ABSTRACT

Academic libraries are currently facing their greatest challenge since the explosion of literature. The global digital revolution is affecting both the traditional forms of the creation, organization and dissemination of knowledge. The universities are supposed to create a new paradigm of tertiary education with sound academic library system and security of its future. Retaining and growing their customer base and focusing more energy on meeting their users' expectations is the only way for academic libraries to survive in this volatile competitive environment. Competitive pressures, information availability, rising costs and an increasingly aware and selective student population mandate that academic libraries become more user focused. This calls for a better understanding of the specific needs of library users in order to provide the appropriate type and level of service that meets those needs. Today's academic libraries are confronted with challenges on several fronts: Megabookstores, online information providers, multimedia products, document delivery services, and other competitive sources of information are apparently threatening their role and even their very survival. They need to ensure that their services both meet customer needs and customer expectations to the highest degree. That is, they need to compete both in terms of service quality and customer satisfaction. The term customer satisfaction is being used synonymously and it is the actual manifestation of the state of satisfaction will vary from person to person and product/service to product/service. The state of satisfaction depends on a number of both psychological and physical variables which correlate with satisfaction behaviors such as return and recommend rate. The level of satisfaction can also vary depending on other options the customer may have and other products against which the customer can compare the organization's products. The work done by Parasuraman, Zeithaml and Berry between 1985 and 1988 provides the basis for the measurement of customer satisfaction with a service by using the gap between the customer's expectation of performance and their perceived experience of performance. This provides the measurer with a satisfaction "gap" which is objective and quantitative in nature. Work done by Cronin and Taylor propose the "confirmation/disconfirmation" theory of combining the "gap" described by Parasuraman, Zeithaml and Berry as two different measures (perception and expectation of performance) into a single measurement of performance according to expectation.
According to Altman and Hernon (1998): the word “satisfaction” comes from the Latin word ‘Satis’ (enough) and ‘Facere’ (to do or make). These words suggest the true meaning of satisfaction, which is fulfillment.

According to Tessier, crouch, and Atherton (1977) in an early attempt to define “user satisfaction” stated that satisfaction was “ultimately a state experienced inside the user’s head” and therefore was a response that “may be both intellectual and emotional”.

According to I-Ming Wang and Chich-Jen Shieh (2006): user satisfaction is defined as “the levels of service quality performance that meets user’s expectations”.

According to Sparck Jones (1981: p.55) stressed the importance of user satisfaction and considered it as the basic concept of information retrieval system evaluation that could not be ignored in any experiment.

According to Su (1992) user satisfaction has the following advantages: (i) it takes explicit account of users and their subjective evaluation of various aspects of the IR interaction; (ii) it focuses on multi-dimensional evaluation of the interactive processes and (iii) it also recognizes user and request characteristics as among possible influencing factors in user evaluation.

The term 'User' is employed to represent the seekers of information. The term 'User' in the context of information chain may be at the end. The generator of information, who comes in the beginning of the chain may also be an 'end-user' of information. The user continuously interacts with the information unit. In fact, the very existence of an information unit owes to its users. The collection of varied sources of information, designing of an information unit, services planned - all are governed by his needs, attitudes, demands and characteristics. In fact the user is the focal point of all information systems. The user is involved in most operations of the documentary chain: He knows certain sources of information which he is able to weigh up and communicate. He can contribute to the selection of and sometimes even decide on new acquisitions. He can facilitate access to nonconventional literature about which he is more directly informed. He should help in developing some of the working tools such as the documentary language, analysis grids, file structure and formats; and he may or may not be closely associated with contents description, the formulation of search strategies and the evaluation of search results. He utilises the products and services of the information unit and states what he wants...
and how it should be presented. He also plays a key role in the circulation of information. The user is the essential consideration to the design, evaluation, improvement, adaptation, stimulation and the operation of the information system.

