Assessing Quality of Library Services: A Case Study of Select Libraries of Northern India

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ABSTRACT

Since their inception, the university libraries are engaged with the task to select, acquire, process, store, retrieve and disseminate the documents/ information to cater to the informational needs of their users- the faculty, students, research scholars, and administrative staff of the universities. It is a challenge for the university libraries to filter and deliver the most useful information from the vast quantity available anywhere. For this purpose, library professionals need to manage the resources of the libraries- man, money, machine, materials using various methods and techniques, in order to provide quality library services to their users. To manage the resources, librarians are now applying management practices and information communication technologies. The present paper describes need for accessing library services and SERVQUAL as a tool to assess the quality of library services after certain modifications. The result of study may motivate the library authorities to get the feedback from the library patrons in order to enhance the quality of such services which require immediate attention.

Key words: University library; SERVQUAL; Service quality.

INTRODUCTION

Barua[1] defined a library as "an organized collection of books and other reading and audio-visual materials, and the services of a staff able to provide and interpret such materials as are required to meet the informational, research, educational or recreational needs of its users. A library is often classified and designated from the point of view of needs or objectives and the category of readers intended to be served. Whatever may the types of libraries, collection, organization and dissemination are the primary purposes and functions of all libraries".

The service is a complicated phenomenon. Different people define service differently from 1960s to 1980s. These definitions focus upon the service activity, and mainly include only those services rendered by so-called service firms. Gronroos[2] defined service "as a process consisting of a series of more or less intangible activities that normally, but not necessarily always, take place in interactions between the customer and service employees and / or physical resources or goods and / or systems of the service provider, which are provided as solutions to customer problems". By 1990s the importance of use of the Information Technology to provide services had increased dramatically. The most important contribution to market theory and practice by service research, especially emphasized by the Nordic School, is the notion of interaction instead of exchange as a focal phenomenon.

Measurement or Assessment of Library Service Quality

The commitment of the Association of Research Libraries (ARL) was strengthened in 1994 when ARL adopted as a strategic objective "to describe and measure the performance of research libraries and their contribution to teaching, research,

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scholarship, and community service." By this action, the Association of Research Libraries demonstrated the previously stated desire of the major research libraries "to maintain the useful approaches of the past and explore responses to the challenges of the present and future" (Pritchard)[3].

Measuring library service quality should be a continuous process to assess the areas which need immediate and urgent attention to enhance the quality of the services and to make the user more satisfied. A satisfied user may or may not advertise the facts about the good library services but an unsatisfied user damages the image of the library. Library service quality assessment may be undertaken as a project. Library service quality is a concept that is becoming less elusive and increasingly recognizable and actionable. Understanding library quality will possibly lead us to developing not only an understanding of preferred and best service practices but towards widespread recognition of standards for library quality, especially to the extent that users have an overarching preconceived notion of the library quality.

Academic libraries must improve the quality of their services in order to survive to make the users satisfied with library services. Most of the traditional statistics gathered by libraries lack relevance and do not measure the library's performance in terms of element important to customers. They do not really describe performance or indicate whether service quality is good, indifferent, or bad. Even worse, they do not indicate any action that the administration or any team could or should take to improve performance. (Hernon and Altman)[4]

Hernon et..al 1999[5] stated that the research on service quality reported in the Library and Information Research (LIS) concentrates on one dimension-expectation- and defines service quality in terms of reducing the gap between the services provided (perceived or real) and customer expectation. Implicit in the definitions is that the organization will try to narrow the gap. For libraries, service quality

applies to three general areas, each of which consists of assorted variables:

Resources: information content

Organization: service environment and resource delivery

Service delivered by staff

SERVQUAL: A Measuring Rod of Service Quality

In the early 1980s, the impetus to measure and evaluate service quality arose from the marketing discipline. A repeated theme in the marketing literature is that service quality, as perceived by consumers, is a function of what customers expect and how well the firm performs in providing the service. Recognizing the centrality of customer perception of service quality, academicians sought to devise methods to assess customer views of quality service empirically (Cook and Thompson)[6]. Among the most popular assessments tools of service quality is SERVQUAL, an instrument designed by the marketing research team of Parasuraman, Berry and Zeithaml[7]. Through numerous qualitative studies, they evolved a set of five dimensions which have been consistently ranked by customers to be most important for service quality, regardless of service industry. These dimensions are defined as follows:

