Online Public Access Catalogue Usage at Panjab University Library, Chandigarh

Shiv Kumar and Ranjana Vohra*

Department of Library and Information Science Panjab University, Chandigarh-160 014 E-mail: shiv1977@gmail.com; E-mail: ranjanashiv@yahoo.com

ABSTRACT

This paper examines Online Public Access Catalogue usage by the students and faculty of Panjab University Library, Chandigarh. OPAC, an information retrieval system, has revolutionised access to bibliographic information through search capabilities such as keyword searching, Boolean searching, truncation, proximity searching, and item identity number searching. A questionnaire-based survey on use of OPAC was conducted forA.C. Joshi Library on various categories of users such as faculty members, research scholars and postgraduate students, covering different disciplines such as basic sciences, applied sciences, social sciences, and humanities. The paper discusses various aspects of OPAC such as frequency of use, purpose, ease of use, satisfaction level, etc. An attempt is also made to explore the reasons for the least used search options of OPAC. The results of the study reveal that a significant number of users search information regarding the library material through OPAC despite encountering problems. Lack of basic skills among users was found to be the major reason for not utilising full features of OPAC. It is suggested that University library should organise quality instruction programmes to improve knowledge and skills of the users.

Keywords: Catalogue, information retrieval, library automation, OPAC, user study, university library

1. INTRODUCTION

A large number of libraries in India have automated their operations and services using this technology to fulfil their users' needs. Public catalogue, which is an important service of the library is not exceptional to computer technology. Computerised catalogue is termed as Online Public Access Catalogue (OPAC). It acts as an information retrieval system for the user. OPAC has revolutionised access to bibliographic information through search capabilities such as keyword searching, Boolean searching, truncation, proximity searching, and item identity number searching. These were not possible in the traditional catalogue.

Today, a number of libraries are providing OPAC service to their users to find out their documents. In such a situation, the libraries should examine periodically how much comfort the users feel with this service so that some initiatives could be taken timely to improve this facility. Therefore, a study has been undertaken on the use of OPAC by the users in Panjab University Library, Chandigarh.

2. A.C. JOSHI LIBRARY—A BRIEF INTRODUCTION

The Panjab University Library is officially known as A.C. Joshi Library after the name of the illustrious Vice-Chancellor of the University. The Library houses more than 6.8 lakh volumes including books, bound volumes of periodicals, theses/dissertations, rare books, reports, and government documents, back files of newspapers, other non-book material, and manuscripts. It is subscribing approximately 662 current periodicals. This library also possesses facilities like photocopy, Internet, CD-ROM databases, etc. It is equipped with computer and communication network which is connected to campus-wide network. It has its own server to support automation of library. It is automated with integrated library management software named Techlib Plus. All library operations are being operated with the help of the computer and it is providing OPAC facility to the users. In 2003, INFLIBMENT Centre came up with a consortium project named 'UGC-INFONET' to provide access to the universities with electronic resources through a central agency. The Panjab University is also a part of this

consortium from its beginning. As per the usage statistics provided by various publishers to INFLIBNET, the Panjab University is among the top ten universities using electronic resources¹⁻².

3. OBJECTIVES OF THE STUDY

The present study aimed to achieve the following objectives:

- To assess as to what extent the users are using OPAC.
- % To find out the purpose of use of OPAC.
- To know whether the users face problems while using OPAC.
- % To study the satisfaction of users while using OPAC.

4. SCOPE OF THE STUDY

The present study included faculty members, research scholars and postgraduate students of Panjab University Library, Chandigarh. The main aim of the study was to assess the purpose, knowledge and frequency of using OPAC and problems faced by users. A sample of 252 users was taken covering various disciplines such as basic sciences, applied sciences, social sciences and humanities.

5. METHODOLOGY

A questionnaire was designed to gather primary data which was distributed among 252 users constituting 24 faculty members, 82 research scholars and 146 postgraduate students of A.C. Joshi Library during 2008-2009 session. Proper care was taken to select the representative sample from each category proportionately on the basis of total strength of category concerned.

