

Effectiveness Of Hybrid Library Services In Five Select University Libraries Of Haryana: A Users' Point Of View

1.Sunil Kumari, Research Scholar, BMU Asthal Bohar, Rohtak

2.Dr K.C.Dabas, Supervisor of Sunil Kumari, BMU Asthal Bohar, Rohtak

1.0 INTRODUCTION

The university library, to be effective, must reflect the goals and mission of the university in all the functions, activities, operations, services, collection, physical facilities, ICTs applications in house-keeping operation, and assistance of knowledgeable and courteous staff in delivering the services. Organisational theory and managerial wisdom advocates that for the survival of any organization, the nature of the organisation must be compatible with the environment. Customer service and library effectiveness is an important aspect of organizational effectiveness and it is a dependent factor of customer satisfaction. Customer Service and customer satisfaction view library and its services from customer perspectives and lead to outcome measures, whereas performance measures concentrates on library and lead to output measures. User satisfaction as well as efficient utilization of resources is the conceptual basics of library effectiveness. The service which satisfies to a high degree information and research needs of faculty, students and others users and contributes to the success of educational and development goals of the institutes in an effective manner is known as quality of service.¹⁻²

In this paper the effectiveness of hybrid library services of five selected libraries, i.e. Kurukshetra University Library, Kurukshetra (KULK); Maharshi Dayanand University Library, Rohtak (MDUL); Chaudhary Charan Singh Haryana Agricultural University Library, Hisar (HAUL); Guru Jambheshwar University Library, Hisar (GJUL); and Chaudhary Devi Lal University Library, Sirsa (CDUL), has been studied on user satisfaction with the collection, facilities and services available in the libraries under study. It deals with the views, opinions, attitudes, values, perceptions, expectations of library users on the various parameters and factors of library effectiveness collected through Questionnaire-III (Appendix-C) and Interview Schedule from the faculty members, research scholars, M.Phil, Postgraduate, and undergraduate students of all the five universities. The data so collected have been analysed to determine users' needs and their information seeking behavior. In the second stage the data were evaluated for studying library effectiveness on user satisfaction.

It has already been well established in corporate sector, and amply revealed in review of literature, that organizational effectiveness leads to overall improvement in all operations, functions, services, products, and consultation. If a library is effective in all respect, then library users will be happy and satisfied with library collection, facilities, staff, services, products, procedures, and processes and will use the library more. In another way library effectiveness has a positive correlation with satisfaction of customer, and satisfaction of customer on customer retention (customer loyalty), and further customer loyalty on total benefits of libraries. Library

effectiveness can also be evaluated on the pattern of educational institutions, i.e., reputation of institution for the advancement of the profession, resources, outcomes and value addition aspects. There are various other methods to assess library effectiveness.³

Here the effectiveness of university libraries has been studied, analysed and compared on the basis of user perceptions and factor analysis. The dimension and parameters on which information was collected include: quality of library collection, staff quality, staff quality in relation to the use of library, staff knowledgeability and communication skills, ICT's application level, physical facilities and services.

The gap in user importance level and perception level has also been studied on user satisfaction on the basis of Likert type rater scales. Important dimensions, factors and indicators have been used to measure library effectiveness. Library effectiveness has five important dimensions such as 1) Reliability : is the ability to perform the promised service dependably and accurately, 2) Assurance: is the knowledge and courtesy of employees and their ability to convey trust and confidence, 3) Tangible: is the appearance of physical facilities, equipment, personnel and communication material, 4) Empathy: is the caring and individualised attention the organisation provides to its customers, and 5) Responsiveness: is the willingness to help customers and provide prompt service. Also includes expectations of users of all the libraries with regard to computerised access of learning resources.

1.1 PROFILE OF RESPONDENTS

Table 6.1 depicts the respondents population. It comprises of 113 faculty members, 129 research scholars, 170 postgraduates/M.Phil students, and 88 undergraduates. Out of a total of 500 users 388 are male and 112 are female.

Table.6.1: Sample of User Population of University Libraries Under Study

Age Groups	KULK	HAUL	MDUL	GJUL	CTLUL	Total
20-25	36	31	29	23	28	147
26-30	25	30	31	28	26	140
31-35	13	15	16	17	12	73
36-40	9	8	10	11	14	52
41-45	7	9	8	9	12	45
46-above	10	7	6	12	8	43
GENDER						
Male	71	80	78	82	77	388
Female	29	20	22	18	23	112
Academic Status						
U.Graduates	16	14	21	20	17	88
P.G/ M.Phil	35	37	32	31	35	170
Research Scholar	26	31	26	24	22	129
Faculty/Teacher	23	18	21	25	26	113
Total Users	100	100	100	100	100	100

1.2 PURPOSE OF LIBRARY VISIT

Library users used to come to library with several purposes in mind but the need to borrow books accounts for the highest frequency of their library visit, 24.5%. Out of this figure majority is of

the graduates, undergraduate and some other users. Using internet services is the next in the order of their preference which accounts for 17%. The third most important purpose for visiting library is to read personal books and use library as a place for reading, it accounts for 12.45.