The needs of the users vary with the kind of the user. The user's needs are to be satisfied at the earliest possible time. However, most of the users cannot express their wants properly and clearly. It is the job of the information specialist to make the user comfortable and then elicit his needs by putting a series of questions. As the work progresses and time passes, users needs also change. Once user's needs are analysed, information sources are to be identified. The information is to be provided in a form that is assimilable to the user. While, collecting information to design a system in consonance with the users' needs, several methods have to be used to complement, balance and minimise any individual bias. Ms. Pauline Atherton listed the following twenty different methods of collecting information about users' needs:

1. Study the organisational chart of the institution.
2. Study of its functions/activities chart.
3. Study of its annual reports, project reports and other publications.
4. Survey of users' requirements using questionnaire.
5. Interviewing users.
6. Study of papers, books etc. published by the user.
7. Attending seminars, colloquia etc. in which users participate.
8. Observing user at his work place (e.g., office, school, laboratory, factory etc.).
9. Personal informal contacts with users.
10. Meeting users in small, preferably homogeneous groups periodically.
11. Feedback from information services rendered.
12. Providing for suggestions from users, about their subject interest, author interest, institutional interest, etc.
13. Attending technical meetings within the institution at which projects and problems may be discussed.
14. Scanning correspondence and reports prepared and received by user.
15. Study of documents used by user.
16. Study of reference queries received from users.
17. Participation in institutional/work orientation programmes.
18. While orienting and guiding users in using the libraries' resources, tools and techniques.
Users satisfaction can be defined in a library as positive feelings of users after successfully fulfillment of his/her information needs in right time through right sources. Satisfaction and service quality are distinct but related constructs. Service quality involves the long-term, general examination of customer expectations, whereas satisfaction focuses on a personal, emotional reaction to service. A careful attention to both increases customer retention and staff satisfaction and empowerment. User satisfaction makes it imperative to understand better and define specific student needs and to provide the type and level of service that meets them. Christopher Millson-Martula and Vanaja Menon asserted that one element of high quality service is "the incorporation of users' personal needs and expectations into the development of programs and service." According to them, the continued success of a service organization such as an academic library depends on the organization's ability to adjust its products and services to correspond to user needs. Similarly, Peter Hernon and Phillip Calvert suggested that only customers justify the existence of a library. Danuta A. Nitecki also claimed that "the assessment of how well a library succeeds depends on the user as a judge of quality." As these views gain greater acceptance among academic librarians, librarians must orient themselves and their programs to become better service providers and address their problem-solving needs.

In 1973, Cooper described "utility" which required users to indicate their satisfaction with search results by assigning a monetary value to the retrieved documents. Soergel (1976) rejected Cooper's proposal that user satisfaction with search results was a valid measure of retrieval. Soergel discarded user satisfaction as a measure, maintaining that users may be satisfied with less than optimal search results, especially if a definitive assessment is made only for the first iteration of results returned by the system. In particular, he cited the "user-distraction" phenomenon whereby a user, upon receiving an irrelevant document from the IR system in response to some search operation, might still express satisfaction with the irrelevant search result. He recommended, therefore, that helping users in completing their search tasks successfully should take priority over seeking their satisfaction. Belkin and Vickery (1985) warned, like Tessier et al. before them, of the many problems associated with satisfaction criteria. These problems arose from the ambiguous
definition of "satisfaction" and how to measure it. Hildreth (2001) further questioned the reliability of the satisfaction criterion as a measure due to its lack of independence from other influential factors in the retrieval procedure. When used as a performance measure in IR system evaluation, it can be easily affected by non-performance factors that may confound the results. This concern was especially critical if the actual performance factors being measured were the quality of search results or assessments of search success as judged by the users. Hildreth posited that end users of IR systems often expressed satisfaction both with their results and with the overall performance of the system, even when objective analysis of the results showed them to be poor. Moreover, Hildreth argued that evaluation studies that relied on measures such as user perception of ease of use and subjective satisfaction with the search results did not provide a clear and consistent answer as to how user satisfaction may predict their actual search effectiveness. He found that user perception of ease of use had an effect, possibly greater than the results themselves, on user satisfaction. Harter and Hert (1997) reported that satisfaction has been the most widely used evaluation concept in information system evaluation. The researcher reviewed the literature on Management of Information Systems (MIS) and Library Information Systems (LIS) on the use of the satisfaction criterion in information system research and evaluation. The earlier studies had substantially different conclusions on the applicability of user satisfaction in user-oriented evaluation. For example, Hildreth (2001) asserted that user satisfaction was a false measure when used in predicting system success; while other researchers (e.g., Gatian, 1994; Gluck, 1996; Huffman and Hochster, 2007) found that user satisfaction was significantly associated with system effectiveness. According to previous studies there is a confusing picture on the applicability of user satisfaction as a measure of system effectiveness. Furthermore, it was illustrated that while users searching in two systems with different effectiveness; users were significantly more satisfied with the superior system as compared to their satisfaction with the inferior system. The results from various study also confirmed that user satisfaction was influenced by several factors such as, user effectiveness, system effectiveness, user effort, and user expectation.