Tangibles

Appearance of physical facilities, equipment, personnel, and communication materials;

Reliability

Ability to perform the promised service dependably and accurately;

Responsiveness

Willingness to help customers and provide prompt service;

Assurance

Knowledge and courtesy of employees and their ability to convey trust and confidence; and

Empathy

The caring, individualized attention the firm provides to its customers.

The three collaborators concluded that quality could be viewed as the gap between perceived service and expected service, and their work eventually resulted in the Gap Theory of Service Quality, that is,

$$Q = P - E$$

(Where Q = Quality, P and E are Customers' Perception and Expectation of particular product/service)

Parasuraman, Berry and Zeithaml identified following five quality gaps:-

Gap 1

Difference between actual user expectation and management's idea or perception of user expectation;

Gap 2

Mismatch between manager's expectation of service quality and service quality specifications;

Gap 3

Gap between the service quality specifications and the delivery of service;

Gap 4

Differences between service delivery and external communication with the users;

Gap 5

Difference between Expected and Perceived Quality

SERVQUAL, developed by Parasuraman et al.[8], has now evolved as an effective instrument to measure library service quality. It has been used in various library settings, including university, public, and special libraries around the world (see, for example, Martin[9], Nagata et al.[10], Satoh et al.[11], Sahu[12], Green[13], Kumar[14]).

OBJECTIVES

The following specific objectives have been identified:

To identify the gap between the levels of perception and expectation of library users towards library services;

To study whether users, across different types of libraries, exhibit different levels of satisfaction in respect of library services;

To recommend specific suggestions which can help the libraries in enhancing the quality of library services.

Data Collection

A structured questionnaire was developed by modifying and extending SERVQUAL tool to collect data from the library users. At least one university from all eight States and one Union Territory of Northern India was included in the study.

Total twelve universities were selected and divided in three types of universities namely science & technology universities, agricultural universities and general universities. From each type, the researcher selected four universities in such a way that at least one library from all eight States and one Union Territory of the Northern India was included in the sample. A sample of 1200 library users (100 users per library) was taken from these twelve universities. The details with regard to twelve selected libraries of three types of universities are shown in Table 1.

Table 1: List of University Libraries Included in the Study

Sr. No.	Type	Name of the University	Name of the Library	State/ UT	Abbrn.
	Science & Technology	Guru Jambheshwar University of Science and Technology, Hisar	University Library	Haryana	GJUST
	Science & Technology	Deenbandhu Chhotu Ram University of Science and Technology, Murthal	University Library	Haryana	DCRUST
	Science & Technology	Guru Gobind Singh Indraprastha University, New Delhi	Information Resource Centre	Delhi	IPU
	Science & Technology	*Uttar Pradesh Technical University, Lucknow	Library	Uttar Pradesh	UPTU
	Agricultural Sciences	Chaudhary Charan Singh Haryana Agricultural University, Hisar	Nehru Library	Haryana	HAU
	Agricultural Sciences	Gobind Balabh Pant University of Agricultural, Pant Nagar	University Library	Uttarakhand	GBPUA
	Agricultural Sciences	Punjab Agricultural University, Ludhiana	University Library	Punjab	PAU
	Agricultural Sciences	Y. S. Parmar University of Horticulture & Forest, Solan	Satyanad Store Library	Himachal Pardesh	YSPUA
	General	Kurukshetra University, Kurukshetra	Jawaharlal Nehru Library	Haryana	KUK
	General	Panjab University, Chandigarh	University Library	Chandigarh	PUC
	General	University of Jammu, Jammu	Central Library	Jammu & Kashmir	UoJ
	General	University of Rajasthan, Jaipur	Central Library	Rajasthan	UoRJ

*Now known as Gautam Buddh Technical University, Lucknow

Analysis of Data

To find the gap between the perception and expectation of users towards quality of library services, data was analyzed on the basis of lowest average gap scores. To find the significant difference in the gap scores across the type of libraries, 'F' test was used.