Self explanatory table 6.2 displays that 24.5% respondents come to library to borrow books for home reading, 11.45 respondents visit library to read current journals, only 5.4% users for reading reference books, 11.8% users for reading newspapers, 17% for internet services, 10.6% for using e-resources, a mere 7% for general purpose and 12.4% user visit to library to read their personal books. The individual score of CDUL users is highest for borrowing books and it is lowest in case of GJUL users. With regard to visiting library for reading current journal, the score of HAUL is highest and the score of KULK is lowest.

Table 6.2:
PURPOSE OF LIBRARY VISIT BY USERS OF THE LIBRARIES

Purpose of Library Visit	KULK	HAUL	MDUL	GJUL	CDUL	Total	%
Borrowing books	25	25	23	21	28	122	24.5%
Reading current journals	7	15	12	14	9	57	11.4%
Reading reference books	5	7	5	6	4	27	5.4%
Reading newspapers & news magazines	12	8	12	9	18	59	11.8%
Using internet services	21	14	18	16	16	85	17%
Using E-Resources	12	13	8	10	10	53	10.6%
General interest	7	8	7	8	5	35	7%
Using library for study personal books	11	10	15	16	10	62	12.4%
Total	100	100	100	100	100	500	100%

1.3 USER SATISFACTION WITH PHYSICAL ORGANISATION OF COLLECTION

User satisfaction with physical organization of different library collections was evaluated. Their satisfaction is 57.80% for HAUL, 53.45% for MDUL, 51.41% GJUL library, 41.34% for KULK library, and 31.34% for CDUL library. Table shows a gloomy scenario where the physical organization of library collection is not as per satisfaction and expectations of users. And it is more important for the management of CDUL and KULK to improve the physical organization of the library as per the expectations of the users.

The users satisfaction with the physical organization of different collections in overall varies between 41.30% and 57.80% for all the five libraries under evaluation. Individually the satisfaction level is highest with the physical arrangement of current journals, followed by satisfaction with the books and newspapers and magazines. The satisfaction level with physical arrangement of back volumes is comparatively less.

Table 6.3:
USER SATISFACTION WITH THE PHYSICAL ORGANISATION OF COLLECTIONS

Type of Library Collections	KULK	HAUL	MDUL	GJUL	CDUL	%
-----------------------------	------	------	------	------	------	---

Current Journals	6.19%	9.58%	13.56%	10.45%	5.34%	24.5%
Back Sets Journals	4.51%	5.87%	1.15%	2.34%	2.50%	11.4%
New Additions	7.21%	9.54%	2.12%	4.51%	3.56%	5.4%
Reference Books	7.10%	8.25%	12.34%	8.67%	7.80%	11.8%
Books	10.15%	12.50%	10.15%	12.56%	8.45%	17%
Text Books	4.07%	5.80%	2.51%	3.58%	4.58%	10.6%
Theses/Diss.	2.58%	3.56%	5.56%	5.67%	4.23%	7%
Newspapers Magazines	2.54%	3.00%	6.06%	7.20%	4.84%	12.4%
Total Score	1774	2312	2138	2056	1652	9932
	44.35%	57.80%	53.45%	51.40%	41.30%	49.66%
Maximum	4000	4000	4000	4000	4000	100%

- Satisfaction has been measured on a five point scale ---1 (poor) to 5 (very high)
- Figures in second row of each collection type give percent of satisfaction out of maximum score. It is calculated by multiplying 8 (item) x 5 (Very High scale) .

The collection size, scope, and variety of collection and its growth provide quantitative and qualitative data of basic inputs. This basic data is used for comparison and benchmarking purposes.

