

USE OF E-RESOURCES BY RESEARCH SCHOLARS: A CASE STUDY OF KURUKSHETRA UNIVERSITY, KURUKSHETRA, INDIA

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Abstract

The main purpose of this paper is to examine the use of electronic resources by the research scholars of Kurukshetra University, Kurukshetra (KUK) located in Haryana, as provided by the Jawaharlal Nehru Central Library of the University. Survey method with a structured questionnaire was used to conduct this study. The study found that research scholars were using mainly e-resources (45.65 percent) on daily basis, such as e-journals (41.30 percent), search engines (38.04 percent) and websites (39.13 percent). However majority of them needed training regarding information retrieval (63.04 percent) and discipline specific (36.96 percent). The main purpose of using e-resources is for research and development work (85.87 percent), publishing article/books (91.96 percent) and to up-to-date with developments in own field (53.26 percent). Slow access speed (77.17 percent), enable to find the needed e-resource (42.83 percent) and overcrowded information in e-resources (66.30 percent) are the major problems in accessing the e-resources. This study provides the suggestions for further improvement of access of electronic resources to fulfil the research needs of scholars.

Key Words: Electronic Resources; Research Scholars; User Study; University Library; Kurukshetra Universities.

1.0 Introduction

Electronic resources (e-resources) have given us the power to get information timely and manage information more effectively and also the means to dissolve barriers and offer equity of access to knowledge and information which can meet the instant desire of users to have an access to information Madhusudhan (2010). Kurukshetra University, Kurukshetra (KUK) is the oldest and leading university of Haryana, established in the 1970 and now secured 10th position among the top 100 universities of the country. It provides a great opportunity for research in sciences, social sciences, humanities and arts. University library is the central hub of research in an academic setting and quality research, education and teaching is impossible without the library. In this regard, the Jawaharlal Nehru Central Library of KUK plays a significant role in the research and development activities of the university by providing access to the vast range of services, more than 0.5 million volumes, database, journals, periodicals and numerous electronic resources. The present study tries to know about the use of electronic resources by the research scholars as provided by the Jawaharlal Nehru Central Library of Kurukshetra University, Kurukshetra. The main purpose of this study was

to learn what, why and how the e-resources were used for, the find out the main problems tackled by the research scholars while using e-resources, their views on the main features of e-resources and the sources from where the research scholars got information regarding e-resources and their use.

2.0 About Jawaharlal Nehru Library

The Jawaharlal Nehru Library, central library of Kurukshetra University, having a huge collection comprising near about 5 lakhs of learning resources including books, periodicals, theses, CD ROM databases, books and theses on CD in the major areas such as arts, social sciences, humanities, basic sciences, pure sciences, management, etc. The library provides access to about 250 print journals and 8500+ e-journals and number of Bibliographical Databases under UGC-E-ShodhSindhu Consortium. (kuk.ac.in)

3.0 Literature Review

There is lot of literature exists on use of electronic resources by the researcher, faculty members, students and academic communities. Several studies have critically examined here like an Indian study on perception and usage of e-resources and the internet by Indian academics by Kumar and Kumar (2010) revealed that students and faculty member were aware of ER and internet and use electronic information for their academic work. More than 70 percent participants of study opined that E-resources provided more comprehensive information and many of them learnt about ER by trial and error and advice from friends. Madhusudhan (2010) found in his study on use of electronic resources by research scholars of Kurukshetra University that the main purpose for using e-resources was research work of the scholars and main source to know about ER was guidance from teachers. 62 percent research scholar used e-resources daily and e-journals were most used sources whereas google was the most used web browser while the main problem was slow access speed to the e-resources. Tahir, khalid and Shafique (2010) discussed in their study “use of electronic information resources and facilities by humanities scholars” that humanity scholar were regular users of varieties of electronic technologies however they have faced some problems regarding information scattering on too many sources that is difficult to search without assistant and lack of technical support, cost factors and information explosion. Ali (2005) expressed the search behaviour of users of IIT Delhi regarding the use of electronic information services (EIS) that 61.66 percent of users searched by direct keywords and Boolean logic and truncation were the most often used search facilities however lack of printing facility (41.34 percent) and trained personnel (34 percent) was the major reason to discourage the users from using EIS. Sharma, Singh and Sharma (2011) found that e-journals was the most preferred e-resource among the researchers of National Dairy research Institute (NDRI) and National Bureau of Animal Genetic Resources (NBAGR) and animal science and Agricola was the most used online databases. However slow speed of internet, poor design of website and difficult to retrieve the contents were major problems in using e-resources. Chirra and Madhusudhan (2009) found the 26 percent of total research scholars of Goa University use UGC INFONET e-journals daily by using Boolean search strategy (52 percent) and 76 percent research scholars needed training for retrieving e-journals. Limited access to the full articles and system speed was the major problems in using e-journals. So, in the present study an attempt has been taken to examine the use of electronic resources among the research scholars with reference to Kurukshetra University, Kurukshetra.