User satisfaction is a subjective variable which can be influenced by several factors such as system effectiveness, user effectiveness, user effort and user characteristics and expectations. From this point of view, though libraries are non-profitable organization. They should be more concerned on how to bring satisfactory
services when offering information and data to readers. Hence, “user satisfaction” is what libraries always devote their efforts to pursue. User satisfaction comes from service quality, which is based on whether users are satisfied or not. Therefore, to improve service quality is to provide services that meet user’s expectations and satisfy their needs. When readers are not satisfied, it is inferred that there is something wrong with the library. Thus, to study the user’s satisfaction holds an important place in order to know how well the library is successful in its effort to reach its ultimate goal i.e. users satisfaction.

In the literature there are two definitions for user satisfaction, ‘User satisfaction’ and ‘User Information Satisfaction’ is used interchangeably. According to Doll and Torkzadeh (1988) ‘user satisfaction’ is defined as “the opinion of the user about a specific computer application, which they use”. Ives et al. (1983) defined ‘User Information Satisfaction’ as “the extent to which users believe the information system available to them meets their information requirements.” Other terms for User Information Satisfaction are “system acceptance” (Igersheim, 1976), “perceived usefulness” (Larcker and Lessig, 1980), “MIS appreciation” (Swanson, 1974) and “feelings about information system” (Maish, 1979). Angen Koh (1997) have described user information satisfaction (UIS) as “a perceptual or subjective measure of system success”. This means that user information satisfaction will differ in meaning and significance from person to person. In other words, users who are equally satisfied with the same system according to one definition and measure may not be equally satisfied according to another.

Library User Satisfaction

User satisfaction is of utmost importance in any library/ information centre. As the level of user satisfaction is the measure of the performance of the library, understanding the level of user satisfaction will help to improve the collection, services and the environment, if necessary. A library’s resources and services are the most important factors that contribute to user satisfaction. It is not the number of collection, but the quality of collection and services that determine satisfaction. However, it is a commonly accepted truth that no library can satisfy all its users (Andaleeb and Simmonds, 1998). Hence, giving maximum satisfaction to the maximum number is to be ensured.

Modern academic libraries are facing several challenges as a result of the changing information requirements and use pattern of the users on the one hand and
the revolution in the form and availability of information including the electronic information on the other. With the technological revolution and the variety and abundance of information, providing the right information at the right time to the right users has become a great challenge. User satisfaction has been recognized as an important measure of library performance. While user satisfaction is defined, in general, as the degree to which the library is able to meet the demands of the user, this concept has been measured and used in a variety of ways. This diversity indicates both the complexity of the construct and the lack of consensus among librarians concerning its measurement and use. Consequently, interpretation of the literature is open to question. User satisfaction is considered as a reliable criterion for determining library effectiveness. Therefore, in order to improve user satisfaction and their overall perception of library effectiveness, libraries should make concerted efforts to consider all possible factors associated with user satisfaction.

Customers or users are the greatest asset for any organization. They need, as Wing says, to be treated as treasured, long-term investments that, if properly nurtured and cultivated, will provide significant dividends. Service Quality encompasses the relationship between the library and its clientele. It is often defined in terms of customer expectations and the need for the organization to meet or exceed these expectations. It involves the long-term, general examination of these expectations.

