

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Library Philosophy and Practice (e-journal)

Libraries at University of Nebraska-Lincoln

June 2018

Library Performance Measurement: a study of Dhaka University residential hall libraries, Bangladesh.

Sazzadul Karim

sazzad.karim70@gmail.com

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



Part of the [Library and Information Science Commons](#)

Karim, Sazzadul, "Library Performance Measurement: a study of Dhaka University residential hall libraries, Bangladesh." (2018).

Library Philosophy and Practice (e-journal). 1831.

<https://digitalcommons.unl.edu/libphilprac/1831>

Library Performance Measurement:

a study of Dhaka University residential hall libraries, Bangladesh.

-Sazzadul Karim*

Abstract

Measuring the performance of a library's services is one of the most crucial parts of providing good services. The main objective of the study is to examine the perceptions of the DU residential hall library users as they relate to quality service and to determine how far the DU residential hall libraries have succeeded in delivering such service to its users. The primary data were directly collected from residential students of DU in three segments (desired service, minimum service, and perception) using the modified SERVQUAL questionnaire. Different types of measures were calculated as necessitated by the study. The outcome of the study shows that maximum service items fall short of meeting the user's need. The study recommended also some exploratory guidelines for improving the present library performance.

Key words: Library performance measurement, Dhaka University, Residential hall library.

Introduction

Measurement of library performance as well as user satisfaction is very important managerial activity. It is widely recognized as an important issue especially for library and information center. This activity is defined as “the process of systematically assessing effectiveness against a predetermined norm, standard or expressed goal” (Cronin, 1982). According to Mackenzie (1990), “a systematic measurement of the extent to which a system (for example a library) has achieved its objectives in a certain period of time”. The process of measuring library performance can focus on the whole of a library system or the components as the assessment needed could be at any level of a given library or information system.

Background of the study

The library is a repository of knowledge and a dynamic social institution, an indispensable resource center for reliable information and meant to preserve the recorded knowledge of

*Librarian, Department of Public Libraries, Bangladesh. E-mail: sazzad.karim70@gmail.com

many years and are central in the educational process (Jackson, 2005). Each and every higher educational institution like colleges, university has a library for academic as well as research purpose. These (academic) libraries are essential to the core mission of colleges and universities across the nation. To that end, George D. Kuh and Robert Gonyea (2003) noted that “the library is the physical manifestation of the core values and activities of academic life [...] the library’s central role in the academic community is unquestioned.” Higher education is mainly based on research for the contributing to the kingdom of knowledge. Knowledge is created and communicated largely through teaching and research. University residential hall libraries are an integral part of teaching and research. Teaching and research depend upon the library, and achievements in teaching and research are not possible without the library (Ranganathan, 2012).

Significance of the study

The University of Dhaka has a central library which is the biggest library (in the term of collection) in this region, besides every department, institution, research center and residential hall has its individual library for research and higher study. Hall libraries are playing a great role by assisting residential students of the hall to their academic study in meeting the multi-dimensional demands for information and knowledge of the students. University administration invests a minimum amount of money every year on the purchase, process and storage of information resources to serve its user. But changing information environment, application of ICT in library and availability of electronic information sources both in online and offline have made both library professionals and users to get confused in locating appropriate information when required. Though residential hall libraries are playing a great role in Dhaka University there is no study on these libraries to improve their service quality by knowing users’ need and their suggestion. Actually, effective library service will be ensured by knowing users’ demand and their satisfaction to library performance and serving them as their demand. It is the duty of the library professional to conduct periodic study of library users to know the users’ needs, satisfaction with library available resources and services. Literature review reveals that there has been a good discussion on Dhaka University Library (DUL) but comparatively little attention has been paid to user satisfaction and library performance of Dhaka University residential hall libraries. Therefore, this study has been carried out to measure the library performance of the residential hall libraries of Dhaka University. These will help us to know the present situation and how to improve their performance.

Objectives of the study

The aim of this study is to examine the perceptions of the DU residential hall library users as they relate to quality service and to determine how far the DU residential hall libraries have succeeded in delivering such service to its users. The following objectives of the study are:

- Determine how the students of the university perceive quality service at the DU residential hall libraries.
- Establish whether the libraries are meeting the quality expectations of the users.
- Make recommendations on how to improve performance of the libraries.