4.0 Objectives of the study

The present study has the following objectives:

- To know about the main purpose of using e-resources and sources from which research scholars getting information about e-resources.
- To examine the main features of e-resources which researchers like and main problems concerned with using e-resources.
- To know about most used e-resources and to what extent researchers find key material from e-resources.
- To know about the satisfaction level of research scholars with using e-resources.
- To know about the frequency of use and how e-resources are advantageous for research scholars.

5.0 Methodology

The survey was conducted using a structured questionnaire circulated among the 148 Ph. D. research scholars of all the department of Kurukshetra University running doctoral program. A total number of 92 questionnaires were duly

filled back with response rate 62.16 percent. The survey was conducted during March 2018 using accidental sampling method. The received data has been analysed with the help of Statistical Package for Social Sciences (SPSS) version 20.0 and analysed data has been tabulated and converted into graphical form by using Microsoft Excel version 2013.

6.0 Results analysis and discussion

Table 1 shows the general information of the respondents such as gender and age group which indicates that out of the total 92 respondents, 52 (56.52 percent) were male and 40 (43.48 percent) were female. 45.65 respondents were between the age group of 26-28 years and 23.91 percent are between 23-25 years and remaining 30.43 percent are above the age of 29 years.

Researchers were asked how often they are using different e-resources such as e-journals, search engines, websites, e-database, etc. and table 2 in this context shows that 41.30 percent researcher are using e-journals daily and 28.26 percent are using several times a week, 16.30 percent once a week, 8.70 percent couple of times a month. While search engines are being used daily by 38.04 percent researchers, several times a week by 21.74 percent and once a week by 19.57 percent, although there are 7.61 percent researches are such, who are using less often. 39.13 percent researcher are using websites daily, 30.43 percent several times a week and 15.22 percent using once a week. E-databases are being used daily only by the 8.70 percent researchers, several times a week by 28.26 percent, once in a week by 35.87 percent and less often by 11.96 percent. CD ROM and other databases are being used less often by 55.43 percent and daily only by 2.17 percent researchers.

Table 1: Demographical Profile of the Respondents

Age Group	Gender				Total	
	Male		Female			
	N	%	N	%	N	%
23-25	13	59.09	9	40.91	22	23.91
26-28	23	54.76	19	45.24	42	45.65
29 & Above	16	57.14	12	42.86	28	30.43
Total	52	56.52	40	43.48	92	100.00

Table 2: Frequency and type of E-resources Used

Source	Daily N (%)	Several times a week N (%)	Once a Week N (%)	Couple of times a month N (%)	Less Often N (%)
E-Journals	38 (41.30)	26 (28.26)	15 (16.30)	8 (8.70)	5 (5.43)
Search Engines	35 (38.04)	20 (21.74)	18 (19.57)	12 (13.04)	7 (7.61)
Websites	36 (39.13)	28 (30.43)	14 (15.22)	10 (10.87)	4 (4.35)
E-Database	8 (8.70)	26 (28.26)	33 (35.87)	14 (15.22)	11 (11.96)

CD ROM and Others	2 (2.17)	6 (6.52)	11 (11.96)	22 (23.91)	51 (55.43)
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The KUK research scholars were enquired to indicate from where they get information regarding the e-resources? Figure 1 in this context clearly reveals that 62 (67.39 percent) researchers consult library webpage in this regard followed by 59 (64.13 percent) who got informed from their teachers and research supervisors and 56 (60.87 percent) get information from their friends. 34.78 percent researches consult library personals for e-resources and 30.43 percent were got informed by trial and error method.