There are two major approaches to the evaluation of user satisfaction. One is aimed at the library user and the other at library performance. In the first instance, the library user is the object of study and his or her opinions provide the measure of user satisfaction. In the second instance, user satisfaction is indirectly measured using a certain number of indicators that determine the level of library performance. The degree of user satisfaction is then assumed to be proportional to the level of library performance. User satisfaction is a criterion that fosters the appreciation of how well the library and the services offered to its public function. A number of studies view satisfaction as the percentage of bibliographic items sought which are immediately obtained or delivered (Rinkel & McCandless, 1983). The document availability index can be quantified and easily investigated by models developed by Saracevic, Shaw, and Kantor (1977), and others. This approach, however, deals with only one of the multiple dimensions of user satisfaction. Under this approach, satisfaction is not well addressed when evaluated from multiple criteria. A multidimensional approach requires the use of survey research for the gathering of relevant aspects thought to
define library use and user satisfaction concepts. As stated by Bizimana (1991), Bizimana and Lajeunesse (1995) and Van House, Weil, and McClure (1990), the survey must collect information from patrons that allows for analyses of different sources of satisfaction and dissatisfaction in order to explain why some people use the library services while others do not. Unfortunately, this methodology does not directly yield any global measures of the degree of satisfaction.

A numerical index has to be developed using the sampled variables, which is what we propose. The motivation behind statistical evaluation is twofold: (1) the development of indices of library use and user satisfaction using relevant variables and (2) statistical inference. Indices could be valuable in studying relationships between measures of library use and measures of user satisfaction or other variables. These measures could permit comparison of different libraries (D’Elia & Walsh, 1985), as well as categorization of libraries or patrons (Van House & Childers, 1990). The construction and validation of such indices to assess general user satisfaction and library use could provide a useful instrument to study and diagnose various problems in libraries, and help managers with their decision making.

**Factors influencing user’s satisfaction**

Maskari and Sanderson investigated the factors influencing the users' satisfaction. They are as follows:

**System effectiveness**

System effectiveness measures how well a given IR system achieves its objective. Traditionally, system retrieval effectiveness is measured in terms of precision and recall. These two parameters characterise the ability of the system to retrieve relevant documents and avoid irrelevant ones.

**User effectiveness** User effectiveness is defined as the accuracy and completeness with which users achieve certain goals. User effectiveness can be measured by the following criteria: (i) the number of tasks successfully completed, (ii) number of relevant documents obtained, and (iii) the time taken by users to complete set tasks. Indicators of effectiveness also include quality of solution and error rates. User effectiveness is different from system effectiveness, for example system effectiveness is measured objectively by the number of relevant documents retrieved by the IR system, whereas user effectiveness is measured by the number of relevant documents saved by the users from the number of relevant documents retrieved by the IR system.
User effort

User effort can be defined in a similar way to the definition of "information searching behavior". The information searching behaviour is the user search behaviour when interacting with an IR system to search for relevant information. User effort can be measured by the number of clicks, number of queries and number of query reformulations, and rank position accessed to obtain relevant information. Lancaster (1969) also considers the amount of effort expended during the search as one the critical features affecting user satisfaction. Expected search length (ESL) by Cooper (1968) is also a form of user effort; ESL is the average number of documents examined to retrieve a given number of relevant documents.

Conclusion

The libraries are changing from storehouse of books to dynamic service center. In library, the user needs the library services on a wide range of areas and anytime. The delay in giving the right information in right time may lead to delay in their research activity, which leads to delay in filing for patent. Hence, the librarians should always be a step ahead of their users. The libraries need to provide web-based library and information services to the users under intranet and Internet environment. It is also noted that there is great desire among the users to implement the library and information service through company website. There is also a need to plan an integrated training programmes for the users as well as the library staff for an effective utilization of services. A regular feedback from the users will also go a long way in improving the library services.

1.1 Selection of the Problem

The problem selected for the present study entitled “User Satisfaction In Zakir Hussain Library, Jamia Millia Islamia; Central Library, Jawahar Lal Nehru University; Maulana Azad Library, Aligarh Muslim University: A Comparative Study”.

