2011) stated that even though technological changes have changed the relationship between libraries and researchers, university libraries are still valued as a place to study and conduct research. Therefore, librarians use a variety of innovative strategies to create best practice approaches in planning library functions and to carry out the outcome and pragmatism-based assessments. Librarians need to develop collaborations with educators and education personnel to create a workspace where students are able to design projects, products, and be involved in learning activities (Julian and Parrott, 2017). Research has shown that this form of collaboration in creating workspaces tends to enable students to achieve their goals successfully. There are three basic elements to consider and harness together in provision and maintenance of space in the library. These elements are function, usability and attractiveness (Ugwuanyi et al., 2011). Many academic libraries have been changing their spaces radically to keep pace with the rapid increase in online information, including creating "learning commons" spaces to support document and media production and adding technology, group study spaces, and coffee shops (Fagan, 2014). Some other academic libraries even plays role as learning laboratory (Silver, 2005).

Conclusion

The service quality of academic library in terms of the library as place is very important in encouraging the learning activities and creativity. Librarians need to consider providing space that allows collaborative works while supports flexibility for social meeting.

The aspects of a library as space included in the tolerance zone are Libraries have community space to learn or hone skills in groups (utilitarian space), it has spaces that provide inspiration for learning activities (symbols), and its open opportunities for students to learn and carry out research (symbols). The fact that the desired expectation of the user on the refuge indicator has not been fulfilled shows that there is space for improvement in the safety and comfort aspects of the academic library as a place. The findings confirm that the role of the library as a space for users, for individual and collaborative work, and as a space for social activity, will become increasingly important even in this digital era.

Recommendations

This finding suggests that (1) architects should involve librarians and users in building a library to meet user needs; (2) there should be a balance consideration between the community space and private space for users in building a library; (3) an annual evaluation regarding 'library as place' need to be conducted to ensure continuous improvement of library services.

References

- American Library Association (2009) Academic libraries; Tools, Publications & Resources. Available at: <http://www.ala.org/tools/research/librарystats/academic> (accessed 22 November 2020).
- Bennett S (2009) Libraries and learning : a story of paradigm change. *Portal : Libraries and academy* 9(2): 181–197. DOI: 10.1353/pla.0.0049.
- Biggs J (2001) The reflective institution: Assuring and enhancing the quality of teaching and learning. *Higher Education* 41(3): 221–238. DOI: 10.1023/A:1004181331049.
- Butz HE, Leonard JR and Goodstein D (1996) Gaining the Strategic Advantage. *Organizational Dynamics* 24(3): 63–88.
- Clay III ES and Bangs P (2006) Beyond Numbers. *Beyond Numbers* 131. Virginia: 8=10.
- De Lima Lopes J (2011) Semantic differential scale for assessing perceptions of hospitalized patients about bathing. *ACTA Paulista de Enfermagem* 24(6): 815–820. DOI: 10.1590/S0103-21002011000600015.
- Fagan JC (2014) The dimensions of library service quality: A confirmatory factor analysis of the LibQUAL+ instrument. *Library and Information Science Research* 36(1): 36–48. DOI: 10.1016/j.lisr.2013.10.003.
- Green D and Kyrillidou M (2012) *LibQual+ Procedures Manual*. Washington D.C: Association of Research Libraries.
- Hanson A and Abresch J (2016) Socially constructing library as place and space. *Advances in Library Administration and Organization* 36: 103–129. DOI: 10.1108/S0732-067120160000036004.
- Head AJ (2016) *Planning and designing academic library learning spaces : expert perspectives of architects, librarians and library consultant*. Washington D.C.
- Hernon P, Altman E and Dugan RE (2015) *Assessing Service Quality : Satisfying the Expectations of Library Customers* (T Editioned.). United State of America: American Library Association.
- Julian K and Parrott D (2017) Makerspaces in the Library: Science in a Student's Hands. *Journal of Learning Spaces* 6(2): 13–21. Available at: <https://files.eric.ed.gov/fulltext/EJ1152687.pdf>.
- Keeling RP, Wall AF, Underhile R, et al. (2008) *Assessment Reconsidered : Institutional Effectiveness for Student Success*. United State.
- Michael SO (2005) The cost of excellence: The financial implications of institutional rankings. *International Journal of Educational Management* 19(5): 365–382. DOI: 10.1108/09513540510607716.
- Näslund D, Olsson A and Karlsson S (2006) Operationalizing the concept of value - An action research-based model. *Learning Organization* 13(3): 300–332. DOI: 10.1108/09696470610661135.
- Natesan P and Aerts X (2016) Can library users distinguish between minimum, perceived, and desired levels of service quality? Validating LibQUAL+® using multitrait multimethod analysis. *Library and Information Science Research* 38(1). Elsevier Inc.: 30–38. DOI:

10.1016/j.lisr.2016.01.004.