TABLE 6.4 :
USER SATISFACTION WITH LIBRARY COLLECTION

Statements	MDUL	HAUL	KULK	GJUL	CDUL
Range of Material to meet needs	3.562	3.540	3.520	2.500	2.100
Multiple copies of items in high use	3.422	3.564	3.394	3.027	2.199
Purchase of Relevant Material	3.362	3.610	3.350	3.085	3.059
Authenticity of library material	3.350	3.550	3.312	3.500	3.342
Total score	13.696	14.264	13.576	12.112	10.800
Mean Score	3.424	3.566	3.394	3.028	2.700

Table 6.4 displays quality of library collection with regard to the range and adequacy of material, multiplicity of material, authenticity of material and relevancy of material in meeting users minimum; basic; study and teaching; research; and comprehensive needs. Table shows that the range of material held by library is maximum in MDUL and minimum in CDUL with the respective scores of 3.562 and 2.100. While HAUL has the highest (i.e., 3.564) score with regard to multiple copies, whereas CDUL has the lowest (2.099) score. Out of five libraries HAUL has the highest (3.61) relevancy score, whereas CDUL has the lowest (i.e., 2.199) score. In respect of authenticity of library material, HAUL tops the list with a score of 3.550, closely followed by GJUL (3.500), MDUL (3.350), KULK (3.312) and CDUL (3.242).

Table further reveals that the mean score of library collection quality is highest (3.566) in the case of HAUL. MDUL comes next with the score of 3424, KULK and GJUL got the 3rd and 4th rank with the scores of 3.424 and 3.394 respectively, CDUL got the 5th rank with 2.700' score which is the lowest amongst all with regard to quality of library collection.

1.4 USER SATISFACTION WITH LIBRARY STAFF

TABLE 6.5: USER SATISFACTION WITH LIBRARY STAFF

Description	MDUL	HAUL	KULK	GJUL	CDUL
Availability	4.042	3.970	3.462	3.771	3.516
Approachability	4.491	4.685	3.812	3.928	3.540
Courtesy and Politeness	4.285	4.014	3.825	3.700	3.500
Willingness to help	4.114	4.128	3.225	3.071	3.489
Friendliness	4.288	4.014	3.837	3.871	3.490
Total Score	21.220	20.811	18.161	18.341	17.535
Mean Score	4.244	4.162	3.632	3.668	3.507

A large collection in a big building has no meaning without making the collection serviceable to users. It is library staff which makes the collection serviceable. Library effectiveness comes from committed, knowledgeable, friendly and courteous staff.

It shows user satisfaction with regard to availability, approachability, courtesy, politeness, willingness to help and friendliness of library staff in relation to respective user community of the five university libraries. It shows that the availability of staff score is highest (i.e., 4.244) in MDUL and lowest (i.e., 3.507) in CDUL. With regard to approachability, HAUL got the 1st position with 4.685 score, whereas CDUL got the lowest position with 3.540 score. The staff of MDUL got the highest (i.e., 4.285) score with regard to courtesy, whereas CDUL got the lowest (i.e., 3.500) score. With regard to willingness, HAUL got the 1st position with 4.128 score, whereas CDUL's staff to the lowest position with 3.489 score. MDUL staff found to be the most friendly staff with 4.288 score, whereas CDUL staff is found to be the least friendly with 3.490 score.

Table further shows the mean-score of overall user satisfaction with staff quality. It denotes that MDUL got the highest (i.e., 4.244) score, followed by HAUL (4.162). The score of GJUL slid to 3.668 and got the 3rd rank in all while the KULK got the 4th position with 3.642 score. Out of five universities the score of CDUL is lowest amongst all with regard to quality of staff.

1.5 ACCESS ABILITY AND USEABILITY OF THE LIBRARY RESOURCES

TABLE 6.6:
USER SATISFACTION WITH REGARD TO THE ACCESS ABILITY AND
USEABILITY OF THE LIBRARY RESOURCES

USE OF LIBRARY	MDUL	HAUL	KULK	GJUL	CDUL
Access to Catalogue, Reference book and Electronic resources	3.787	3.028	2.987	3.014	3.020
Use of all resources	3.881	3.045	3.075	2.657	3.310
Selection of resources	3.013	3.480	2.725	2.585	3.145
Work culture	3.250	3.325	2.512	2.600	3.010
Know library rules	2.890	3.628	2.812	2.485	3.420
Details of information	3.136	3.785	2.900	3.071	2.010

Encouragement to seek help	3.712	3.200	3.012	3.217	3.021
Accurate response to questions	2.881	3.444	2.975	3.142	3.056
Mention of ILL	2.984	2.785	2.475	2.328	0.881
Referral service in- side library	3.312	3.457	2.800	3.142	2.685
Referral service outside library	2.662	2.342	2.462	2.785	2.600
No undue harassment	2.787	3.828	2.537	2.914	2.640
Use of e-mail	2.562	1.000	2.286	2.057	1.314
Use of books on Shelf	3.420	4.242	2.550	3.128	3.200
Understanding the problems of users	3.620	4.300	2.825	3.014	3.100
Total Score	47.897	48.889	40.933	42.139	40.412
Mean Score	3.193	3.259	2.728	2.809	2.694

Libraries are full of complexities. Due to these complexities there is a wide gap between users and their documents/information. Access and assistance is the most essential dimension of library effectiveness. It is staff assistance which solves all ambiguities and complexities in library system and reduces the gap between users and their document/ information. All this is not possible without personnel with knowledge, skills, dignity and attitudes.