A total of 190 out of 252 respondents completed and returned the questionnaires giving overall, a response rate of 75.5 per cent. Out of 190 respondents, 17 (8.9 per cent) faculty members, 61 (32.1 per cent) research scholars, and 112 (58.9 per cent) postgraduate students. Out of the responses, 60 (31.6 per cent) were received from social sciences, followed by 53 (27.9 per cent) from basic sciences, 43 (22.6 per cent) from applied sciences, and 34 (17.9 per cent) responses from humanities.

The investigator also had discussions with some users on various issues of OPAC to make the data and information more convincing and authentic. The collected data was analysed by using SPSS statistical package.

6 DATA ANALYSIS AND FINDINGS

6.1 Features of Techlib Plus OPAC

Techlib Plus is an integrated modular system for automating functions for libraries and information centres. It is DOS-based system and developed by Information Dimensions Inc, Dublin, Ohio. The features available in Techlib Plus OPAC are shown in Table 1. To present the features of OPAC, a check list was designed on the basis of the checklist developed by Babu and O'Brien³ but some modifications were made in it. It covers interface, search capabilities and facilities of the OPACs.

The evaluation of the checklist indicates that this OPAC provides basic search options and facilities, i.e., simple search, expert search, Boolean search and truncation search. It offers access points by author, title, subject, call number, keyword, and combined search for searching information/documents.

While it does not provide search limit by year of publication, it offers search limits by the type/form of publications. It has provision for both short and long bibliographic displays. Although it provides user assistance/on-screen help to the user on its search interface, but it lacks facilities of spell check online tutorial and procedural prompts or guidance to indicate next steps during a search.

There is no provision for new arrivals, reservation, renewal, patrons to see the information regarding the books on loan, over dues, etc., and provision to indicate the search interface separately for novice or experienced/expert users. The facility of providing links to electronic sources is also not available. Thus, the features and facilities of this OPAC need to be strengthened so as to execute the search effectively and efficiently.

6.2 Frequency of OPAC Use

It is important to know how frequently the users use OPAC to locate their required documents. The frequency of using OPAC indicates its value in the library. Table 2 highlights the frequency of OPAC use. The table depicts that out of the total 190 users very few, i.e., 3 (1.6 per cent) were not aware of OPAC service. Only 13 (6.8 per cent) used OPAC very frequently, almost one-third of users used frequently, 53 (27.9 per cent) used occasionally, 19 (10 per cent) used rarely, and 36 (18.9 per cent) never used OPAC. Table 2 further shows that majority of users regularly (very frequently and frequently) used OPAC and a little more than one-fourth users moderately/occasionally used OPAC.

Table 1. Features of Techlib Plus OPAC

Features		Features	
Types of searches		Entry structure	
a) Simple/basic,	\checkmark	a) Support for MARC format	,
b) Advance/expert/complex	\checkmark	b) Provision for catalogue	✓
c) Boolean search	\checkmark	card form display	
d) Truncation	\checkmark	c) Both MARC format and library structured	
e) Phrase searching	\checkmark	entry format	
f) Browsing capability		User as sistance/help	
g) Word adjacent search		a) On-screen help	✓
h) Proximity search		b) Provision of online tutorial	
in Froming Scalon		c) Provision of a list of search types	
Access points		d) Provision of procedural prompts or guidance	
a) Author	✓	to indicate next steps during a search	
b) Title	✓	e) Spell check facility/software	
c) Subject heading	✓	f) Null retrieval produces a message	✓
d) Keyword	✓		•
e) Keyword in author	✓	g) Requires little intervention	1
f) Keyword in title	\checkmark	by the staff	•
g) Keyword in subject	✓	Services/facilities	,
h) Combined search such as	./	a) Interface with the circulation system	✓
author/title, author/keyword	v ./	b) Provision for the options such as:	,
i) Call/Class number j) Series	•	i) Document check out	✓
k) Accession no./barcode no.		ii) ILL iii) Renewal	
I) ISBN /ISSN		iv) Reservation	
Socrab atratagu		v) Any other	
Search strategy a) Displays search strategy		c) External links	
b) Provides examples under each		i) Link to electronic sources	
type of search		ii) Access to Z39.50	
c) Save the search strategy		d) Provision of online mailboxes	
Search limits		for users' suggestion and comments	
a) Provision for search limit by:		e) Provision for copy location	✓
i) Year		General	
ii) Language		a) Provision for log-on/user password	✓
iii) Type of publication	✓	b) Customisation of the features	
Ph.P. and the Park		as per the library requirement	\checkmark
a) Provision for bibliographic		c) Has time out features, if desired	
displays:		d) Facility for updating/adapting	
i) Short display		new versions	
ii) Full display		e) Explains the comments	
, , ,	,	and coverage in the OPAC	,
iii) Both (i) & (ii)	v	f) Exit/log-off instructions	✓
b) Provision to customise display		Other features	
screen		a) Linguistics capabilities	
c) Limiting the number of		i) Facility to accommodate multilingual	
records per display		libraries	✓
Output provision		b) Capability to suppress indexing/searching:	
a) Export/download of retrieved results		i) Initial articles ('a', 'an', etc.)	✓
b) Provision for the transmission of		ii) Special characters (Inverted	✓
retrieved records through e-mail		commas, colons, etc.)	
c) Provision for:		c) New arrivals	
i) Save retrieved results	✓	d) Patrons	
ii) Print retrieved results	✓	e) Separate search interfaces for	
		novice and experienced/expert users	