Information sources are used to fulfil the specific purpose of information requirement, so that the researcher scholars were asked about their purposes behind using e-resources. Figure 2 shows that majority of respondents i.e. 79 (85.87 percent) using for their research/development work which helps in their thesis/dissertation/project work followed by publishing articles or books (51.96 percent). However 49 (53.26 percent) researchers using e-resources to keep them up-to-date with developments in their own field, find relevant information 42 (45.65 percent) in their specialized areas, for getting new information (42.39 percent) and for teaching purpose (34.78 percent).

Figure 1: Source to get Information about E-resources

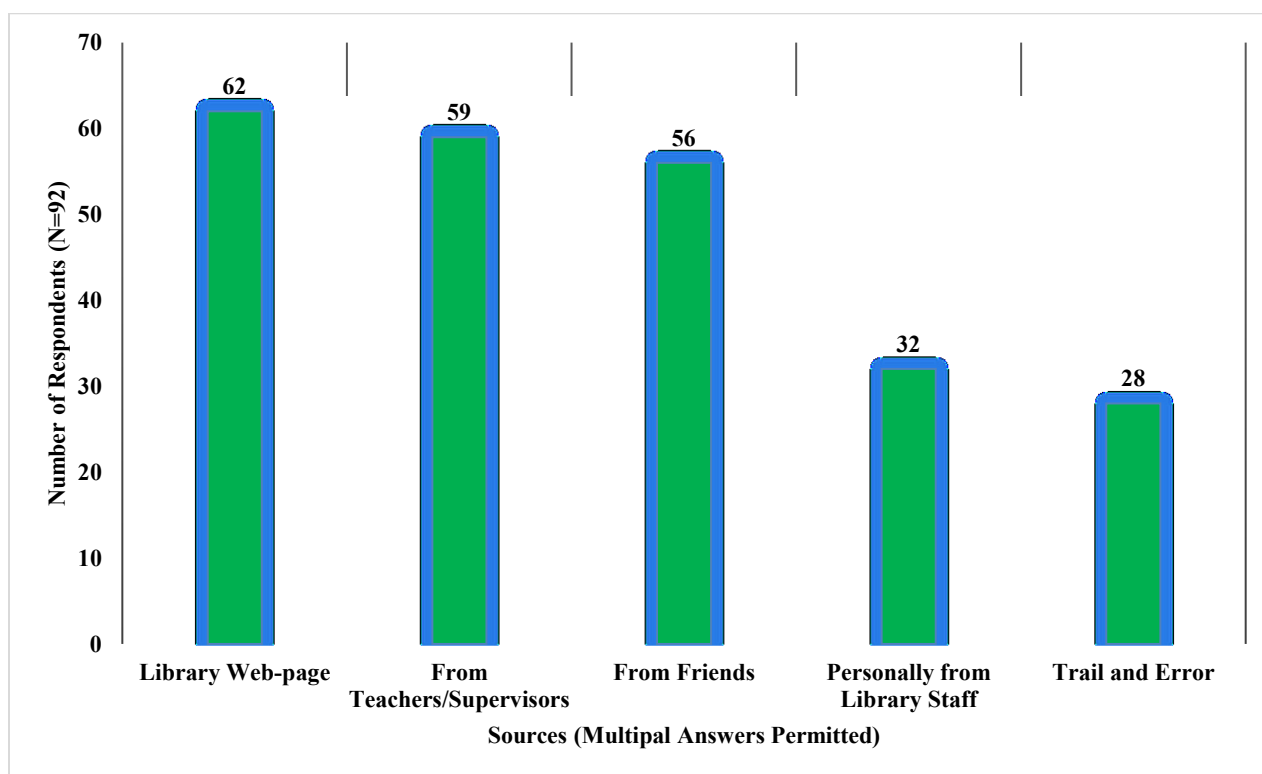
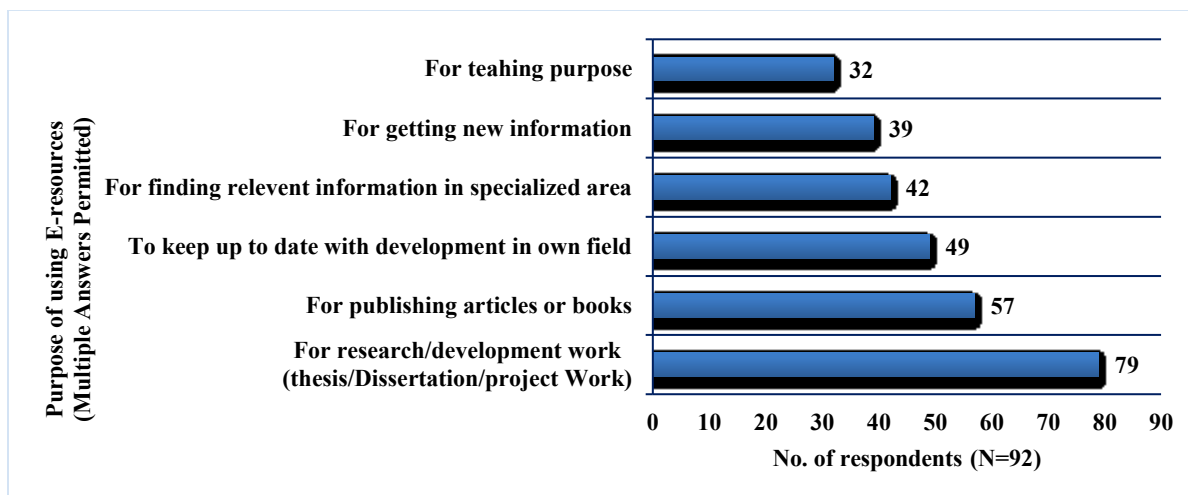