Table 6.6 charts the score of fifteen statements with regard to the importance of staff assistance in access and use of library, i.e., use of catalogue, reference book, electronic resources; all the resources; selection of appropriate resources; cultural sensitivity; direction; details of information; encouragement; accurate answers to questions; suggestions regarding ILL; referral services; e-mail; CAS and SDI service, personalised help and understanding of the problems of the users of respective university libraries.

It denotes that MDUL got 1st position with regard to staff help in the use of catalogue, reference books and electronic resources and all the other resources with 3.787 and 3.881 score respectively, whereas HAUL got 1st position with regard to selection of resources, work culture, and knowing rules with 3.480, 3.325 and 3.628 score. Again HAUL with 3.785 and 3.444 score got 1st position with regard to required details of information and accurate answers to questions, whereas MDUL with 3.712 score got 1st position with regard to encouragement of users to seek staff help. MDUL perceived as best in all with 2.984 score with regard to mentioning of ILL service, whereas GJUL adjudged best with 2.785 score with regard to referral services outside the library.

HAUL emerged at 1st position by doing least undue harassment of its users with 3.828 score and MDUL got 1st position with 3.396 score with regard to use of E-mail service. Where HAUL got 1st position with 4.242 and 4.330 score with regard to use of books on shelf and to understanding the problems of users.

It further demonstrates the total score and mean score with regard to all the fifteen statements. It denotes that HAUL got first place with mean score of 3.259, closely followed by MDUL (3.193). Out of five universities GJUL slid to 3rd position with 2.809 score, while KULK got 4th Position with 2.728 score. The score of CDUL is lowest (i.e., 2.694) amongst all with regard to staff effectiveness in the use of library.

Table 6.7 indicates the effectiveness of staff with regard to availability of knowledgeable staff on service desk when library is opened and communication and information literacy skills of staff to

the respective user community of the libraries. It shows that the score of MDUL is highest (i.e., 3.690) with regard to the availability of knowledgeable staff on service desk and the score of CDUL is lowest (i.e., 3.428) amongst all. Again MDUL has got 1st position with 3.780 score with regard to the availability of knowledgeable staff to assist when library is opened, whereas KULK got the lowest position with 2.737 score.

1.6 STAFF QUALITY: KNOWLEDGEABILITY AND COMMUNICATION SKILLS

TABLE 6.7:
STAFF QUALITY: KNOWLEDGEABILITY AND COMMUNICATION SKILLS

Statements	MDUL	HAUL	KULK	GJUL	CDUL
Knowledgeable staff on all public service desk	3.690	3.651	3.550	3.457	3.428
Availability of knowledgeable staff to assist when library is opened	3.780	3.354	2.737	3.514	3.342
Communication skill of staff	3.770	3.691	2.937	3.314	3.328
Information literacy programmes by staff for effective use of library	2.630	3.370	2.887	2.964	2.285
Total Score	13.870	14.066	12.111	13.249	12.383
Mean Score	3.467	3.516	3.027	3.312	3.095

The communication skills of MDUL staff is found best in all with 3.770 score, whereas it is found on lowest side with 2.937 score in case of KULK staff. With regard to users' education/ Information literacy programme HAUL got 1st position with 3.370 score, closely followed by GJUL (2.964), whereas CDUL slid to the lowest position with 2.285 score.

It further shows the mean score of all the four statements charted in the table. It illustrates that the HAUL got 1st position with mean score of 3.516, closely followed by MDUL (3.467). GJUL scored 3.332 points and got 3rd position in all. While CDUL got 4th position with 3.095 score and KULK got 5th position with 3.027. Out of five universities the score of KULK is lowest (i.e., 3.027) with regard to knowledge ability and communication skills of staff.