Table 2. Frequency of OPAC use

Frequency of use	No. of responses	Percentage
Unaware	3	1.6
Very frequently	13	6.8
Frequently	66	34.7
Occasionally	53	27.9
Rarely	19	10.0
Never	36	18.9
Total	190	100.0

6.3 Reasons/Problems for not Using OPAC

As presented in Table 2, among the respondents, 36 (18.9 per cent) 'never' used OPAC. These respondents were asked to give the reasons/problems for not using OPAC. Table 3 shows that 35 (97.2 per cent) of 36 respondents expressed 'Lack of knowledge', 26 (72.2 per cent) expressed 'Complication in use', 14 (38.8 per cent) expressed 'no output/null retrieval', 23 (63.8 per cent) expressed 'lack of on-screen help', 14 (38.8 per cent) expressed 'lack of assistance from library staff', 11 (30.5 per cent) expressed 'slow speed' and one-sixth expressed 'lack of computer systems'.

Table 3. Reasons/problems for not using OPAC

Reasons/problems	No. of responses	Percentage	
Lack of knowledge	35	97.2	
Complicated/confusing to use	26	72.2	
No output/null retrieval	14	38.8	
Lack of on-screen help	23	63.8	
Lack of assistance from library staff	14	38.8	
Slow speed	11	30.5	
Lack of computer systems	6	16.7	
Total*	36		

6.4 Other Methods Used by the Users

The opinions regarding other methods used by the users who never used OPAC are represented in Table 4. Out of 36 users 23 (63.3 per cent) consulted card catalogue to search the documents, 32 (88.8 per cent) searched the library shelves themselves. Further, 19 (52.7 per cent) seeked the help from library staff to find out the documents, and 22 (61.1 per cent) seeked the help from the friends. Thus, it is clear from Table 4 that majority of these users preferred to search shelves or consult card catalogue to locate the required documents.

Table 4. Other methods used by users

Other methods	No. of responses	Percentage
Consult card catalogue	23	63.3
Search shelves yourself	32	88.8
Ask library staff	19	52.7
Ask friends	22	61.1
Total*	36	

^{*}Total percentage is not hundred because of multiple responses.

6.5 Knowledge of Using OPAC

The users' knowledge about using OPAC is an essential factor for searching the resources of a library efficiently. Therefore, the opinions of the users were collected to rate the knowledge of using OPAC. Table 5 shows that only 11 (7.3 per cent) out of 151 users were of the views that they have excellent knowledge of OPAC, almost one-sixth of users above average, 57 (37.7 per cent) average, 45 (29.8 per cent) below average, and only 12 (7.9 per cent) extremely poor knowledge. Table 5 also shows that only one-fourth of users stated that they have adequate (excellent and above average) knowledge of using OPAC.

Table 5. Knowledge of using OPAC

Knowledge of using OPAC	No. of responses	Percentage
Excellent	11	7.3
Above average	26	17.2
Average	57	37.7
Below average	45	29.8
Extremely poor	12	7.9
Total	151	100.0

6.6 Purpose of Using OPAC

Table 6 shows the purpose of using OPAC is indicated. It depicts that 119 (78.8 per cent) users consulted OPAC to know the availability of the required document in the library, 47 (31.1 per cent) to know whether the required document issued/checked out, and 103 (68.2 per cent) to know the location of the required documents . It is clear from Table 6 that majority of users consulted OPAC to know the availability and location of the required documents.