Figure 2: Purpose of Using E-resources

Any type of information or study material in a library is considered as the main asset which is always dynamic in nature, in this respect research scholars were requested to indicate the material which they want to acquire for library. As the figure 3 shows that 73.91 percent researchers are in favour with finish scientific journals followed by the foreign scientific journals (N=66, 71.74 percent), finish reference data bases and dictionaries (N=62, 67.39 percent), electronic books (N=61, 66.30 percent), foreign reference databases (N=59, 64.13 percent), glossaries and reference books (N=58, 63.04 percent) and factual databases (N=53, 57.61 percent). Researchers also want that the university electronic publication such as theses and dissertation should be available in library with some 46.74 percent strength.

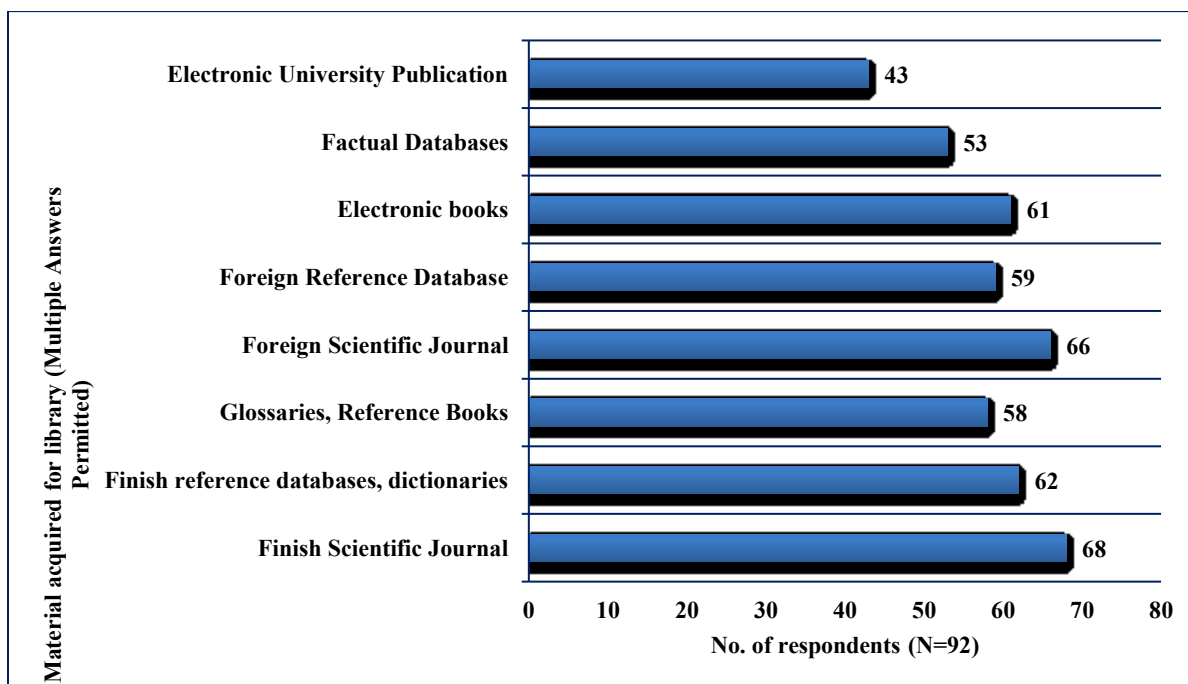
Figure 3: Material to acquire for library