Library Services

Library services mean the facilities and services provided by a library to achieve the organizational objectives. The library is considered as the hub of academic activities in a university. Table 2 shows that the maximum and minimum average expectation scores, i.e. 4.408 and 4.300 were observed in agricultural universities and science & technology universities, respectively, against the total average expectation score of 4.355. The maximum and minimum average perception scores, i.e. 3.459 and 3.146 were observed in general universities and agricultural universities, respectively, against the total average perception score of 3.348. The minimum and maximum average gap scores observed were -0.898 and -1.154 in agricultural universities and science & technology universities, respectively, against the total average gap score of -1.007. The dimension 'Library Services' has a significant average gap

scores in all the statements as the gap ranges from -0.646 to -1.288.

The result of 'F' test shows that significant difference exists in two statements of library services with regard to the average gap scores observed across types of universities. The statements in which significant difference in the gap scores was observed are 'library provides very good photocopy service (value of 'F' test is 46.018)' and 'library helps in preparing bibliographies (value of F test was 8.339)'.

Library issues sufficient number of books on loan

Lending of library books on loan is one of the most important services of a university library. The highest and lowest average expectation scores of 4.364 and 4.354 were observed in science & technology universities and general universities respectively against the average expectation score of 4.358. The highest average perception score of 3.707 was observed in general universities and lowest perception score of 3.668 was observed in both types of universities i.e. agricultural universities and science & technology universities against the total average perception score of 3.681. The lowest and highest average gap scores of -0.646 and -0.696 were observed in general universities and science & technology universities respectively against the total average gap score of -0.677. Thus, the users of general universities were more satisfied with the issuance of number of books as compared to other types of universities. This statement is ranked at number 2. The significance level of 'F' test (0.875) shows that there was no significant difference across the average gap scores observed in three types of universities.

Library issues books for sufficient time period

The second statement discusses about the number of days that a member can retain a book. The users in all type of libraries were more satisfied with this statement as compared to other nine statements and placed it at number 1. The highest and lowest average expectation scores of 4.521 and 4.482 were observed in agricultural universities and general universities, respectively, against the average expectation score of 4.505. The highest and lowest average perception scores of 3.893 and 3.836 were observed in agricultural universities and science & technology universities, respectively, against the average perception score of 3.858. The lowest (-0.629) and highest (-0.675) average gap scores were observed in agricultural universities and science & technology universities, respectively, against the total average gap score of -0.646. The significance level of 'F' test (0.885) shows that there was no significant difference in the average gap scores observed across the type of universities.

Library provides very good photocopy service

Research in the university requires consultation of a number of books and journals. Library provides photocopy service to make users' work easy. Library may provide this facility through private vendors or out of its own resources. The highest and lowest average expectation scores of 4.529 and 4.352 were observed in agricultural universities and general universities, respectively, against the average expectation score of 4.420. The highest and lowest average perception score of 3.899 and 2.721 were observed in agricultural universities and science & technology universities, respectively, against the total average perception score of 3.412. The lowest and highest average gap scores of -0.629 and -1.657 were observed in agricultural universities and science & technology universities, respectively, against the total average gap score of -1.008. Thus the users of science & technology universities are deeply dissatisfied with the photocopy service. This statement is positioned at number 4 within the dimension. The significance level of 'F' test (0.000) shows the most significant difference across the types of universities average gap scores.