Methodology

The researchers used quantitative approach for conducting the research. At first a number of secondary sources (e.g. journals, thesis, research papers, proceedings, and relevant text books, etc.) were consulted to find out what had been written on measuring library performance. In order to understand the nature of service quality and actual service position of DU hall libraries, researchers used a questionnaire survey to gather primary information directly from students of different residential halls of the university. In this study a SERVQUAL questionnaire was used. The questions consisted of following elements:

1. Respondents' needs, satisfaction and library service performance measurement
2. And their overall observation about service quality and satisfaction.

For the category (1) above, three scales of measurement (i.e. respondent's highest expectation of service, lowest expectation and actual service receipt) were used. A 7-point Likert scale are used in each of the measurement where 1 is for 'lowest' and 7 is for 'highest'. And for the category (2) above, a 5-point Likert scale was used for each question where 1 is for 'lowest' and 5 is for 'Highest'.

In this study, the residents of 19 residential halls of Dhaka University are the population. 25 students from each hall were selected as sample using simple random sampling. Thus a total of 475 resident students are the sample of this study.

Dhaka University residential hall libraries

Dhaka University has 19 residence halls and five hostels which provide library services for the resident students of the university. These halls are: Salimullah Muslim Hall, Shahidullah Hall, Jagannath Hall, Fazlul Huq Muslim Hall, Zahurul Haq Hall, Ruqayyah Hall, Surja Sen

Hall, Haji Muhammad Mohsin Hall, Shamsunnahar Hall, Kabi Jasimuddin Hall, A.F. Rahman Hall, Muktijoddha Ziaur Rahman Hall, Bangabandhu Sheikh Mujibur Rahman Hall, Bangladesh-Kuwait Maitree Hall, Sir P. J. Hartog International Hall, Bongomata Sheikh Fazilatunnesa Mujib Hall, Amar Ekushey Hall, Kobi Sufia Kamal Hall and Bijoy Ekattor Hall.

In-fact residential hall libraries of Dhaka University are academic library and academic library needs to provide various services and facilities to motivate users. Based on the user demands hall libraries should provide different innovative services and facilities which make a great impact on the users' satisfaction. Generally academic library users expect some cost effective services so as to use the library regularly. So libraries should design such facilities and services which assist the learners and the academicians in educational process. The proper utilization of library resources can be optimally used only by attracting the users to the library. This attraction is possible only by providing some good services (Sriramand Rajev-2014). Martensen and Gronholdt (2003) identified that, the collection of printed materials, e-resources, library services, technical amenities and library atmosphere are key determinant to identify the service quality of the libraries. According to the observation of Lancaster (2003) the evaluation of library based on the satisfaction of the library users which can be identified in the possible ways of such as cost evaluation, cost effectiveness evaluation and cost benefit evaluation. Simmonds & Andaleer (2001) found that the academic library usage is mostly influenced by a users' awareness and resources of the library. Fidzani (1998) specified that assistance is important in the usage of library services and resources will help the students to meet their information needs.

Review of related literatures

Measuring the performance of a library's services is one of the most crucial parts of providing good services. Performance measurement is the process of quantifying the efficiency and effectiveness of action (Tangen, 2004), where measurement is the process of quantification and action correlates with performance (Neely et al., 1995). It involves the selection and application of performance indicators, which quantify the efficiency and effectiveness of service-delivery methods (Fine and Snyder, 1999). Efficiency measures the relationship between resources and the results obtained from using them, and effectiveness is directed to determine how well a service is provided or how successful a department or program is meeting previously established objectives (Smith, 1988). McClure (1985) defined

evaluation as a planned method that judges the effectiveness and efficiency of a certain act and helps make a decision in accordance with several standards (goals and objectives). Abbott (1994) said that evaluation means a substantive act that provides information necessary for managerial decisions and that one way to obtain an evaluation outcome is by using an evaluation standard. Dalton (1988) defined performance measurement as an accurate and quantitative indicator that gauges the integrated outcome of service and presents the total amount (quantity) and effectiveness (quality) of the service. Bakewell (1997) defined performance measurement as an act of using a performance indicator as a management tool of performance analysis, namely a performance standard. Mackenzie (1990) explains that performance evaluation (performance assessment) measures the extent to which a system accomplishes its goal for a given time period. On the other hand, Cronin (1982) systematically evaluates effectiveness according to rules or norms that have been defined in advance. In summary, library performance evaluation is an act of measuring the input, process, output, and outcome of a library based on evaluation standards or evaluation indicators, which determine the advantages, effectiveness, and value of the library resources, operational management, output, and outcome. The main objective of library performance measurement is to identify how well libraries serve their users and how well libraries manage their resources. Libraries need to measure their performance in order to:

- Demonstrate their results and quality to stakeholders. With university libraries, for example, increasing accountability requirements of their parent institutions is placing pressure on libraries to demonstrate that funding is used appropriately and effectively. If this is done, libraries can maintain their services, justify their role and existence, and increase funding from their parent institutions, and
- Identify their current strengths and weaknesses for the purposes of planning, monitoring progress and finding better ways to improve service quality.

There are two mechanisms of library performance measurement exist. One is the user survey which is very common. Libraries often conduct surveys of their users to determine their satisfaction with library services, either overall system or with specific types of interactions (interlibrary loan, reference service etc). Another recent measurement tool, LibQUAL+ is being developed by ARL for use in a variety of library setting worldwide.

User survey is one of the most popular techniques in academic library. It has often been used as a tool to assess service quality and user satisfaction. A survey is a systematic way of gathering information from (a sample) of entities for the purpose of constructing quantitative descriptors of the attributes of the larger population of which the entities are members. It can be designed and administered in various ways. Self-administered surveys are often employed to reach a large number of potential respondents with a minimum of direct contact and cost. Individuals are given or sent surveys to complete and return and the responses turned into data that can be analyzed. When properly designed and administered, user surveys can provide both quantitative and qualitative data directly from the target population (Hiller-2001). It has a number of benefits and usefulness, including:

- Get direct responses from the respondent.
- Identify user issues, concerns and needs directly.
- Assess library performance as well as users' satisfaction from user perspective.
- Acquire experimental data that can be statistically analyzed and generalized for the larger population.
- Improve library services or change the services to a better form.
- Increase the visibility of library and marketing of services.
- Contribute to broader institutional assessment/accreditation.

LibQUAL+ is a research and development project undertaken by the Association of Research Libraries (ARL) in collaboration with Texas A&M University and with financial support from the U.S. Department of Education's Fund for the Improvement of Postsecondary Education (FIPSE) through September 2003 (ARL Statistics and Measurement Program). LibQUAL+ is defining and measuring library service quality across institutions and creating quality-assessment tools for libraries. It is modified from an instrument called SERVQUAL (for SERVICE QUALity), which is grounded in the "Gap Theory of Service Quality" developed by the marketing research team of A. Parasuraman, V.A. Zeithaml, and L.L. Berry (Parasuraman, Zeithaml and Berry,1985). This tool uses a web-based method of administration and analysis to ease the burden of administration locally and creates a scale able and replicable protocol. It also makes readily available large normative data on user perceptions and expectations of library service quality. Results from the LibQUAL+ instrument are helping to identify benchmark indicators to better assess library service quality, provide empirical documentation of the findings to campus administrators, and

develop a reliable tool by which to measure library service. Hitchingham and Kenney (2002) noted LibQUAL as an effective assessment model for continuous and vital first step in an iterative, organizational planning process. LibQUAL+ has now been used in the USA, Canada, Australia, New Zealand, the UK (England, Scotland, Wales), France, Ireland, The Netherlands, Switzerland, Germany, Denmark, Finland, Norway, Sweden, Egypt, the United Arab Emirates, South Africa and Iran.

Results of the study

A total of 308 students took part in this study. Among them only 61.69% students used their hall libraries most of the respondents were in the age group of 21-25 years and 67.21% respondents were male and 32.79% were female in this study.