Figure 4 shows the extent of using e-resources by the researchers, which indicates that 45.65 percent research scholars are using mainly e-resources while e-resources and printed material are equally being used by 39.13 percent of the

total research scholars. 13.04 percent of research scholars were using e-resources exclusively and only 2.17 percent were using printed material. These results shows that e-resources secured a vital place in research and development action of research scholars of the KUK. Out of the e-resources used, e-journals (68.48 percent) are being used by most followed by other e-resources such as search engines/websites (22.83 percent) and e-database (8.70 percent) see figure 5.

Figure 4: extent of Using E-resources

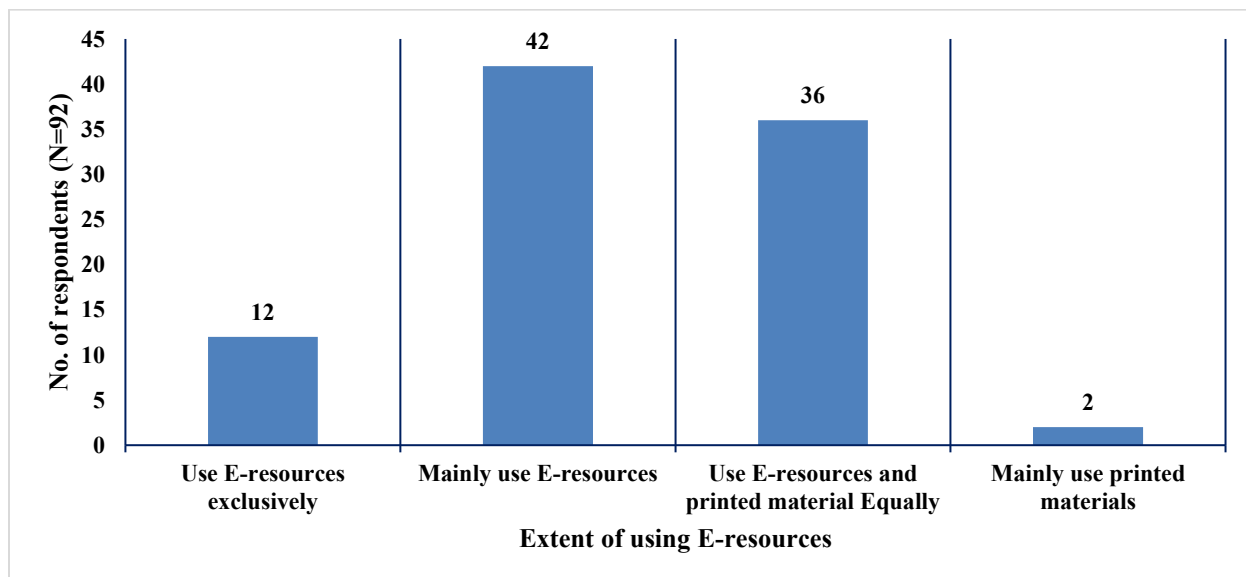
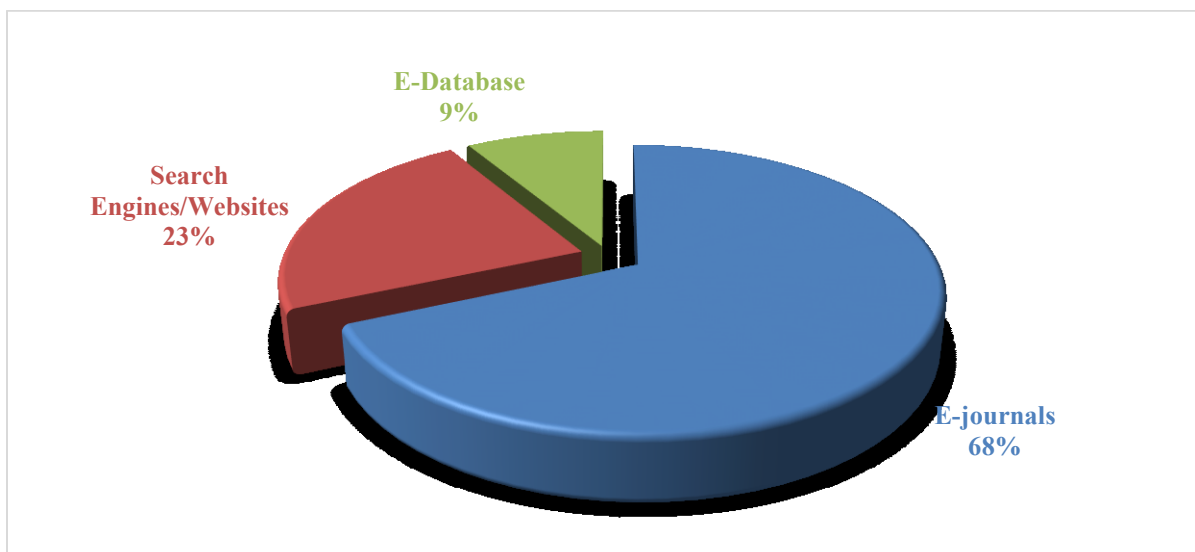