Table 2: Average Gap Score Across Type of Universities: Library Services

Library Services Statements	Sc. & Tech. Universities			Agricultural Universities			General Universities			Average			'F' Test	Sgnt	Rank
	Pern	Expn	Gap	Pern	Expn	Gap	Pern	Expn	Gap	Pern	Expn	Gap			
1 Library issues sufficient numbers of books on loan	3.668	4.364	-0.696	3.668	4.357	-0.689	3.707	4.354	-0.646	3.681	4.358	-0.677	0.134	0.875	2
2 Library issues books for sufficient time period	3.836	4.511	-0.675	3.893	4.521	-0.629	3.846	4.482	-0.636	3.858	4.505	-0.646	0.122	0.885	1
3 Library provides very good photocopy service	2.721	4.379	-1.657	3.899	4.529	-0.629	3.614	4.352	-0.738	3.412	4.420	-1.008	46.018	0.000	4
4 Library conducts user education/ library orientation programme	3.246	4.364	-1.118	3.346	4.414	-1.068	3.361	4.400	-1.039	3.318	4.393	-1.075	0.191	0.827	6
5 Library transactions (Issue/ re-issue/ return) are made within 5 minutes	3.604	4.354	-0.750	3.811	4.479	-0.668	3.761	4.400	-0.639	3.725	4.411	-0.686	0.622	0.537	3
6 Library provides free Internet facility	3.218	4.364	-1.146	3.386	4.571	-1.186	3.557	4.425	-0.868	3.387	4.454	-1.067	3.421	0.033	5
7 Library has locker facility for keeping personal belongings	2.964	4.282	-1.318	2.961	4.379	-1.418	3.154	4.268	-1.114	3.026	4.310	-1.283	2.562	0.078	9
8 Library provides Inter Library Loan service on demand	2.893	4.189	-1.296	2.979	4.168	-1.189	3.146	4.196	-1.050	3.006	4.185	-1.179	1.832	0.161	8
9 Library has separate study rooms for research scholars	2.746	4.036	-1.289	3.221	4.350	-1.129	3.332	4.386	-1.054	3.100	4.257	-1.157	1.667	0.189	7
10 Library helps in preparing bibliographies.	2.561	4.154	-1.593	3.229	4.307	-1.079	3.114	4.307	-1.193	2.968	4.256	-1.288	8.339	0.000	10
Total Average	**3.146**	**4.300**	**-1.154**	**3.439**	**4.408**	**-0.968**	**3.459**	**4.357**	**-0.898**	**3.348**	**4.355**	**-1.007**			

Library conducts user education/ library orientation programme

Extracting or retrieving information/ documents out of the library requires certain skills. The library organizes library orientation programmes, in the beginning of the session or as a special drive to train research scholars. The programmes are very effective in utilizing the resources and making the user self dependent in retrieving and evaluating the documents. The highest and lowest average expectation scores of 4.414 and 4.364 were observed in agricultural universities and science & technology universities, respectively, against the average expectation score of 4.393. The highest and lowest average perception scores of 3.361 and 3.246 were observed in general universities and science & technology universities, respectively against the total average perception score of 3.318. The lowest and highest average gap scores of -1,039 and -1.118 were observed in agricultural universities and science & technology universities, respectively, against the total average gap score of -1.075. Thus the users in all the universities were dissatisfied with the library orientation programmes. This is evident from the fact that the average gap score across the universities exceeds -1. This statement is ranked at number 6 out of the total 10 statements. The result of 'F' test shows that there is no significant difference in the average gap scores observed across the type of universities.

Library transactions (Issue/ re-issue/ return) are made within 5 minutes

In addition to reading and consulting the library resources, users come in the library to issue/ re-issue and return the library documents. They expect from the library to make these transactions within 4 to 5 minutes. Delayed transactions make the users dissatisfied and they may avoid library visits. This statement relates to the question- are library transactions made within five minutes? The highest and lowest average expectation scores of 4.479 and 4.354 were observed in agricultural universities and

science & technology universities respectively against the average expectation score of 4.411. The highest and lowest average perception scores of 3.811 and 3.604 were observed in agricultural universities and science & technology universities, respectively, against the total average perception score of 3.725. The lowest and highest average gap scores of -0.639 and -0.750 were observed in general universities and agricultural universities, respectively, against the total average gap score of -0.686. This statement is ranked at number 3 out of the total 10 statements. The result of 'F' test shows that there is no significant difference in the average gap scores observed across the type of universities.