Age group		15-20		21-25		26-30		Above 30		Total	
		n	%	n	%	n	%	n	%	n	%
Gender	Male	44	14.29	129	41.88	32	10.39	2	0.65	207	67.21
	Female	32	10.39	52	16.88	12	3.90	5	1.62	101	32.79
Total		76	24.68	181	58.77	44	14.29	7	2.27	308	100.00

Table I: Age group by gender

Table I shows that among 308 students, 207 (67.21%) were male and 101 (32.79%) were female. This suggests a balance between male and female respondents. Among them 76 (24.68%) students were aged between 15-20 years. The largest group of students (181, 58.77%) comprised of those in the age group of 21-25 years, 44 (14.29%) students were aged between 26-30 and the smallest group of respondents (7, 2.27%) was above 30 years.

Hall of the student	Use the libraries					
	Yes		No		Total	
	n	%	n	%	n	%
SM Hall	16	5.19	4	1.30	20	6.49
Sahidullah Hall	16	5.19	3	0.97	19	6.17
JN Hall	13	4.22	12	3.90	25	8.12
FH Hall	10	3.25	10	3.25	20	6.49
Jahurul Haque Hall	16	5.19	4	1.30	20	6.49
Rokeya Hall	10	3.25	10	3.25	20	6.49
Surjoson hall	11	3.57	6	1.95	17	5.52
Mohsin Hall	17	5.52	5	1.62	22	7.14
SN Hall	8	2.60	15	4.87	23	7.47

KJ Hall	8	2.60	3	0.97	11	3.57
FR Hall	8	2.60	5	1.62	13	4.22
Zia Hall	4	1.30	6	1.95	10	3.25
BB Hall	6	1.95	5	1.62	11	3.57
Kuwait Maitree Hall	14	4.55	6	1.95	20	6.49
Fozilatunnesa Mujib Hall	11	3.57	8	2.60	19	6.17
Ekushe Hall	11	3.57	8	2.60	19	6.17
Sufia Kamal Hall	11	3.57	8	2.60	19	6.17
Total	190	61.69	118	38.31	308	100.00

Table II: Residential halls of the students

The above table shows that out of 308 respondents, 20 (6.49%) students were from the Salimullah Muslim hall, 19 (6.17%) were from Shahidullah hall, 25 (8.12%) were from Jagannath hall, 20 (6.49%) were from Fazlul Huq Muslim hall, 20 (6.49%) were from Zahurul Haq hall, 20 (6.49%) were from Rukayyah hall, 17 (5.52%) were from Surja Sen hall, 22 (7.14%) were form Haji Muhammad Mohsin hall, 23 (7.47%) were from Shamsunnahar hall, 11 (3.57%) were from Kabi Jasimuddin hall, 13 (4.22%) of were from A. F. Rahman hall, 10 (3.25%) were Muktijoddha Ziaur Rahman hall, 11 (3.57%) were of Bangabandhu Sheikh Mujibur Rahman hall, 20 (6.49%) were of Bangladesh-Kuwait Maitree hall, 19 (6.17%) were of Bangamata Sheikh FozilatunnesaMujib hall, 19 (6.17%) were of Amar Ekushey hall and 19 (6.17%) were of KobiSufia Kamal hall of Dhaka University.

Measuring library quality using SERVQUAL

Historically the quality of an academic library has been described in terms of its collections and measured by the size of the library's holdings and various counts of its usage. But, such traditional assessment of library service quality has been such a questionable agenda that measurement of library service quality based solely on collections has largely become obsolete. "SERVQUAL," an alternative approach to measure service quality for business sectors was developed by marketing researchers Parasuraman et al. (1988), and has been significantly shifted to the assessment of library service quality among academic, public, and special libraries (Hernon, 2002). This study used an modified version of SERVQUAL to examine the perceived service quality (PSQ) associated with users' satisfaction of each service item provided by Dhaka University residential hall libraries. The questionnaire included perceptual measures that were rated on seven-point Likert scale items. This design is consistent with prior studies on service quality and satisfaction jointly followed by customer service model of Zeithaml et al. (1993),Kettinger and Lee (1997), and Parasuraman et al.'s (1988) formula of measuring PSQ. The primary data were directly collected from residential students of DU in three segments (desired service, minimum service, and perception) using

the modified SERVQUAL questionnaire. Different types of measures were calculated as necessitated by the study. The current service performance as perceived by users is determined first from perception scores directly, where no calculation was required. The perception scores were then matched with relevant minimum service level (i.e. ME scores) to determine how much users' perceptions of service performance meet with their expectations. To determine the PSQ, minimum service level (ME) was preferred for comparison standard, which was equally selected as disconfirmation standard for satisfaction measurement process. Nevertheless, the measurement process of PSQ and user's satisfaction for the current study is clearly exposed in the following methods.