User satisfaction is of utmost importance in any library/ information centres. As the level of user satisfaction is the measure of the performance of the library, understanding the level of user satisfaction will help in improving the collection, services and the environment. A library’s resources and services are the most important factors that contribute to user satisfaction. It is not the number of collection, but the quality of collection and services that determine satisfaction.
However, it is a commonly accepted truth that no library can satisfy all its users. Hence, giving maximum satisfaction to the maximum number is to be ensured.

Modern academic libraries are facing several challenges as a result of the changing information requirements and use pattern of the users on the one hand and the revolution in the form and availability of information including the electronic information on the other. With the technological revolution and the variety and abundance of information, providing the right information at the right time to the right users has become a great challenge. User satisfaction has been recognized as an important measure of library performance. Hence, this study has been designed to examine the adequateness of collection, services, facilities and preparedness of staff in helping the users. It investigates the satisfaction level of users of three different university libraries on a structured scale containing 44 questions. The user satisfaction scale helps in gauging the satisfaction level and further generalizes certain issues which need to be taken care of for the satisfaction of users.

1.2 Definition of Terms

An adequate definition of terms is necessary, since lack of proper explanation can contribute to the problem. The term User, Satisfaction, User satisfaction, Zakir Husain Library, JMI, Central Library, Jawaharlal Nehru University, New Delhi. Maulana Azad Library, Aligarh Muslim University and Comparative Study will be often used by the investigator.

User: In this study users indicates the community which uses the library. According to Oxford English Dictionary user is generally defined as one who uses or employs anything.

Satisfaction: According to Webster Universal Dictionary satisfaction is the act of satisfying or gratifier feeling or gratification of desire.

According to Altman and Hernon (1998): the word “satisfaction” comes from the Latin word Satis (enough) and Facere (to do or make). These words suggest the true meaning of satisfaction, which is fulfillment.

1.3 User Satisfaction

Users satisfaction can be defined in a library as positive feelings of users after successfully fulfillment of his/her information needs in right time through right sources. Satisfaction and service quality are distinct but related constructs. Service quality involves the long-term, general examination of customer expectations. Whereas satisfaction a more short-term measure, focuses on a personal, emotional
reaction to service. Careful attention to both increases customer retention and staff satisfaction and empowerment.

According to Tessier, Crouch, and Atherton (1977): in an early attempt to define “user satisfaction” stated that satisfaction was “ultimately a state experienced inside the user’s head” and therefore was a response that “may be both intellectual and emotional”.

According to I-Ming Wang and Chich-Jen Shieh (2006): user satisfaction is defined as “the levels of service quality performance that meets user’s expectations”.

New Delhi: New Delhi is the capital of India. It is situated within the metropolis of Delhi and serves as the seat of the Government of India and the Government of the National Capital Territory of Delhi

Comparative: A comparative study is a study that involves the comparison of two or more things of the same kind.

Study: The Concise Oxford English Dictionary (2004, p. 1432) defines ‘Study’ as “the act of considering or examining something in detail”. It is also applying the mind to learning and understanding a subject in order to discover new information.

1.4 Objectives of the Study

The main objectives of the present study is to examine the status of user satisfaction among the three university libraries of India. The present study attempts to achieve the following objectives.

1.4.1 To find out the overall user satisfaction in the Zakir Husain Library, JMI university.

1.4.2 To find out the overall user satisfaction in the Central Library, Jawahar Lal Nehru university.

1.4.3 To find out the overall user satisfaction in the Maulana Azad Library, Aligarh Muslim university, Aligarh.

1.4.4 To find out the user satisfaction in all the three university libraries with regard to Document acquisition Service.

1.4.5 To find out the user satisfaction in all the three university libraries with regard to Document Processing and House Keeping Service.

1.4.6 To find out the user satisfaction in all the three university libraries with regard to Document Delivery Service.
1.4.7 To find out the user satisfaction in all the three university libraries with regard to Reading Facility.

1.4.8 To find out the user satisfaction in all the three university libraries with regard to Reference and Documentation Service.

1.4.9 To find out the user satisfaction in all the three university libraries with regard to Personal Attention Paid by the Library Staff.