Library provides free Internet facility

In the present era, thinking about academic research without Internet is not possible. Emergence of electronic books and journals has made the academic community more dependent on Internet. Almost all the academic communication with editors, authors, co-authors, publishers, and conference / seminar / workshop organizers are now based on Internet. By providing Internet facility, university libraries are bridging the digital divide among the university patrons. The libraries provide access, content and training and help users who don't have the computer systems with Internet connectivity. These ULIC are also helpful to those users who have Internet facilities at home however, libraries provide Internet Protocol (IP) based access of electronic journals and books within the university premises. Thus, the users residing outside the university campus can't avail this facility. Today Internet has become a necessity and the users become dissatisfied with libraries if they do not get the smooth, fast and un-interrupted access.

This statement concerns the free Internet facility in the university. The highest and lowest average expectation scores of 4.571 and 4.364 were observed in agricultural universities and science & technology universities, respectively, against the average expectation score of 4.454. The highest and

lowest average perception scores of 3.386 and 3.218 were observed in agricultural universities and science & technology universities, respectively, against the total average perception score of 3.387. The lowest and highest average gap scores of -0.868 and -1.186 were observed in general universities and agricultural universities, respectively, against the total average gap score of -1.067. Thus, users in agricultural universities followed by science & technology universities were found most dissatisfied with Internet facility. This statement is ranked at number 5. The result of 'F' test shows that there is no significant difference in the average gap scores observed across the types of universities.

Library has locker facility for keeping personal belongings

Generally, library users are not allowed to take their belongings inside the library because allowing them to take their bags, personal books, books of other libraries, etc. create pressure for thorough checking at the gate. Therefore, users need to put their personal belongings at the gate. To keep these belongings safe, libraries have to provide locker facility at the gate. Users can keep their belongings in the locker and while going back from library, they return the locker's key to the library gatekeeper. The 7th statement discusses the availability of lockers in the university libraries. The highest and lowest average expectation scores of 4.379 and 4.268 were observed in agricultural universities and general universities, respectively, against the average expectation score of 4.310. The highest and lowest average perception scores of 3.154 and 2.961 were observed in general universities and agricultural universities, respectively, against the total average perception score of 3.026. The lowest and highest average gap scores of -1.114 and   -1.418 were observed in general universities and agricultural universities respectively against the total average gap score of -1.283. This statement is ranked at number 9. The result of 'F' test shows that there is no significant difference in the

average gap scores observed across the types of universities.

Library provides Inter –library-loan service

Inter-library loan is a service wherein a user of one library can borrow books that are owned by another library. The user makes a request to library which in turn arranges the required material from another library. In this way the users can get even those documents which are not available in that library. The 8th statement discusses the issue of Inter –library-loan facility. The highest and lowest average expectation scores of 4.196 and 4.168 were observed in general universities and agricultural universities, respectively, against the average expectation score of 4.185. The highest and lowest average perception score of 3.146 and 2.893 were observed in general universities and science & technology universities, respectively, against the total average perception score of 3.006. The lowest and highest average gap scores of -1.050 and -1.296 were observed in general universities and science & technology universities, respectively, against the total average gap score of -1.179. This statement is ranked at number 8. It is observed that in all the three types of universities, the users are almost dissatisfied with this service of ILL. The result of 'F' test shows that there is no significant difference in the average gap scores observed across the types of universities.

Library has separate study rooms for research scholars

The research scholars have to consult many books related to their research but it is not possible to consult them all in a day or two. Library provides separate rooms to the research scholars for their studies. The highest and lowest average expectation scores of 4.386 and 4.036 were observed in general universities and science & technology universities, respectively, against the average expectation score of 4.257. The highest and lowest average perception score of 3.332 and 2.746 were observed in general universities and science

& technology universities, respectively, against the total average perception score of 3.100. The lowest and highest average gap scores of -1.054 and -1.289 were observed in general universities and science & technology universities, respectively, against the total average gap score of -1.157. This statement is ranked at number 7 within this dimension. The result of 'F' test shows that there is no significant difference in the average gap scores observed across the types of universities.