Table 6. Purpose of using OPAC

Purpose of using OPAC	No. of responses	Percentage
To know the availability of required document	119	78.8
To know whether required document issued	47	31.1
To know the location of required document	103	68.2
Total*	151	

6.7 Frequency of Use of Access Points

The users come to library with various approaches to find out the required documents. They can search the information by author, title, subject, keyword, call/class number, and combined search through OPAC. Therefore, an attempt was made to know the most used approaches. Table 7 highlights the awareness about these access points and the frequency of their usage. It indicates that all the users were aware of the existence of author and title as access points in OPAC. As a result, 46 (30.5 per cent) users searched the documents by title

Table 7. Frequency of use of access points

Frequency	Author	Title	Subject	Keyword	Call/Class	Combined
of use					number	search
Unaware	0 (0.0)	0 (0.0)	17 (11.3)	36 (23.8)	73 (48.3)	111 (73.5)
Very frequently	38 (25.2)	46 (30.5)	5 (3.3)	10 (6.6)	1 (0.7)	0 (0)
Frequently	55 (36.4)	52 (34.4)	25 (16.6)	17 (11.3)	4 (2.6)	2 (1.3)
Occasionally	43 (28.5)	39 (25.8)	20 (13.2)	24 (15.9)	5 (3.3)	4 (2.6)
Rarely	15 (9.9)	14 (9.3)	32 (21.2)	44 (29.1)	8 (5.3)	11 (7.3)
Never	0 (0.0)	0 (0.0)	52 (34.4)	20 (13.2)	60 (39.7)	23 (15.2)
Total	151 (100)	151 (100)	151 (100)	151 (100)	151 (100)	151 (100)

very frequently, one-third searched the documents by title frequently, one-fourth search the documents by title occasionally, only 14 (9.3 per cent) searched the documents by title rarely.

Almost similar results were observed in case of Author access point. Only 17 (11.2 per cent) users were not aware of subject access point. One-fifth of the users used subject approach regularly (very frequently and frequently). Similarly, only 20 (13.2 per cent) used it occasionally, almost one-fifth of the users use it rarely and almost one-third of users used it never.

Almost three-fourth of users were aware of keyword and a significant number of users were not aware of call/class number and combined search. The data reveals that a few users used keyword approach and very few call/class number and combined search. It is clear from the Table that author and title were the most used access points.

6.8 Reasons for Most Used Access Points

As shown in Table 7, author and title were the most used access points. A few users used other access points regularly (Table 8). 'No response' in Table 8 indicates those users who do not use any of access points frequently. The table depicts that almost one-sixth of users responded that they have 'comparatively good knowledge to search' the most used access points, whereas 87 (57.6 per cent) 'comparatively easy to search'. The data further reveals that a large majority of users expressed that the most used access points were 'comparatively easy to search'.

Table 8. Reasons for most used access points

Reason	No. of responses	Percentage
No response	40	26.5
Comparatively good knowledge to search	24	15.9
Comparatively easy to search	87	57.6
Total	151	100.0

6.9 Problems Faced By Users in the Most Used Access Points

Table 9 indicates problems, if any, faced by the users in the most used access points. Notably, 60 (39.7 per cent) users faced the problems in searching the most used access points, whereas almost one-third of users did not faced any problem. Thus, the most used access points were not free from the problems.