- National Research Council (1999) *TCRP Report 47 A Handbook for Measuring Customer Satisfaction and Service Quality*. Wash: National Academy Press.
- Oakleaf M (2010) *The Value of Academic Libraries : Comprehensive Research Review and Report*. Chicago: Association of College and Research Libraries.
- Pinfield S, Cox AM and Rutter S (2017) *Mapping the future of academic libraries*. London.
- Plum T (1994) Academic libraries and the ritual of knowledgde. *RQ* Vol. 33(No. 4): 496–508. Available at: <http://www.jstor.org/stable/20862529>.
- Rehman SU, Kyrillidou M and Hameed I (2014) Reliability and validity of a modified libQUAL+® survey in Pakistan: An Urdu language experience. *Malaysian Journal of Library and Information Science* 19(2): 83–102.
- Research Library UK (2011) *The value of libraries for research and researchers*. Research Library UK. London.
- Roberts AF and Blandy SG (1989) *Library Instruction for Librarians*. 2 d Revise. Englewood: Libraries Unlimited.
- Sajna and Haneefa M (2016) Measuring the Service Quality of Services. (February): 219–241. DOI: 10.4018/978-1-5225-3628-4.ch009.
- Salkind N (2010) *Encyclopedia of Research Design*. Thousand Oaks, California. DOI: 10.4135/9781412961288 NV - 0.
- SCONUL (2012) The value of academic libraries | SCONUL.
- Silver H (2005) *Library as Place: Rethinking Roles, Rethinking Space*. Washington, D.C.: Council on Library and Information Resources. DOI: 10.1016/j.lisr.2006.03.012.
- Simmons-Welburn J, Donovan G and Bender L (2008) Transforming the library: The case for libraries to end incremental measures and solve problems for their campuses now. *Library Administration and Management* 22(3): 130–134.
- Tessa EM (2018) *Evaluasi Kualitas Layananan Perpustakaan Menggunakan Metode Libqual di Universitas Islam Negeri Sumatera Utara*. Universitas Sumatera Utara, Medan.
- Thompson B, Kyrillidou M and Cook C (2008) How you can evaluate the integrity of your library service quality assessment data: Intercontinental LibQUAL+® analyses used as concrete heuristic examples. *Performance Measurement and Metrics* 9(3): 202–215. DOI: 10.1108/14678040810928426.
- Thompson B, Kyrillidou M and Cook C (2009) Item sampling in service quality assessment surveys to improve response rates and reduce respondent burden: The “LibQUAL+® Lite” example. *Performance Measurement and Metrics* 10(1): 6–16. DOI: 10.1108/14678040910949657.
- Ugwuanyi CF, Okwor RN and Ezeji EC (2011) Library space and place : Nature , use and impact on academic library. *International Journal of Library and Information Sciences* 3(May): 92–97.
- Woodruff RB (1997) Customer value: The next source for competitive advantage. *Journal of the Academy of Marketing Science* 25(2): 139–153. DOI: 10.1007/BF02894350.

Appendix 1

Survey

As a user, you can provide input about your perceptions and expectations on the library services of State Islamic University of North Sumatra (UIN SU) Medan regarding UIN SU library as a place

Respondent Identity

1. Name
2. Student ID Number
3. Gender
4. Major/Study Program
5. Level (Bachelor/Magister/Doctor)

Part I: Activities at the library

In this section, please put a cross (x) on one of the items you choose.

1. During your time as a student, did you visit and take advantage of the library service more than once?
 - a. Yes (please go to number 2)
 - b. No (You do not need to answer the next question. Thank you)
2. How often do you take advantage of library services and facilities?
 - a. Rarely
 - b. Once a week
 - c. Twice a week
 - d. More than twice a week

Give your reasons for visiting the library.

.....
.....
.....

3. How often do you access library information sources through the web?
 - e. Rarely
 - f. Once a week
 - g. Twice a week
 - a. More than twice a week

Give your reasons

.....
.....
.....

Part II. Perceptions on the Quality of UINSU Library Services

Direction:

You are asked to provide a perception regarding the quality of library services, specifically the quality you know and feel.

There are no wrong answers. Put a checkmark (✓) on one of the numbers you choose and give your reasons. The answer option is determined as follows.

- a. Number (1) means low perception.
- b. Number (9) means your perception is high.

The higher the score, the higher the grade of the aspect in question.