Library helps in preparing bibliographies

Preparation of bibliography on a research work, project work, assignment etc. requires certain skills and is a very cumbersome, tedious and time consuming job. With the emergence of computerized library services, libraries now can help the research scholars in preparing the bibliography. The 10th statement is that

'library helps in preparing bibliographies'. The highest average expectation score of 4.307 was observed in two types of universities i.e. general universities and agricultural universities. The lowest average expectation score of 4.154 was observed in science & technology universities against the average expectation score of 4.256. The highest and lowest average perception score of 3.229 and 2.561 were observed in agricultural universities and science & technology universities, respectively, against the total average perception score of 2.968. The lowest and highest average gap scores of -1.079 and -1.593 were observed in agricultural universities and science & technology universities, respectively, against the total average gap score of -1.157. This statement is ranked the last in all the ten statements as it has the highest total average gap score of -1.288. The result of 'F' test shows that there is

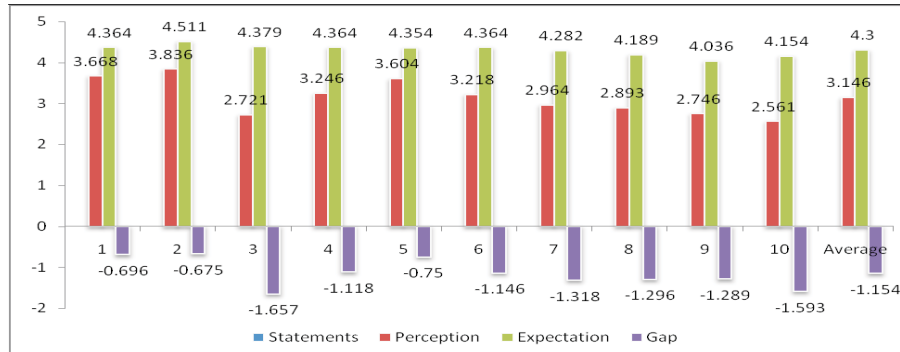**Chart 1: Average Gap Score : Science & Technology Universities**

Chart 2: Average Gap Score : Agricultural Universities
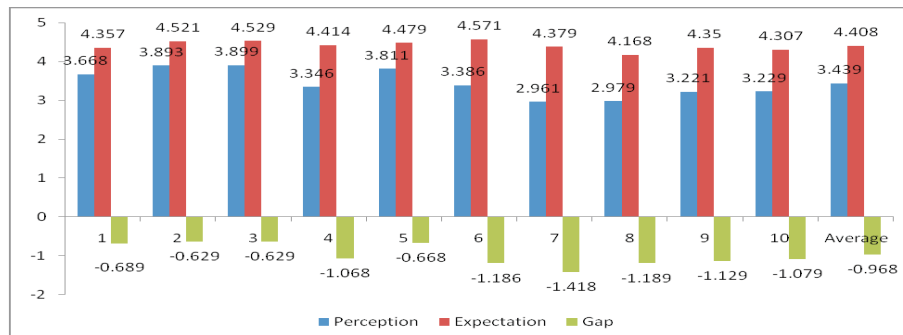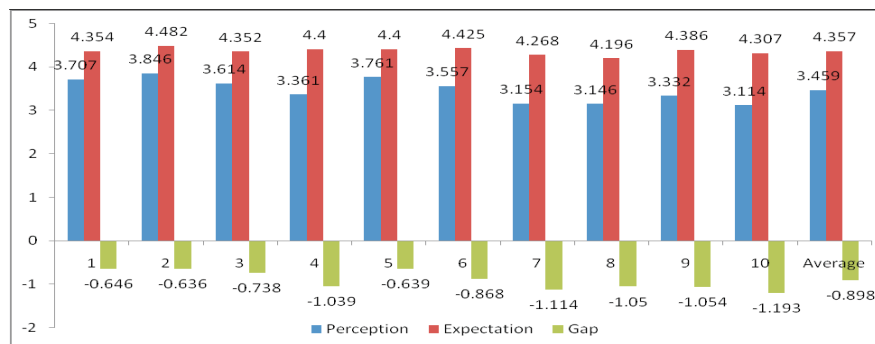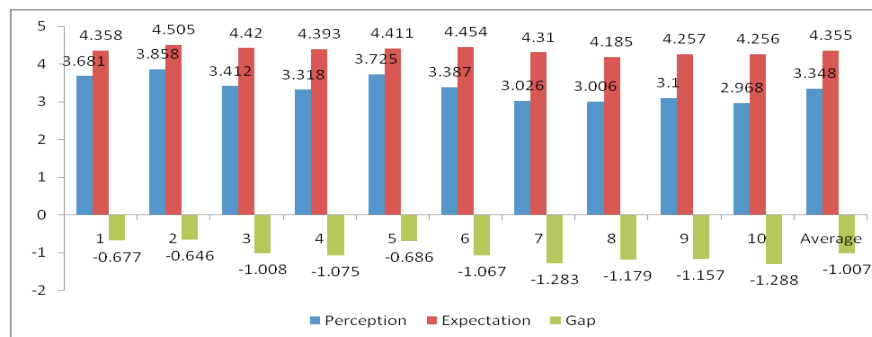
Chart 3: Average Gap Score : General Universities