Figure 5: Most used E-resource



Research scholars were asked how e-resources are beneficial for them and table 3 describes that e-resources make easier to find the material considerably for 68.48 percent and to some extent for 17.39 percent researchers and extend the range of material they need for 44.57 percent researcher considerably and to some extent for 42.39 percent. 52.17 percent research said that e-resources keep them updated with development in their own field considerably, 36.96 percent said to some extent and 9.78 percent said not at all. E-resources improved the quality of research work for

47.83 percent researchers considerably and to some extent for 35.87 percent. Half of the researchers said e-resources inspire new thinking/idea considerably while 53.26 percent said that e-resources reduced the working time at same.

Table 3: Benefits of using E-resources

Statement	Considerably N (%)	To some Extent N (%)	Not at all N (%)	Uncertain N (%)
Made it easier to find the material I need in my work	63 (68.48)	16 (17.39)	9 (9.78)	4 (4.35)
Extended the range of the material I need in my work that is available	41 (44.57)	39 (42.39)	7 (7.61)	5 (5.43)
Made it easier to keep up with developments in my own field	48 (52.17)	33 (35.87)	9 (9.78)	2 (2.17)
Improved the quality of my work	44 (47.83)	34 (36.96)	6 (6.52)	8 (8.70)
Inspire new thinking/ideas	46 (50)	32 (34.78)	5 (5.43)	9 (9.78)
Shifted the focus of my work (Narrower/Broadened)	43 (46.74)	39 (42.39)	3 (3.26)	7 (7.61)
Reduces my working time	49 (53.26)	35 (38.04)	2 (2.17)	6 (6.52)
Reduced the amount of browsing of resources in libraries	35 (38.04)	46 (50)	4 (4.35)	7 (7.61)

Research scholars were requested to indicate the features of e-resources with multiple choices, they liked most. As figure 6 shows that 83 (90.22 percent) researchers like because of easily searchability of e-resources followed by easily downloadable (82.61 percent) and availability of links to other sources (75 percent). 63.04 percent researchers opined that they like e-resources because of multi-user usability at the same time and speed of e-resources (52.17 percent) while 44.57 percent scholars like e-resources because of their flexibility.