Methods of measuring PSQ and satisfaction.

P= perceived service performance;

ME= minimum service level or minimum service expectation; and

PSQ= perceived service quality.

m= Mean

1. Method of measuring PSQ

$PSQ = (ME - P)$

If $(ME - P)$ provides positive value, the result indicates the "quality service";

If $(ME - P)$ provides negative value, the result indicates the "service shortfall" that is also categorized into three levels based on positive scores as follows:

Service gap 0-30 indicates the service is "problematic";

Service gap 31-60 indicates the service is "critical"; and

Service gap $\Rightarrow >61$ indicates the service is "most critical."

2. Method of measuring satisfaction

Satisfaction= the result of comparison between ME and P

If $ME > P$ indicates "need is not met," and results "dissatisfaction";

If $ME = P$ indicates "need met," and results "satisfaction"; and

If $ME < P$ indicates "need exceeded," and results "improved satisfaction."

Results of PSQ of existing service performance

Variables	ME (m)	P (m)	PSQ=(ME-P)
A. Sufficient number of documents	3.53	3.18	0.35
1. update documents	3.52	3.13	0.39
2. Informative/resourceful documents	4.15	3.59	0.56
3. Easy access to documents	4.19	3.93	0.26
4. Latest Information service	3.89	3.85	0.04
5. E-resource accessibility	3.80	3.75	0.05
6. Sufficient modern technology	4.25	3.68	0.57
7. Sufficient number of staff	4.20	3.67	0.53
B. Academic fitness of employee	4.56	3.89	0.67
8. professional skills of employee	4.35	3.62	0.73
9. Ability to guide users properly	4.02	3.54	0.48
10. Ability to understand user's problems	4.01	3.59	0.42
11. Ability to make quick solution	4.14	3.78	0.36
C. Sincerity of employees on job	4.08	3.95	0.13
12. Willingness to help users	3.81	3.97	-0.16
13. Giving personal attention to user	3.84	3.95	-0.11
14. Giving quick service to users	4.51	4.10	0.41
15. Inform users on the regular progress	3.69	3.68	0.01
D. Courtesy of employees	5.27	4.02	1.25
16. Handling user carefully	3.68	3.76	-0.08
17. Reliable Personality	3.78	3.66	0.12
18. Loving users by heart	3.97	3.69	0.28
E. Appropriate study environment	3.61	3.59	0.02
19. Adequate space for study	4.46	3.80	0.66
20. Suitable furniture	4.53	3.92	0.61
21. Documents are the right place	3.63	3.85	-0.22
22. Users can complaint easily	3.65	3.64	0.01
23. Suitable library hour	3.52	3.56	-0.04
Overall result	4.02	3.73	0.30

Table III: Perceived Service Quality (PSQ) of existing service performance

The difference between minimum service level (ME) and perception of service performance (P) forms the key to assessment of “PSQ” in this study. The gap between two constructs, e.g. (ME-P) is therefore calculated in Table-33 to provide the PSQ of 28 items of five service dimensions. The overall gap score 0.30 forms the overall PSQ of DU hall libraries’ current service performance. The lower the gap between ME and P scores, the better the quality would be. In terms of service value, the gap scores of the whole service items (see in Table-

33) were grouped into two stages (as defined in the methodology). The variables “21.Documents are the right place (-0.22)”, “12.willingness to help users (-0.16)”, “13.giving personal attention to user (-0.11)”, “16.handling user carefully (-0.08)” and “23.suitable library hour (-0.04)” provide positive values that indicates quality service. The other variables provide negative values that indicate service shortfall, which were further grouped into three levels of service unavailability in accordance with their value significance. The first level indicates the lowest gap between ME and P scores, that is nearer the quality service and assigned as “problematic service” level; while the second level that reveals more gap than the first level indicates “critical service” level, and thus the third level provides a larger gap between the two constructs and indicates “more critical service” level. At the problematic level “4.Inform user on their regular progress (0.01)” and “22.Users can complaint easily (0.01)” yielding the lowest gap, while “18.Loving users by heart” having the highest gap score 0.28. At critical service level “A. Sufficient numbers of documents (0.35)” occupies the lowest gap, while “6.Sufficient modern technology” scores the highest gap 0.57. Consequently at the ultimate and most critical level “20. Suitable furniture” forms the lowest gap 0.61, while the highest gap is found 1.25 against “D. Courtesy of employees”.