1.7 RELATIONSHIP MARKETING

Relationship marketing is a continuous process to enrich customers' satisfaction. It is concerned with getting and retaining customer through rapport, relationships, personalized service, acknowledging the presence of users, customer care service, and marketing. For effectiveness, understanding the customers and the benefits he or she seeks from a library is central to survival. Those attributes or factors that contribute to user satisfaction with services and staff are known as dimensions or attributes of library effectiveness. Marketing is concerned with the exchange of relationships between libraries and users and capability, effectiveness and customer service are the key linkages in this relationship. Customer service is a process which provides time and place utilities for the customer and which involves pre transaction, during transaction and post transaction considerations relating to the exchange process with the customer. Customer service

has links with customer satisfaction.

According to Ghosh and Goswami (2000)⁴ the first link deals with relation between service quality, effectiveness and customer satisfaction. It can be based on an outsider perspective, advertising, knowledge about service provider, and experiences with the service. The second type of satisfaction is purely based on customer's own experiences of a service where the outcome has been evaluated in terms of value received against price paid. The outcome may be low satisfaction but high perceived value. The third link between service quality and customer satisfaction is that the customer is always ready to absorb some unfavorable evaluations before expressing them in terms of net dissatisfaction. The fourth link between service quality and customer satisfaction depends upon the availability of other providers of service. In this connection Bhattacharya (2000)⁵ said that customer service, quality, and marketing are closely related and yet frequently managed separately. Therefore, relational marketing approach brings them into a much closer coherence. Quality of interactions with the users is the core of marketing strategy in the context of library and information services.

In this connection Banwet and Datta (2000)⁶ observed that customer satisfaction mediates the path between service quality and post-visit intentions. Quality is meeting customer requirements. It is what the customer says, perceives and believes in the process as well as in services. Perceptions of casual users differ from frequent users. Frequent users are relatively more satisfied than casual users. This is largely due to information seeking behaviour.

1.8 USERS CRITERIA & DIMENSIONS OF LIBRARY SERVICE QUALITY

In the user study users were asked to rate the goodness and quality of their library on the basis of dimensions of quality of library services. Users' perception about service quality and effectiveness is displayed in self-explanatory Table 6.8. All the users were asked to give points out of 100 to the library service aspects in accordance with the importance they give to that aspect of service. With regard to tangibles, HAUL scored 11.51 points and got first position, followed by MDUL (10.02), KULK (9.01), and CDUL (8.68), whereas GJUL scored 6.59 points, i.e., lowest amongst all. Regarding reliability HAUL scored first position with 26.16 points and GJUL got the last position with 20.15 points. MDUL scored 23.89 points and got first position with regard to willingness and KULK got the last position with 20.59 score. CDUL got the first position with 25.68 score with regard to knowledge and courtesy and HAUL got the last position with 19.64 score. Regarding caring and personalised service GJUL got the first position with 27.38 score and CDUL got 16.85 points i.e. lowest among all with regard to individualised service.

TABLE 6.8 :
USERS CRITERIA FOR JUDGING DIMENSIONS OF LIBRARY QUALITY

Dimensions	MDUL	HAUL	KULK	GJUL	CDUL
Appearance of physical facilities, equipment, personnel and information resources	10.02	11.51	9.01	6.59	8.68
Library's ability to provide promised service dependably and accurately	24.68	26.16	23.45	20.15	26.11

Willingness to help prompt service	23.89	23.59	20.19	21.15	22.68
Knowledge and Courtesy of staff and ability to convey trust and confidence	21.78	19.64	22.72	24.73	25.68
Caring and individualized attention provided by the library	19.63	19.10	24.13	27.38	16.85
Total Score	100	100	100	100	100

1.9 FACTOR ANALYSIS

In the user study respondents were asked to rate 20 variables for their potential usefulness in making a library effective. The variables have been described in questionnaire meant for users. The data collected on these variables were grouped into factors using factor analysis technique. The assumption underlying factor analysis is that variables that consistently receive similar ratings are measuring the same underlying dimension. If libraries that are performing well on one variable also consistently seen performing well on another, the two variables are measuring the same underlying dimension of library performance. In factor analysis the investigator does not create the factors, but interprets the factors that emerge from the data. Table 6.6 depicts the perceptions of users of respective libraries.