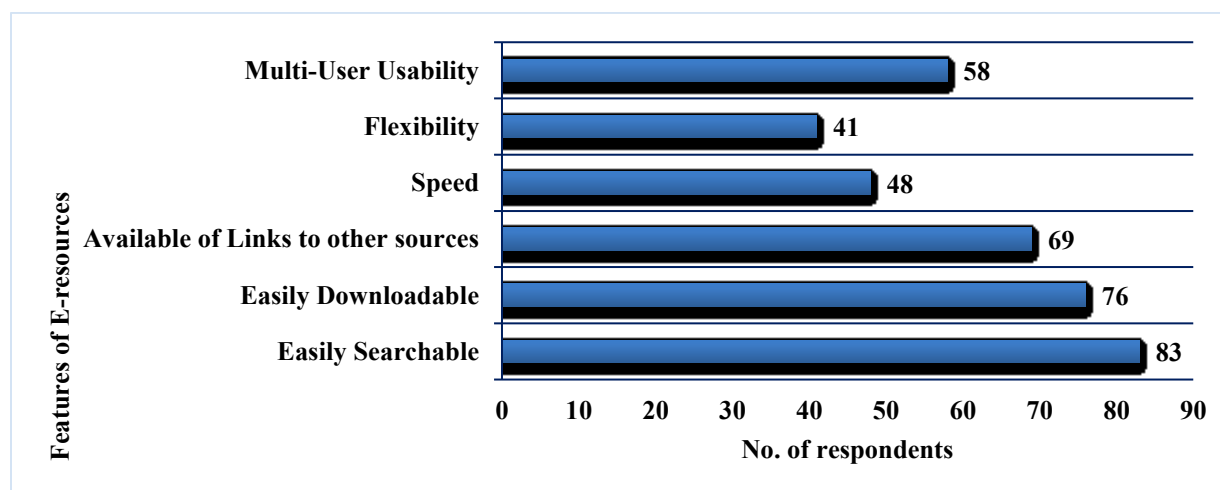
Figure 6: Features of E-resources Liked

Table 4 reveals that almost 97 percent of the total researches are able to find the key material from the e-resources, and out of these researchers 48.31 percent find the key material very easy whereas 43.82 percent find to some extent from the e-resources. Only 7.86 percent user found their key material from e-resources with difficulty. On the other side Table 5 shows the satisfaction level of the researchers regarding the use of key material obtained from the e-resources and it is found that 40.22 percent researcher were very satisfied whereas 53.26 percent were fairly satisfied and only 6.52 percent were fairly dissatisfied with the use of e-resources provided by the KUK.

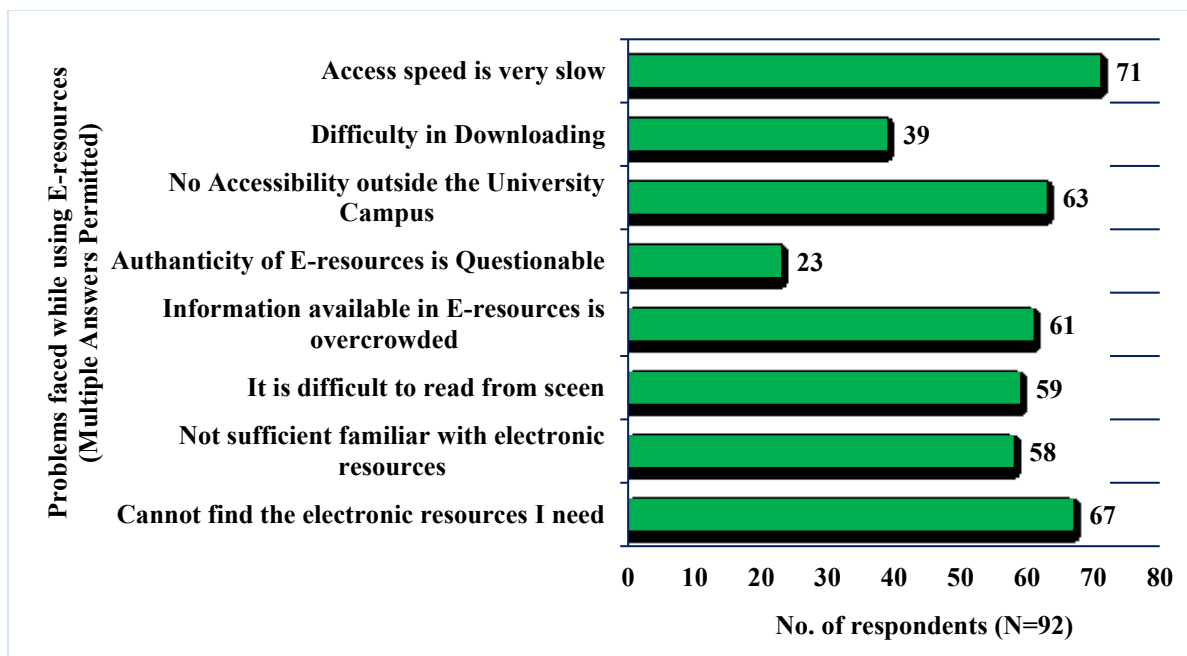
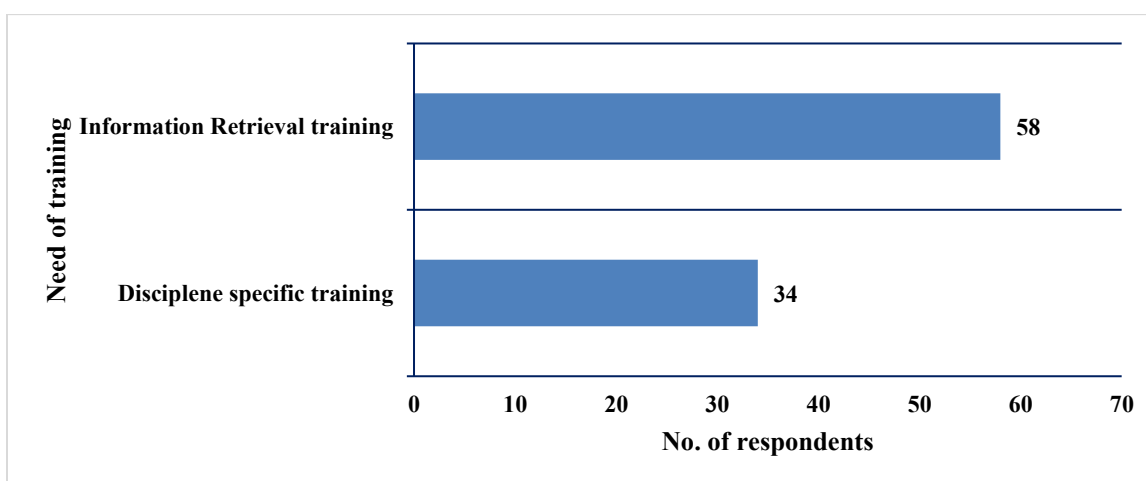
Table 4: Fine Key Material from E-resources