Chart 4: Average Gap Score of all types of Universities

significant difference in the average gap scores observed across the types of universities.

The lowest average gap scores for all the 10 statements except of 1st and 6th were observed in HAU, Hisar. The lowest average gap scores for 1st and 6th statements were observed in DCRUST, Murthal and KUK. The highest average gap scores for all statements (except 4th, 7th and 8th) were observed in UPTU, Lucknow. The highest average gap scores for 4th and 8th statements were observed in DCRUST, Murthal. The highest average gap score in 7th statement was observed in two Universities i.e. UPTU and DCRUST.

Across the types of universities, general universities got the first position with lowest average gap score of-0.898, agricultural universities came 2nd with gap score of -0.968 and science & technology universities last with the average gap score of -1.154 against the total average gap score of -1.007.

The statement-wise average perception, expectation and gap scores, observed in science & technology universities have been shown in Chart 1. The highest expectation and

perception scores and lowest average gap scores are observed in statement 2 (Library issues books for sufficient time period). Lowest expectation is observed in the 8th statement whereas the lowest perception and highest gap score is observed in the 3rd statement. The main reason for the poor library services observed in the science & technology universities is that two universities of this category i.e. DCRUST, Murthal and UPTU, Lucknow, are in their infant stage and their libraries don't have even their own buildings. Otherwise, it is observed that the GJUST, Hisar, has not only obtained 1st position in science & technology universities but also 3rd position among all the twelve universities.

The statement-wise average perception, expectation and gap scores, observed in agricultural universities have been shown in Chart 2. The highest expectation score is observed in 6th statement, highest perception score in 3rd statement and lowest average gap score is observed in 2nd and 3rd statement. Lowest expectation is observed in the 7th statement whereas the lowest perception and highest gap score is observed in 8th statement.