Table 9. Problems faced by users in the most used access points

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Problem s faced	No. of responses	Percentage
No response	4 0	26.5
Yes	60	39.7
No	5 1	33.8
Total	1 5 1	100.0

6.10 Types of Problems/Difficulties in the Most Used Access Points

Table 9 shows that 60 (39.7 per cent) users encountered the problems in searching information through the most used access points. In this regard, these respondents were further asked to mention the problems/difficulties faced by them in the most used access points. Various types of problems/difficulties faced by these users are depicted in Table 10. Out of 60 users 23 (38.3 per cent) did not specify their problems/

Table 10. Type of problems/difficulties in most used access points

Problems/difficulties	No. of responses	Percentage
No response	23	38.3
No output/null retrieval	12	20.0
Lack of knowledge	4	6.6
Do not know to narrow/expand search results	9	15.0
Results/output too large or too small	6	10.0
Lack of on-screen help	2	3.3
No results/output but books in library	4	6.6
Total	60	100.0

difficulties. One-fifth responded 'No output/null retrieval, only 4 (6.6 per cent) respond 'Lack of knowledge', about one-sixth respond 'do not know to narrow/expand search results', 6 (10 per cent) opined 'results/output too large or too small, very few, i.e., 2 (3.3 per cent) opined 'lack of on-screen help' and 4 (6.6 per cent) opined 'no results/output but book in library'. Further analysis infers that the users are not acquainted with search strategy of OPAC to find out the relevant information and documents.

6.11 Reasons/problems for the Least Used Access Points

The reasons/problems for the least used access points are presented in Table 11. One-sixth respondents did not responded to this query. Forty four (29.1 per cent) stated 'Do not know how to use', 35 (23.2 per cent) 'complicated/confusing to use', and 20 (13.2 per cent) 'do not know how to narrow/expand search results'. While only 17 (11.3 per cent) express 'no output/null retrieval', 7 (4.6 per cent) 'lack of on-screen help' and very few, i.e., 3 (2 per cent) 'lack of assistance from library staff'. The data reveals that the responses for the first three problems/reasons in Table 11 accounted almost two-third of total 151 users. Thus, it can be inferred that there is lack of basic skills among the users in searching the least used access points.

Table 11. Reasons/problems for least used access points

Reasons/problems	No. of responses	Percentage
No response	25	16.6
Do not know how to use	44	29.1
Complicated/confusing to use	35	23.2
Do not know how to narrow/expand search results	20	13.2
No output/null retrieval	17	11.3
Lack of on-screen help	7	4.6
Lack of assistance from library staff	3	2.0
Total	151	100.0

During the survey, it was noticed that the majority of users were unaware that they have misspelled search terms, while OPAC of Techlib Plus requires exact search terms or spellings. The users rarely checked spelling errors, which resulted in 'no output/null retrieval'. They also faced difficulties for selecting appropriate search terms and could not formulate good search queries. Some previous studies have shown similar findings. Antell and Huang⁴ reported that users rarely utilised correct and complete subject terms and therefore retrieved zero results in almost half of their searches. Morupisi and Mooko⁵ discovered that the users faced common problems in using the OPAC that included typographical errors, spelling difficulties, appropriate search terms,

and search strategies. In addition, the users sometimes typed search terms in wrong fields as they applied 'title searches' in the field/search box of 'author' and consequently, they obtained no results. Chisman, Diller and Walbridge⁶ reported that typing a search in the wrong format led some of the users to conclude that the item they were looking for was not in the library's catalogue. Further, to confirm the spelling errors in metadata, five hundred entries were browsed randomly and no spelling errors were found there. A strong feature of this software is that it makes index/keyword for every word/term in database. Hence, catalogue database has sufficient keywords for selecting search terms.

6.12 Orientation Programme Received by Respondents

Table 12 shows the responses from the users about attending user orientation programmes. In this programme, the users are oriented about library facilities and services including OPAC. The Table highlights that majority of the users constituting 96 (63.6 per cent) were not aware of such programmes. Almost one-fourth of 151 users attended orientation programme, whereas 20 (13.2 per cent) users did not attended while they were aware of it. It is clear from the data that a small proportion of users attended orientation programme. During informal interview with the users, it was found that this programme helped in searching OPAC. Novotny and Cahoy⁷ found that library instruction could have a positive effect on user search behaviours in using OPAC.

Table 12. Orientation programme received by respondents

Orientation received	No. of Response	Percentage
Unaware	96	63.6
Yes	35	23.2
No	20	13.2
Total	151	100.0

6.13 Availability of Library Staff near OPAC

Table 13 shows the responses about the availability of library staff to assist the users for using OPAC. The Table reveals that only 15 (9.9 per cent) users found that library staff was always available near OPAC, almost one-sixth found library staff usually available, 59 (39.1 per cent) found occasionally available, 34 (22.5 per cent)

Table 13. Availability of library staff near OPAC

Availability of staff	No. of responses	Percentage
Always	15	9.9
Usually	26	17.2
Occasionally	59	39.1
Rarely	34	22.5
Never	17	11.3
Total	151	100.0

found rarely available and 17 (11.3 per cent) found never only a small group of users library staff was regularly (always and usually) available and a significant number of users occasionally available near OPAC.