Results of comparison between ME and P with satisfaction

The overall result (4.02) shows the negative service circumstances and indicates that users’ overall need does not meet with their expectations. It also results dissatisfaction of users with current service performance of DU residential hall libraries. In terms of specific service situation, user’s perception for all the items (except “willingness to help users”, “giving personal attention to user”, “handling user carefully”, “documents are the right place” and “suitable library hour”) does not meet with their expectations and result dissatisfaction to them (see in Table 4.34). Only these items i.e. “21.Documents are the right place (3.81<3.97)”, “12.willingness to help users (3.84<3.95)”, “13.giving personal attention to user (3.68<3.76)”, “16.handling user carefully (3.63<3.85)” and “23.suitable library hour (3.52<3.56)” meet and exceed the needs and thus results improved satisfaction to users. Comparing the overall mean result of each dimension a comparative ranking (see in Table-34) was done on overall satisfaction to each dimension, where all the overall perception scores in relation to items of each dimension were lower than the expectation

Variables	ME (m)	P (m)	Result of comparison (ME and P)	
A. Sufficient number of documents	3.53 >	3.18	Need is not met	Dissatisfaction
1. update documents	3.52 >	3.13	Do	Do
2. Informative/resourceful documents	4.15 >	3.59	Do	Do
3. Easy access to documents	4.19 >	3.93	Do	Do
4. Latest Information service	3.89 >	3.85	Do	Do
5. E-resource accessibility	3.80 >	3.75	Do	Do
6. Sufficient modern technology	4.25 >	3.68	Do	Do
7. Sufficient number of staff	4.20 >	3.67	Do	Do
B. Academic fitness of employee	4.56 >	3.89	Do	Do
8. professional skills of employee	4.35 >	3.62	Do	Do
9. Ability to guide users properly	4.02 >	3.54	Do	Do
10. Ability to understand user's problems	4.01 >	3.59	Do	Do
11. Ability to make quick solution	4.14 >	3.78	Do	Do
C. Sincerity of employees on job	4.08 >	3.95	Do	Do
12. Willingness to help users	3.81	< 3.97	Need exceeded	Improved satisfaction
13. Giving personal attention to user	3.84	< 3.95	Need exceeded	Do
14. Giving quick service to users	4.51 >	4.10	Need is not met	Dissatisfaction
15. Inform users on the regular progress	3.69 >	3.68	Do	Do
D. Courtesy of employees	5.27 >	4.02	Do	Do
16. Handling user carefully	3.68	< 3.76	Need exceeded	Improved satisfaction
17. Reliable Personality	3.78 >	3.66	Need is not met	Dissatisfaction
18. Loving users by heart	3.97 >	3.69	Do	Do
E. Appropriate study environment	3.61 >	3.59	Do	Do
19. Adequate space for study	4.46 >	3.80	Do	Do
20. Suitable furniture	4.53 >	3.92	Do	Do
21. Documents are the right place	3.63	< 3.85	Need exceeded	Improved satisfaction
22. Users can complaint easily	3.65 >	3.64	Need is not met	Dissatisfaction
23. Suitable library hour	3.52	< 3.56	Need exceeded	Improved satisfaction
Overall result	4.02 >	3.73	Need is not met	Dissatisfaction

Table IV: Comparison between ME and P with satisfaction

scores. It should be noted that maximum perception scores of the service items in this study were lower than the expectation scores, implying that all service items suffer from a service shortfall that provide dissatisfaction to library users. The lowest gap is found for “15. Inform users on the regular progress (3.69>3.68)” and “22. Users can complaint easily (3.65>3.64)” that indicates the service is problematic, while the highest gap (5.27>4.02) is found against

“D. Courtesy of employees” indicates the most alarming and critical position of that service. Most of the items fail to meet users’ expectations. And these items only i.e. “21.Documents are the right place (3.81<3.97)”, “12.willingness to help users (3.84<3.95)”, “13.giving personal attention to user (3.68<3.76)”, “16.handling user carefully (3.63<3.85)” and “23.suitable library hour (3.52<3.56)”meet and exceed users’ need indicating quality service that provides improved satisfaction to users on that service item.