Library as a place (facilities and infrastructure)

- | | | | | | | | | | | |
|----|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. | <i>The library is an inspiring place for studying</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | Strongly disagree | | | | | | Strongly Agree | | |
| | | | | | | | | | | |
| 2. | <i>The library has quiet spaces for individual activities.</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | Strongly disagree | | | | | | Strongly Agree | | |
| | | | | | | | | | | |
| 3. | <i>The library is conveniently and attractively located</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | Strongly disagree | | | | | | Strongly Agree | | |
| | | | | | | | | | | |
| 4. | <i>The library is a gateway for learning and research</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | Strongly disagree | | | | | | Strongly Agree | | |
| | | | | | | | | | | |
| 5. | <i>The library has community spaces to study or hone skills as a group</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | Strongly disagree | | | | | | Strongly Agree | | |

Appendix 2

Slovin formula:

$$n = \frac{N}{1 + N \cdot e^2}$$

Description:

n = Sample size

N = Population size

e = an estimated 10% tolerable sampling error rate

$$n = \frac{49892}{1 + 49892 \cdot (0,1)^2}$$

$$n = \frac{49892}{499,92}$$

$$n = 99,79$$

$$n = 100 \text{ (rounded off)}$$

The sampling formula for each stratum:

$$n = \frac{n_1 \times n_2}{N}$$

Description:

n = number of samples per stratum

n_1 = Number of populations per stratum

n_2 = The number of research samples

N = Total population

Appendix 3

Table 1. Active user of The State Islamic University of North Sumatra (UINSU) library Medan

Faculty / Department Affiliation	Active Library Members
Da'wah and Communication	3692
Islamic Economics and Business	8458
Social Sciences	2032
<i>Tarbiyah</i> and Teacher Training	18532
Public health	1469
Science and Technology	3099
Sharia and Law	5178
<i>Ushuluddin</i> and Islamic Studies	3016
Postgraduate	4416
Total	49892

Table 2. Samples based on proportional random sampling technique

Faculty / Department Affiliation	Sub Population	Sample	Sum of rounding results
	Da'wah and Communication	3692	$\frac{3692 \times 100}{49892}$
Islamic Economics and Business	8458	$\frac{8458 \times 100}{49892}$	17
Social Sciences	2032	$\frac{2032 \times 100}{49892}$	4
<i>Tarbiyah</i> and Teacher Training	18532	$\frac{18532 \times 100}{49892}$	38
Public health	1469	$\frac{1469 \times 100}{49892}$	3
Science and Technology	3099	$\frac{3099 \times 100}{49892}$	6
Sharia and Law	5178	$\frac{5178 \times 100}{49892}$	10
<i>Ushuluddin</i> and Islamic Studies	3016	$\frac{3016 \times 100}{49892}$	6
Postgraduate	4416	$\frac{4416 \times 100}{49892}$	9
Total	49892	49892	100

Table 3. Hypothesis test results

Dimension	Score	T mean	Significance	Description	
LPP – LPM	6,22	6,19	0,03	0,769	There is no significant difference
LPP - DLP	6,22	8,15	-1,93	0,000	Significant difference

Table 4. The adequacy gap score in the library as place

Description	P	ME	AG
Library as Place	6,22	6,19	0,03

Table 5. Adequacy gap score on the library as place dimension indicator

Indicator	P	ME	AG
Utilitarian space	6,38	6,30	0,08
symbol	6,36	6,20	0,16
refuge	6,01	6,13	-0,12

Table 6. Adequacy gap score per item library as place dimension questions

Indicator	Question	p	ME	AG
symbol	Libraries have spaces that provide inspiration for learning activities (LP2)	6,36	6,19	0,17
symbol	Libraries open opportunities to study and carry out research (LP3)	6,35	6,20	0,15
Refuge	Libraries have quiet spaces for individual activities (LP4)	5,87	6,24	-0,37
Refuge	Libraries have comfortable and attractive locations (LP5)	6,14	6,01	0,13
Utilitarian space	Libraries have community spaces for learning or honing group skills (LP1)	6,38	6,30	0,08

Table 7. The superiority gap (SG) scores of the library as place dimension

Description	P	DE	SG
<i>Library as Place</i>	6,22	8,15	-1,93

Table 8. The superiority gap scores on the library as place dimension indicator

Indicator	P	DE	SG
Utilitarian space	6,38	8,34	-1,96
symbol	6,36	8,13	-1,77
refuge	6,01	8,09	-2,08

Table 9. Superiority gap score per question item of the library as place dimension

Indicator	Question	P	DE	SG
------------------	-----------------	----------	-----------	-----------

symbol	Libraries have spaces that provide inspiration for learning activities (LP2)	6,36	8,14	-1,78
symbol	Libraries open opportunities to study and carry out research (LP3)	6,35	8,11	-1,76
Refuge	Libraries have quiet spaces for individual activities (LP4)	5,87	8,19	-2,32
Refuge	Libraries have comfortable and attractive locations (LP5)	6,14	7,98	-1,84
Utilitarian space	Libraries have community spaces to study or hone skills in groups (LP1)	6,38	8,34	-1,96