6.14 Need of Assistance of Library Staff

Table 14 depicts the responses of the users about the need for the assistance from the library staff near OPAC. It depicts that 64 (42.4 per cent) out of 151 users always needed the assistance from library staff for searching OPAC, 43 (28.5 per cent) usually, about onesixth occasionally, 16 (10.6 per cent) rarely, and a very few, i.e., 4 (2.6 per cent) never needed the assistance. It is inferred that a large majority of users constituting 107 (71 per cent) needed regularly (always and usually) assistance from library staff near OPAC. In a similar study, Rajput⁸, *et al.* found that the dominant majority of users opined for assistance/advisor near the OPAC.

Table 14. Need of assistance of library staff

No. of responses	Percentage
64	42.4
43	28.5
24	15.9
16	10.6
4	2.6
151	100.0
	64 43 24 16 4

6.15 Adequacy of Computers for OPAC Use

Table 15 presents the opinions of respondents about the adequacy of computers/terminals available in the library for OPAC use. Table shows that only 15 (9.9 per cent) users strongly agreed that the number of computers was adequate, about half of users agreed with availability of computers, 44 (22.5 per cent) were neutral about it, while almost one-sixth disagreed with availability of computers, and very few, i.e., 3 (3.3 per cent) strongly disagreed with availability of computers. It is clear from Table 15 that majority of users opined that the number of computers was adequate for OPAC use.

Table 15. Adequacy of computers for OPAC use

Adequacy of computers	No. of responses	Percentage
Strongly agree	15	9.9
Agree	71	47
Neutral	44	22.5
Disagree	26	17.2
Strongly disagree	3	3.3
Total	151	100.0

6.16 Response Time for Displaying Results

The respondents were asked to indicate how fast OPAC system displayed the results after a search. The

data related to this query is depicted in Table 16. Among the respondents, 22 (14.6 per cent) said very fast display of the results after a search, 84 (55.6 per cent) said fast display of the results, 35 (23.2 per cent) said moderately fast display of the results, 8 (5.3 per cent) said slow display of the results, and very few (2 representing 1.3 per cent) said very slow display of the results. It is evident that a large majority of users (70.2 per cent) feel that the display of the results after a search was fast (very fast and fast). Besides this, during the survey the researchers observed instant display of results. Moreover, in case of large number of documents on a search term in the catalogue database, information retrieval took less than/or approximately one minute.

Table 16. Response time for displaying results

•	. , ,	
Speed of displaying the results	No. of responses	Pe rce nta ge
Very fast	22	14.6
Fast	84	55.6
Moderately fast	35	23.2
Slow	8	5.3
Very slow	2	1.3
Total	151	100.0

6.17 Overall Ease of Using OPAC

In response to the overall ease of using OPAC, only a few users 7 (4.6 per cent) expressed that OPAC is very easy to use, 24 (15.9 per cent) easy to use, 53 (35.1 per cent) moderately easy to use, 54 (35.8 per cent) difficult to use and only 13 (8.6 per cent) found OPAC very difficult to use. Table 17 shows that majority of users (45 per cent) felt that OPAC is difficult (difficult and very difficult) to use and some users (35.1 per cent) said OPAC is moderately easy to use.

As discussed earlier in Section 6.10 and 6.11, the users sometimes receive too large or small results; they do not know properly to narrow/expand search results. The lack of understanding of the capabilities of OPAC also created difficulties for users. Such users are generally unable to apply effective search strategies and to use all search features. Apart from this, OPAC users are also accustomed to simplicity of Web seaching. Therefore, users felt that OPAC is complicated/confusing to use.