Recommendations

From the results of the study, the following implications are presented. These implications can be recommendations for the management of the libraries to improve existing conditions/ situation of Dhaka University residential hall libraries.

- The libraries need to give serious attention to improve their collection. An adequate number of textbook, reference books, journal (including its digital/electronic version) for each department/institute should be included to the collection. Besides academic materials libraries should collect sufficient number of fictions, (i.e. novel, story, poetry, drama, any other literature etc.) magazines, newspapers etc. for the students.
- The library must have a resourceful and updated collection including textbook, reference book, periodicals etc. Latest edition of all relevant reference materials, (i.e. encyclopedia, glossary, dictionary, bibliography etc.) recent journals, magazines, newspapers, should be subscribed annually by the requirements of the user for updating library collection and providing current reference services.
- Staffs or personnel, works in the library, are most important element for a library. They are the provider of the products of the library. They should be gentle, user-friendly, and courteous during providing services. So, authority should appoint knowledgeable, skilled personnel for the libraries.
- Well-trained and skilled personnel are essential ingredients for libraries. Existing staffs should be trained properly so that an efficient system could be developed to meet the current and future needs. They should be trained with modern library services/ systems, tools and technologies etc.so they could able to meet the needs of next generation.
- Use of necessary information technology for better processing and ensuring delivery of information to the clientele should be introduced.

- Environment is an essential factor for any library. So, authority should concentrate on this issue. Library environment should be neat and clean, adequate light and air should be ensured.
- The government and the respective authority have to co-operate with the libraries and have to allocate them adequate fund so that they can increase information resources and other modern facilities.
- Circulation, reader service, reference service, reprography service and all other library services should be developed, modernized and user friendly. Beside traditional services modern facilities (i.e. using social networking tools, online circulation, instant reference service, network-based remote access to information, mobile library service etc.) should be implemented to improve existing library service.
- It is clear that most of libraries do not have adequate infrastructural facilities, so necessary infrastructure like space/ place, chair, table, IT equipment, necessary electronic materials etc should have to increase as soon as possible.
- The findings suggest that existing library hour should be extended as it is a common complain of most of the respondents. Maximum users are not satisfied to present library hour.
- Libraries should do research on customer focus and user satisfaction. Research and analysis can always be done for the library.

Conclusion

The main goal of library is to provide right information to the right user at right time. This implies that a library should make a plan to develop and organize its resources and to design its services in such a way that it facilitates easy and efficient retrieval of needed information with a minimum effort. So, it is important that the libraries should evaluate their performance with the aim of improving the library's performance by adopting the best practice. Apart from that is having a customer service plan. The implementation of the plan helps create a customer service focused library and includes mechanisms for customer input, such as surveys and focus groups. The goal is continuous improvement. Library staff has to be involved in the process of turning libraries into service organizations with the focus on users as customers, and programs and services that meet or exceed customer expectations. The elements that determine expectations are identified; the reasons for gaps between customer expectations and service performance are explored, and strategies for narrowing these gaps

be made. Services and activities provided by university residential hall libraries must be oriented to become better customer supporter and address their problem solving needs.

Reference

Abbott, C. (1994), *Performance Measurement in Library and Information Services*, Aslib Publishing, London.

Bakewell, K.G.B. (1997), “Managing User-centered Libraries and Information Service”.2nd ed., Mansell, London.

Cronin, B. (1982), “Performance measurement and information management”, *Aslib Proceedings*, Vol. 34 No. 5, pp. 227-36.

Dalton, G. (1988), “Performance measurement matters when evaluating the effectiveness of reference service”, *Mousaion*, Vol. 6 No. 2, pp. 28-46.