Number of respondents	Response N (%)			
	Yes			No
	89 (96.73)			3 (3.27)
	Very easy	To some extent	With difficulty	
	43 (48.31)	39 (43.82)	7 (7.86)	

Table 5: Satisfaction Level for Use of E-resources

Satisfaction level	No. of respondents	Percent
Very Satisfied	37	40.22
Fairly satisfied	49	53.26
Fairly dissatisfied	6	6.52
Total	92	100

Justification of the problems given by the researchers while using e-resources are likely to be solved by the library so that the use of its resources can be enhanced. Figure 7 revealed that the slow access speed is major problem while using e-resources as pointed out by the 77.17 percent scholars followed by unable to find out the needed e-resources (72.83 percent) and no accessibility of e-resources outside the university campus (68.48 percent). Another major problem found that information available in e-resources is overcrowded which is faced by 66.30 percent researchers, difficulty in reading from screen (64.13 percent) and not sufficient familiar with e-resources (63.04 percent). Difficulty in downloading is also one of the problems tackled by 42.39 percent researches and 25 percent said that the authenticity of e-resources is questionable.

Figure 7: Problems in Using E-resources**Figure 8: Need of Training**

Training is an essential part of an academic setting and library provides it throughout the session through orientation programme, seminars, training camps, exhibitions etc. regarding their services and how to access the resources. In this context, the researchers of KUK were asked whether they need training and as per the data, it shows in the figure 8 that 63.04 percent needs information retrieval training and remaining 36.96 percent research scholar needs discipline specific training.

7.0 Conclusion

In the view of increasing demand of information by the research scholars in an academic setting, e-resources can be a significant tool to tackle, perhaps all the problems in the field of research. As per the observations in this study it has been found that research scholars are more keen to access and retrieve the information through e-resources rather than printed one and meanwhile if there is any problem in all that they only require training. It reflects that researcher

wishes to keep him updated with the pace of development in their respective field at every possible cost. Library should provide a user friendly access of the e-resources to the researcher and should also carry out some training sessions in the library at the regular interval the earliest opportunity. Majority of research scholars get information about e-resources from library web page and personally discuss with their friends/colleague. So the library should design its web site in such a user friendly way that research scholar can easily access to library e-resources and professionals can work with research scholars to convert their opinion and suggestion into reality.

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