Table 6.9: FACTORS OF LIBRARY EFFECTIVENESS

Factor of Library Effectiveness	MDUL	HAUL	KULK	GJUL	CDUL
User Services	2.712	2.231	2.112	2.227	2.121
Accessibility	2.861	2.454	2.875	2.242	2.156
Quality of Physical Facilities	2.981	2.785	2.475	2.328	1.881
Management Quality	2.312	2.457	2.800	2.142	2.785
Electronic Access	2.662	2.342	2.462	2.785	2.600
Quantity of inputs	2.687	2.728	2.537	2.914	2.640
Relevance of collection	2.562	2.010	2.286	2.057	1.314
Accomplishment of goals	2.420	2.242	2.550	2.128	2.200
Suitability of user services	2.620	2.300	2.825	2.014	2.123
Total score	23.817	21.549	22.922	20.837	19.820
Mean Score	2.646	2.394	2.547	2.315	2.202

As a first step in factor analysis linear combinations of the observed variables were formed using principle analysis technique. The first component is the combination that accounts for the largest amount of variance in the sample. The variance is the squared deviation from the mean. The second component accounts for the largest amount of variance, and is uncorrelated with the first. The successive components explain progressively small portions of the total variance. The total variance explained by each factor was computed. The linear combination formed by factor 2 is of total variance. Communality describes the proportion of variance explained by the common factors. Secondly, varimax rotation was performed to get the final statistics. As shown in the table 6.9 factors were extracted. These factors explain 72.3% of total variance in the sample. These factors also account for a total of 20 variables. It should be emphasized that these factors

group variables according to correlation as judged by the respondents, and not according to respondents' perception to which indicators belong together. The third step in factor analysis is to name the factors. The usual approach to naming the factors is to select a name that adequately represents all the variables that load significantly with more emphasis on the variables that load more highly. In these study variables loading 0.3 or more were considered significant. These factors are labeled as user Services, accessibility, quality of physical facilities, management quality, electronic access, quantity and quality of inputs, relevance of collection.

1.10 FACTOR ANALYSIS AND ORGANISATIONAL EFFECTIVENESS

The results of Factor analysis when placed in the context of organizational effectiveness provide means to understand the real nature of the relationship between the factors and definition of library effectiveness. The models of organizational effectiveness are:

- (1) goal model⁷, or rational system model⁸
- (2) system resource model,⁹ or natural system mode¹⁰
- (3) participant satisfaction model,¹¹ or multiple constituencies model¹²
- (4) internal processes model,¹³ or natural system model¹⁴

Taken as a group, the factors reflect a mixture of approaches to effectiveness. The goal approach to organizational effectiveness is represented by one factor concerned with services: User Services. It is concerned with ends rather than means, with services rather than internal processes. Accessibility and electronic access reflect the process model of organizational effectiveness, with its concern for the organisation's internal functioning and health. This factor also reflects on the resource model of organizational effectiveness for it concern with the growth and development of collections, electronic journals and databases on the network, computing and communication facilities for connectivity and access. So does the factor on management quality and the quality of physical facilities. Both emphasise on internal operations and institutional inputs. Quantity of inputs and relevance of collection reflect the resource model of organizational effectiveness.

There are seven factors of library effectiveness. These are user Services, accessibility, quality of physical facilities, management quality, electronic access, quantity and quality of inputs, relevance of collection. The first factor has preponderance over all others. Each additional factor has a rapidly diminishing influence. The factors reflect a mixture of approaches to effectiveness. They are explained by goal model, process model, and resource model of organizational effectiveness. The constituency model of organizational effectiveness is automatically taken into account since the scope of this study is confined to a well-defined user group of the university libraries.

Clearly effectiveness must be studied on variables which reflect all the models of organizational effectiveness. Factor analysis provides a different approach to formulate the definition of library effectiveness. Accordingly, begin with the measures and induce there from the definition of library effectiveness. The assumption underlying in this inductive approach is that individuals choose measures based upon implicit, often unarticulated definition of effectiveness that can be made explicit by examining these choices in the context of models of organizational effectiveness.

It is clear from the perceptions of the users of five university libraries that the role of the library

is not to be limited to providing just information and document alone. But along with this, it should also be role of the library to offer service and facilities to the satisfaction of users.

Since effectiveness basically relates to library outputs and outcomes, its definition, and measures must relate to the goal model, and the constituency model. The resource model, and the process model of organizational effectiveness should, therefore, relate only to the management of library effectiveness.

Therefore, effectiveness is a multidimensional construct which is defined and measured in various ways.

1.11 USERS' CRITERIA FOR JUDGING LIBRARY EFFECTIVENESS

In the user study the respondents were asked to evaluate the importance of 9 criterion variables in judging library effectiveness. The scores are presented in table 6.10.