Table 3: University-wise Average Gap Score

Statements	Sc. & Tech Universities				Agricultural Universities					General Universities				
	GJUST	DCRUST	IPU	UPTU	HAU	GBPUA	PAU	YSPUA	KUK	PUC	UoJ	UoRJ	Average	Rank
	Gap	Gap	Gap	Gap	Gap	Gap	Gap	Gap	Gap	Gap	Gap	Gap	Gap	
1	0.671	-0.343	-0.729	-1.043	-0.357	-0.729	-0.857	-0.814	-0.514	-0.429	-0.729	-0.914	-0.566	1
2	-0.571	-0.457	-0.629	-1.043	-0.357	-0.529	-0.686	-0.943	-0.686	-0.443	-0.686	-0.729	-0.647	2
3	-0.786	-2.257	-1.129	-2.457	-0.157	-0.671	-0.771	-0.918	-0.429	-0.706	-0.957	-0.86	-1.008	4
4	-1.1	-1.686	-0.671	-1.014	-0.8	-0.986	-1.171	-1.314	-0.829	-1.243	-1	-1.086	-1.075	6
5	-0.914	-0.357	-0.557	-1.171	-0.3	-0.871	-0.929	-0.571	-0.514	-0.729	-0.514	-0.8	-0.686	3
6	-0.386	-0.529	-0.786	-2.886	-0.371	-0.914	-1.4	-2.057	-0.343	-0.886	-1.229	-1.014	-1.067	5
7	-0.886	-1.343	-1.7	-1.343	-0.671	-1.4	-1.671	-1.929	-1.057	-1.557	-1.014	-0.829	-1.283	9
8	-0.814	-1.857	-1.2	-1.314	-0.514	-1.114	-1.357	-1.771	-0.629	-1.171	-1.314	-1.086	-1.178	8
9	-1.029	-0.786	-1.214	-2.129	-0.429	-1.2	-1.229	-1.657	-0.571	-1.071	-1.4	-1.171	-1.157	7
10	-0.914	-1.757	-1.129	-2.571	-0.457	-0.8	-1.586	-1.471	-0.829	-1.243	-1.529	-1.171	-1.288	10
Average	-0.807	-1.137	-0.974	-1.697	-0.441	-0.921	-1.166	-1.345	-0.64	-0.948	-1.037	-0.966	-1.007	
Rank	3	9	7	12	1	4	10	11	2	5	8	6		

The statement-wise average perception, expectation and gap scores observed in general universities have been shown Chart 3. The highest expectation, perception and lowest average gap scores are observed in 2nd statement whereas the lowest expectation score is observed in 8th statement and lowest perception and highest gap scores are observed in 10th statement.

The statement-wise average perception, expectation and gap scores observed in all universities (Mean score) have been shown in Chart 4. The highest expectation, perception and lowest average gap scores are observed in 2nd statement whereas the lowest expectation score is observed in 8th statement and lowest perception and highest gap scores are observed in 10th statement.

The ranking of universities is also shown in the Table 3 as per lowest gap score. The HAU, KUK, and GJUST have occupied 1st, 2nd and 3rd positions respectively. UPTU, YSPUA and PAU are placed at the end i.e. 12th, 11th and 10th positions respectively.

Across the science & technology universities, GJUST (-0.807) has the lowest average gap followed by IPU (-0.974), DCRUST (-1.137). The UPTU has the highest average gap (-1.697) across these universities. The HAU (-0.441) has the lowest average gap amongst all the universities as well as in agricultural universities. The highest gap in agricultural universities is observed in YSPUA (-1.345). KUK has the minimum average gap (-0.640) and the UoJ has the maximum average gap (-1.037) across the general types of universities.

Suggestions

University libraries should get feedback from the users in order to identify areas where they are not satisfied.

Library authorities should analyze the feedback, find the reasons for poor service, check the available resources, check the feasibility to add additional resources, plan to enhance the quality of services and implement the plan.

Quality is a continuous process and the library authorities must get feedback in order to enhance it.

CONCLUSION

It is a fact that dissatisfied users may not come back and either they may remain dissatisfied or they may seek alternate option of informational resources. In both the cases, the image of library shall be affected adversely. Libraries must take appropriate steps to get feedback from the library users about their perception towards quality of library services. In addition to feedback, library authorities, after going through the present library system, should carry out the study to find the gap between 'what' the library perceives regarding the users' expectation and 'what' the user actually receives from the library. The libraries may use the SERVQUAL model after necessary modifications. The tool shall be very helpful for understanding the needs of the users. After using this tool, library authorities may be able to highlight the major areas where the users are dissatisfied most and address those grievances.

Finally, it can be summarized that there exists a gap in the perception and expectation of library users. The study also highlights the perception of library authorities towards application of management dimensions in the libraries of different universities. The result of the study has identified the services which need immediate attention of the library authorities in order to enhance quality. The other university libraries may carry out similar studies in order to evaluate their services and take managerial action accordingly in order to enhance the quality of library services.

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