Fidzani, B.T (1998) “Information needs and information seeking behaviour of graduate students at the University of Botswana”. *J. Lib. Rev.*, Vol. 47 No.7, pp. 329-40.

Fine, T. and Snyder, L. (1999), “What is the difference between performance and benchmarking?”.*Public Management*, Vol. 81 No. 1, pp. 24-5.

George D. Kuh and Robert M. Gonyea (2003), “The Role of the Academic Library in Promoting Student Engagement in Learning”.*College & Research Libraries*, Vol. 64 No.4, pp. 256.

Hernon, P. (2002), “Quality: new directions in the research”, *Journal of Academic Librarianship*, Vol. 28 No. 4, pp. 224-31.

Hiller, Steve (2001), “Assessing User Needs, Satisfaction, and Library Performance at the University of Washington Libraries”.*Library Trends*, Vol. 49 No. 4, pp. 605-625.

Hitchingham, E.E. and Kenney, D. (2002), "Extracting meaningful measures of user satisfaction from LibQUAL+(TM) for the university libraries at Virginia Tech", *Performance Measurement and Metrics*, Vol. 3 No. 2, pp. 48-58.

Hossain, Muhammad Jaber and Anwarul Islam, Md. (2012), "Understanding perceived service quality and satisfaction: a study of Dhaka University Library, Bangladesh". *Performance Measurement and Metrics*, Vol.13 No. 3, pp. 169-182.

Jackson, Faye Hall... [et al.] (2005), "Use and satisfaction library resources and services by hospitality education patrons: an exploratory study". *The Consortium Journal of Hospitality and Tourism*, Vol. 9 No.1, pp. 35-45.

Kettinger, W.J. and Lee, C.C. (1997), "Pragmatic perspectives on the measurement of information systems service quality", *Management Information Systems (MIS) Quarterly*, Vol. 21 No. 2, pp. 223-40.

Lancaster, F.W.(2003), "Guidelines for the evaluation of Information systems and services". Paris, UNESCO. pp.15.

Mackenzie, G.A. (1990), "Performance measurement in Maurice, L.B. (Ed.)", *Academic Library Management*, LA, London.

Martensen A, Gronholdt L.(2003), "Improving library users perceived quality, satisfaction and loyalty: An integrated measurement and management system". *J. Acad. Librarianship*, Vol.29 No.3, pp. 140-47.

McClure, C.R. (1985), "Measurement and evaluation, in American Library Association Yearbook". American Library Association, Chicago, IL. Vol. 9, pp. 185-98.

Neely, A., Gregory, M. and Platts, K. (1995), "Performance measurement system design: a literature review and research agenda", *International Journal of Operations & Production Management*, Vol. 15 No. 4, pp. 80-116.

Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1985), "A conceptual model of service quality and its implications for future research" *Journal of Marketing*, vol. 49, pp. 41-50.

Parasuraman, A., Zeithaml, V.A. and Berry, L. (1988), "SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality", *Journal of Retailing*, Vol. 64 No. 1, pp. 12-40.

Ranganathan, C. (2012), "Perception and Expectation of the Users of Bharathidasan University Library: A Study". *Journal of Advances in Library and Information Science*, Vol.1No.3, pp. 119-124.

Simmonds, Patience & Syed Saad Andaleer. (2001), "Usage of academic libraries: The role of service quality, resources, and user characteristics". *Library Trends*, Vol. 49 No.4, pp. 626-34.

Smith, G.S. (1988), "Performance evaluation for nonprofits: a tested method for judging your organization's performance". *Nonprofit World*, Vol. 6 No. 1, pp. 24-5.

Sriram, B. and Rajev, M.K.G. (2014), "Impact of Academic Library Services on User Satisfaction: Case Study of Sur University College, Sultanate of Oman". *DESIDOC Journal of Library & Information Technology*, Vol. 34 No. 2, pp. 140-146.

Tangen, S. (2004), "Performance measurement: from philosophy to practice". *International Journal of Productivity and Performance Management*, Vol. 53 No. 8, pp. 726-37.

Zeithaml, V.A., Berry, L.L. and Parasuraman, A. (1993), "The nature and determinants of customer expectations of service", *Journal of the Academy of Marketing Science*, Vol. 21 No. 1, pp. 1-12.