Table 17. Overall ease of using OPAC

No. of responses	Percentage
7	4.6
24	15.9
53	35.1
54	35.8
13	8.6
151	100.0
	7 24 53 54 13

Many researchers have also noted that the users experience that OPAC is difficult to use. One of the reasons mentioned commonly in research is that users usually use the OPAC as they do a search engine. Search engines and OPACs have certain similarities; however, the system complexity of OPACs is far greater than that of search engines9. While examining over 17,000 OPAC sessions using transaction logs, Malliari and Kyriaki-Manessi¹⁰ discovered that individuals use very few of the search features provided by the system. Mulla and Chandrashekara¹¹ investigating the libraries of Engineering Colleges in Karnatka found that OPAC systems were not user-friendly. The users were facing certain difficulties in making proper use of the OPAC facility. Moreover, information retrieval (IR) systems are not too much simple to unserstand. OPAC as an IR system is more complicated and requires a certain level of expertise to use.

Borgman¹² pointed out that information retrieval in an OPAC requires conceptual knowledge of the IR process, semantic knowledge of how to effectively execute a query, and technical skills to implement the query. Hence, OPAC searchers are facing difficulties for a long time.

Further, Techlib Plus is a DOS-based system. These types of systems are difficult to use in comparison to Windows-based systems because users have to give a command to operate such systems. Windows-based systems provide various searching functionalities and flexibilities to get the search results with little effort.

6.18 Overall Satisfaction Level in Using OPAC

Table 18 exhibits overall satisfaction level of users in using OPAC. It highlights that out of 151 users a very few, i.e., 2 (1.3 per cent) were fully satisfied with OPAC use, almost one-fourth were satisfied a little more than andone-third moderately satisfied with OPAC use. Almost one-third were dissatisfied with OPAC use, 11 (7.3 per cent) were very dissatisfied with OPAC use.

Evidently, it is clear that only a small portion of users is satisfied (fully satisfied and satisfied) with OPAC working.

Table 18. Overall satisfaction level in using OPAC

Satisfaction level	No. of responses	Percentage
Fully satisfied	2	1.3
Satisfied	37	24.5
Moderately satisfied	53	35.1
Dissatisfied	48	31.8
Very dissatisfied	11	7.3
Total	151	100.0

7. SUGGESTIONS

On the basis of the findings, the following suggestions have been made for optimum utilisation of OPAC facility in the University library:

- The study indicates that OPAC system is difficult to use. The major reason of complexity of use is that OPAC is DOS-based system. Therefore, the library should provide Windows-based OPAC system that has simple search options.
- It is observed that the OPAC does not offer various essential features such as spell-check software, quick search, online reservation, online renewal, new arrivals and book cover display facilities. Besides these features, there is no provision for links to electronic sources/content pages. Therefore, it is strongly recommended that the said features must be incorporated in OPAC. Such features may enhance its optimum utilisation and also make it more attractive and useful.
- OPAC should have more user-friendly online help that may provide guidance to users to start a search and to indicate next steps during a search.
- It was also felt that the system designer should provide two separate search interfaces on OPAC system for novice and experienced/expert users.
- To facilitate the users, the University library should organise quality instruction programmes on the use of different techniques and strategies in retrieving information about the documents. The instruction programmes may enhance user knowledge and basic skills for searching OPAC. In addition to this, printed instruction may be provided to understand the functions of OPAC.
- It is evident from the study that the users were not having basic skills of searching OPAC. Therefore, they needed the assistance of library staff near OPAC terminals for optimum utilisation of this service.

8. CONCLUSIONS

Users usually come to OPAC when they want to search the required materials on the topic of their interest. In this process, OPAC, as a retrieval tool, plays an important role for finding out the required documents. From the present study, it is evident that majority of users use OPAC to know the availability and location of library materials, and at the same time, they expressed that they face difficulty in its use. It was found that users have not acquired basic skills to apply effective strategies such as

subject, keyword, call number, and combined search options. The major reasons for the least used search options are 'do not know how to use', 'complicated/ confusing to use', and 'do not know how to narrow/expand search results'. Therefore, the University library should arrange instruction programmes on the effective techniques and strategies of OPAC so that maximum number of users could utilise this facility efficiently. Further, library professionals have to ponder what changes should be made to it. In this regard, library professionals should convey users' problems as well as their needs and requirements to library software developers; they should also collaborate with the software vendors. Finally, the system designers should design user-friendly OPAC.

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