1.5 Hypotheses

There is no doubt that hypothesis is an important and indispensable tools of a scientific study. In lack of hypothesis no one scientific study can be completed. Hypotheses are the working instrument of the theory, which can be tested and shown to be probably true and false. It is the hypothesis which makes the way for solution of the problem. Hypothesis is a supposition or preposition. It is a tentative generalization, which is yet to be proved.

For the purpose of the present study, the following hypotheses are formulated so as to make the present study more scientific, purposive and unequivocal.

1.5.1 Most of the users are satisfied with the services and facilities provided by all the three university libraries.

1.5.2 The difference in the users satisfaction scores among the three university library must be non significant with respect to Document acquisition Service.

1.5.3 The difference in the users satisfaction scores among the three university library must be non significant with respect to Document Processing and House Keeping Service.

1.5.4 The difference in the users satisfaction scores among the three university library must be non significant with respect to Document Delivery Service.

1.5.5 The difference in the users satisfaction scores among the three university library must be non significant with respect to Reading Facility.

1.5.6 The difference in the users satisfaction scores among the three university library must be non significant with respect to Reference and Documentation Service.

1.5.7 The difference in the users satisfaction scores among the three university library must be non significant with respect to Personal Attention Paid by the Library Staff.

1.6 Scope and Limitations of the Study
The present study includes in its scope the analysis of various aspects of retroconversion of documents of selected libraries of this study. The scope of the research entitled "User Satisfaction In Zakir Hussain Library, Jamia Millia Islamia; Central Library, Jawahar Lal Nehru University; Maulana Azad Library, Aligarh Muslim University: A Comparative Study" is limited to only the two libraries of New Delhi namely: Zakir Husain Library, JMI, Central Library, Jawahar Lal Nehru and one library of Aligarh namely: Maulana Azad Library, Aligarh Muslim University. These libraries are well-established, well recognized and well reputed libraries in India as well as abroad.

It is necessary to draw some limitations specific to this research. The limitations are mostly based on these factors: time, geographical location and selection of library and area of study. This limitation was necessary to develop worthwhile norms towards the accomplishment of the present study. The investigator was able to identify some of the major limitations such as,

1.6.1 The limitation of time is associated with the period of research. In the other words, the time of gathering information from questionnaires takes more time.

1.6.2 The present study consists of the two libraries of New Delhi and one of Aligarh. The questionnaires were distributed to library users.

1.6.3 It is also necessary to narrow down the geographical areas of study because selecting a much wider area tends to defuse the results and findings in a research works; therefore, such a study will not be feasible if a much wider geographical area is taken into consideration. In view of these factors, the present study confines its scope and limitation to the two-selected libraries of New Delhi and one-selected library of Aligarh. The geographical area is restricted in New Delhi and Aligarh.

1.6.4 The responses have been taken from library users those who are the part of the under study libraries and those who have been using library services and are regular users of libraries.

1.7. Research Methodology

Satisfaction, being a state of mind cannot be counted as tangible goods. However, there are techniques to measure this psychological aspect. As a research tool, attitude scales are used to measure such psychological aspects. The scale developed by Dineshan Koovakkai was used to measure the satisfaction of the users of three university libraries.
1.8 Organization of thesis

This thesis consists of six chapters such as Introduction, Profile of Libraries, Review of related literature, Research methodology, Data analysis and interpretation, Findings, Tenability of hypothesis, conclusion and suggestions.

Chapter 1 provides an introduction to the user satisfaction, including the background studies, statement of the problem, research objectives, hypothesis, scope and limitations of the research. It also summarises the research methodology of the present study.

Chapter 2 deals with the brief outline of the university library system in India. It also examines the profile of three university libraries such as history and background, collections, staff, users and present status etc.

Chapter 3 presents the literature review of the researches undertaken on user satisfaction, its methodology and findings in brief.

Chapter 4 presents the research strategies and detailed processes and methods of conducting their survey on user satisfaction scale.

Chapter 5 presents the detailed results of the data analysis and interpretation.

Chapter 6 describes the findings, tenability of hypotheses, conclusion. This chapter also indicates some suggestions for further research.
REFERENCES