TABLE 6.10:

USER CRITERIA FOR JUDGING LIBRARY EFFECTIVENESS

Evaluation Criteria	MDUL	HAUL	KULK	GJUL	CDUL	Total Score
1.Achievement of predefined goals	2.512	2.231	2.112	2.227	2.121	11.203
2.Generation of Income	1.361	1.454	1.175	1.242	1.156	06.388
3.User Satisfaction	2.981	2.978	2.475	2.928	2.981	14.343
4.Appeal of library building	2.312	2.357	2.300	2.342	2.385	11.696
5.Suitability of user services	2.662	2.642	2.562	2.785	2.600	13.251
6.Suitability of access facilities;	2.787	2.728	2.598	2.914	2.894	13.921
7.Suitability of collection;	3.162	3.110	3.186	3.057	3.114	15.629
8.Library as a gateway to information access;	3.100	3.012	2.415	2.828	2.821	14.176
9.Library's internal process and its health	2.620	2.760	2.582	2.614	2.512	13.088
Total score	22.497	23.272	25.039	23.937	22.584	
Mean Score	2.450	2.586	2.782	2.571	2.509	

Factor analysis on these 9 variables groups them into two unrelated factors: 1) Accomplishment of predefined goals, and 2) Resource generation. Factor 1 Accomplishment of predefined goals comprises all the variables except variable 2. Factor 2 Resource generation contains only one variable, i.e. Generation of income. Obviously correlation between the variables of factor 1 is very strong. The 8 variables are : 1) Achievement of predefined goals; 2) User's satisfaction; 3) Appeal of library building; 4) Suitability of user services; 5) Suitability of facilities; 6) Suitability of collection; 7) Library as a gateway to information access; 8) Library's internal process and its health. The factor loadings of variables of factor 1 and factor 2 are given in Table 6.11.

Table 6.11:
Factor Analysis of User Judgment of Library Effectiveness

	Factor 1	Factor 2
8) Library as a gateway to information access;	.88883	.01665
6) Suitability of facilities	.84495	.18014
9) Library's internal process and its health	.77025	.15998
4) Appeal of library building	.70738	.20492
1) Accomplishment of redefined goals	.69768	-.03581
5) Suitability of user services	.68226	.51821
3) Users satisfaction;	.63602	.25369
7) Suitability of collection	.58391	.56890
	Factor-1	Factor- 2
2) Generation of income by the library	-.04017	.87446

Taken as a group, the variables of factor 1 reflect a mixture of approaches to effectiveness. The goal approach to organisational effectiveness is represented by four variables: 1) Library as a gateway to information access; 2) Accomplishment of redefined goals; 3) Users satisfaction; and 4) Suitability of user services. They are concerned with the ends rather than means, with the services rather than internal processes. Besides, user satisfaction reflects the participants' satisfaction model of organizational effectiveness. It is concerned with the users' satisfaction with all aspects of the library including collection, facilities and services. Three other factors (i) suitability of facilities; (ii) library's internal process and its health; (iii) appeal of library building reflect the process model of organizational effectiveness as these are concerned with the organisation's internal functioning and health. Besides, these variables also reflect the resource model of organizational effectiveness as they are made on library facilities and the buildings. Suitability of library collection reflects the resource model of organizational effectiveness. The factor 2 reflects the goal model of organizational effectiveness since it concerns itself with the library outputs.

The criterion variables for judging library effectiveness can be grouped into two unrelated factors. The factor 1 comprises 8 variables. The variables in the decreasing preponderance are: 1) Library as a gateway to information access; 2) Suitability of facilities; 3) Library's internal process and its health; 4) Appeal of library building; 5) Accomplishment of redefined goals; 6) Suitability of user services; 7) Users satisfaction; and 8) Suitability of collection. The factor 2 comprises only one variable, i.e. generation of income by the library. The 8 variables constituting factor 1 are interrelated and not mutually exclusive.

Taken as group, these criterion variables reflect a mixture of approaches to library effectiveness. They help to evaluate the performance from the perspectives of goal model, resource model, process model and participants' satisfaction model. No single model of organizational effectiveness is sufficient to judge effectiveness.

Two samples were employed for studying the relationship between the dimensions, indicators, and definition of library effectiveness. In the first sample certain variables were evaluated which hold the potential to make a library effective. In the second sample were evaluated certain variables which could be used to judge library effectiveness.

The approach to measuring effectiveness is common in both the models. The measurement of

library effectiveness must be made on such variables which reflect all models of organizational effectiveness.

1.12 DIFFERENCES IN LEVEL OF NEEDS & EXPECTATIONS OF USERS

Level of user satisfaction differs from one category to another so also the needs and expectations of user differ from one category to another. Quality in services and products of libraries depend to a large extent on the needs, desires and expectations of users Colman, et al (1997)¹⁵. Self explanatory table 6.12 charts the needs, expectations and preferences of all categories of users of five libraries with regard to the computerised access of information resources.

Table 6.12:

EXPECTATIONS OF USERS TO ACCESS RESOURCES VIA COMPUTERS

ITEMS	KULK	HAUL	MDUL	GJUL	CDUL
Indexing abstract Journals	7.60%	11.56%	5.62%	6.48%	9.62%
Catalogues	16.76%	13.64%	16.70%	17.52%	10.75%
Bibliographies	5.44%	8.13%	7.65%	6.71%	8.64%
E-Journal Articles	6.27%	14.14%	9.89%	7.68%	11.76%
Conference Proceedings	2.86%	3.06%	2.11%	1.76%	2.15%
Books	48.13%	42.76%	47.06%	47.36%	45.45%
Monographs	2.89%	0.68%	2.16%	3.48%	3.69%
Manuscripts	3.14%	2.78%	2.78%	3.71%	1.41%
Films Video	3.29%	2.00%	2.62%	3.79%	3.02%
Videoconference service	3.29%	2.00%	2.62%	3.79%	3.02%
Reference Books	2.89%	0.68%	2.16%	3.48%	3.69%
Films Audio	2.68%	1.25%	3.41%	1.51%	3.51%
Open Source material	6.27%	14.14%	9.89%	7.68%	11.76%
Others	0.94%	Nil	Nil	Nil	Nil
Total	100%	100%	100%	100%	100%

1.13 CONCLUSION

A user study was conducted to measure library effectiveness on the measures of users' needs, expectations and satisfaction with library services, facilities, collection and staff. The respondent population was comprised of teachers, research scholars and P.G. students. The quality of HAUL collection was adjudged best amongst all, MDUL comes next, followed by KULK and GJUL. The score of CDUL is found to be the lowest. Most of the users preferred to access e-books, e-journals and indexing and abstracting services via computers and Internet.

Regarding overall satisfaction score of library users with respective university libraries, HAUL got first position with 63.16%, MDUL got 2nd position with 54.56%, and GJUL got 3rd position with 53.76%. The user satisfaction level of KULK and CDUL slid to 42.11% and 40.53% respectively. The result shows that users want not only physical facilities but information services and document to meet their needs and expectations. Although in KULK the level of physical facilities is high but the level of management quality and services is poor hence user satisfaction level is not to the mark. In CDUL the low level of user satisfaction is due to lack of

facilities, services, and learning resources. So library effectiveness means library's ability and success in providing information, documents, services and facilities to the satisfaction of the users. Quality, effectiveness, customer service, and marketing are the means to enrich customers' satisfaction. All the three should be managed jointly through relationship marketing.

References

1. Van House, Nancy A., et al. *Measuring Academic Library Performance : A Practical Approach*. Chicago: American Library Association, 1990. 1-5.
2. Zeithaml, Valerie A., et al, *Delivering Quality Service: Balancing Customer' Perceptions and Expectations*. New York: The Free Press, 1990. 19- 26, 75.
3. Berry, L., et al , "SERVQUAL: A multiple-item scale for measuring customer perception of service quality." *Journal of Retailing* 64 (Spring 1988) : 12-40.
4. Ghosh, Bhabani Kumar and Goswami, Sajal Kanti. "Service Quality to Customer Relationship profitability." M.N. Nagraj, et al (eds): *Library and Information Profession at the Cross Roads: Papers 19th National Seminar of Iaslic*, Nov. 13-16, Bhopal. Calcutta: Iaslic, 2000. 185-192.
5. Bhattacharyya, Swati. "Relationship marketing in library and information services." M.N. Nagraj, et al (eds): *Library and Information Profession at the Cross Roads: Papers 19th National Seminar of Iaslic*, Nov. 13-16, Bhopal, Calcutta: Iaslic, 2000. 243-250.
6. Banwet, D.K and Datta, B. "Effect of service quality on post visit intentions: The case of a library." *Annals of Library and Information Science and Documentation* 47.2 (2000): 41- 48.
7. Cameron, K., "Domains of organizational effectiveness in colleges and universities." *Academy of Management Journal* 24 (1981): 25-47.
8. Scott, W.R. *Organizations: Rational, natural, and open systems*. Englewood Cliffs, NJ: Prentice-Hall. 1987. n.pag.
9. Cameron, K. Op. cit.
10. Scott, W.R. Op. cit.
11. Cameron, K. Op. cit.
12. Scott, W.R. Op. cit.
13. Cameron, K. Op. cit.
14. Scott, W.R. Op. cit.
15. Colman, Vicki, et al, "Towards a TQM paradigm: Using SERVQUAL to measure library service quality." *College and Research Libraries* (May 1997): 237-251.