Use and Impact of E-Resources on Study and Research:
A Study on Research Scholars of University of Lucknow

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Abstract - *In this paper authors want to know the impact of e-resources on study and research. In this order 100 questionnaires were distributed to the research scholars of University of Lucknow out of which 80 responses collected from the respondents. Most of respondents (55%) for given questionnaires were male and maximum numbers of responses were received from respondents of age group of 21-25. Majority of respondents were using e-resources i.e. 96%. Most preferred electronic resources 38.18% are online databases. Majority of responses 68.62% were aware about e-resources from internet and 53.75% responses received from the respondents used it daily. 51.2% people used e-resources for study and research. Most preferred e-recourses website according to the respondents was Jstor.com than followed by Shodganga.*

Keyword: Shodganga, Research Scholars, E-Resources, Electronic Resources, Study and Research.

INTRODUCTION

The document that are in electronic form are said to be electronic resources. Before the few decade information communication technology has changed the meaning of libraries. In every spare of life we are surrounded by information communication technology. The history of electronic resources is very short the first e publishing came in the year 1980 in the form of text e-mails. As advanced of the technology first e journal was published in 1994-95 and it was

totally distributed by electronic letters by IEE (Institute of Electronic Engineers) (Bansode, 2013). E- Resources mainly refer to all of those materials that can be access through electronic devices like computer, tablet, mobile etc. e- resources provide many possibilities and opportunity by which user can access faster and quicker to information. Information communication technologies provide and interface by which user can build better understating with e-resources and information technologies (Mittal, 2013). There have so many e-resources are available like E-Journals, E-books, E-papers, E-images, E-audio, CD-ROMs, database, E-thesis, E-news papers, E-Magazines, www, E-research report, Digital Repository etc.

Electronic publishing are direct to new area of communication and information sharing which provide an opportunities for their users and creators. It also provide an interface between users and creators therefore they can frequently access the feedback and their suggestion for the improvement of theirs facility. The modern libraries are spending their much time to adopt or gain access to electronic resources from publisher or venders by which they will improves their facility in many ways (Dhanavandan, 2012). Organizing of e-resources is a very impotent and critical work to provide services to the users through library information system. The professionals of modern libraries are engage to develop a skill of organizing e-resources through information technologies like computing, data base management systems, networking and others skill related to IT environment.

SCOPE AND LIMITATION OF THE STUDY

The scope of the study is mainly concern with use and impact of e –resources on study and research in University Lucknow. This study is not done to compare e-resources with print resources or to stress that e-resources or more beneficial is compared to print resources. As both kinds of resources have their own significance in the post for information and knowledge. Study of e- resources comprises of:- Electronic Journals, Electronic books, Data bases etc.

OBJECTIVE OF THE STUDY

The main objectives of the present study are as follow:
- To study the E-Resources used by the user`s.
- To find out the awareness e-resources among the users.
- To explore the reasons for using e-resources.
- To study the problems faced by the users while accessing e-resources.
- To find out the frequency of using e-resources.
- To study the e resources available in central library of University of Lucknow.
- To study preferred format for using e-resources.
- To study the satisfaction of users about infrastructure to support the access of e-resources.

RESEARCH METHODOLOGY

Keeping in the view of objectives of the study survey method of research have been adopted by the researcher. Survey method can be descriptive, comparative or evaluative, it is basically

present oriented and it's more structured nature. It is a process of selecting sample from a population to obtain empirical evidence of contemporary nature to solve problems (Agarwal, 2005). A structured questionnaire was prepared to collect data from the users of e-resources in University Lucknow. Questionnaire contains various questions pertaining to the awareness and uses of e-resources. For this purpose a total of 100 questionnaires were distributed among researchers and students of Lucknow University. Out of 100 distributed questionnaires 80 valid responses were collected and then data was analyzed, tabulated, interpreted and present in form of tables and figures (Graphs).

DATA ANALYSIS

Data analysis and interpretation is basically concerned with the computation of data that further lead to the particular conclusion on the basis of data gathered. It is concerned with analyzing the data on the basis of some measurement and further testing of the hypothesis on the basis of the result of the data gathered.

Analysis of data is a process of inspecting, cleaning, transforming, and modeling data with the goal of discovering useful information, suggesting conclusions, and supporting decision-making. Data analysis has multiple facets and approaches, encompassing diverse techniques under a variety of names, in different business, science, and social science domains. After the analysis of data, the researcher has to accomplish the task of drawing inferences. This has to be done very carefully otherwise misleading conclusions may be drawn and the purpose of doing research will be ruined. Interpretation of data refers to that part of investigation or research that is associated with the drawing of inferences form the collected facts after an analytical study. Statically data itself have no utility till they are not properly interpreted.

Response of the Questionnaire

Table No 1

S. No	Distributed	Received	Percentage
1.	100	80	80%

The table 1 depict that 100 questionnaires were given to the Research scholars and in response 80 received. The above table shows that 80% responded were collected for given questionnaires and 20% not responded.

Gender wise Distribution of Respondents (Fig. 1)

Gender-wise Distribution

Female 45%

Male 55%
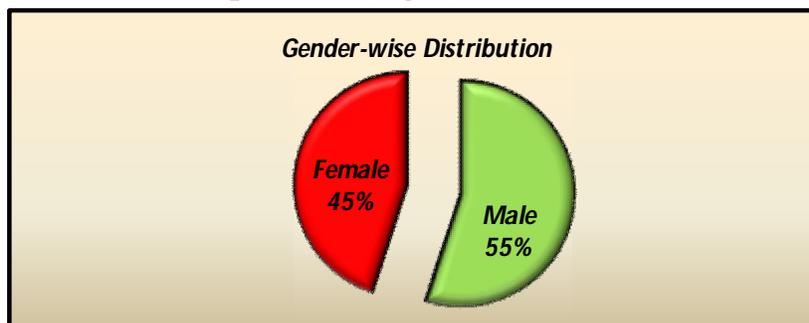
The above graph reveals that 55% male and 45% females were responded for given questionnaires, 80 (100%). It shows that male is more interested to respond the questionnaire.

Age Wise Distribution of Respondent

Table No 2

S.N.	Age	Respondents	Percentage
1.	Below 25 years	5	6.25%
2.	21-25	51	63.75%
3.	26-30	19	23.75%
4.	31-35	3	3.75%
5.	Above 35	2	2.5%
	Total 80	80	100%

The above table reveals that questionnaires were distributed to different age groups of respondents. Maximum responses were received from respondents of age group of 21-25 i.e. 63.75%. 23.75% from age group of 26-30, 6.25% from below 25 yrs., 3.75% from age group of 31-35 and 2.5% from aged above 35.

Use of Electronic Resources

Figure No 2
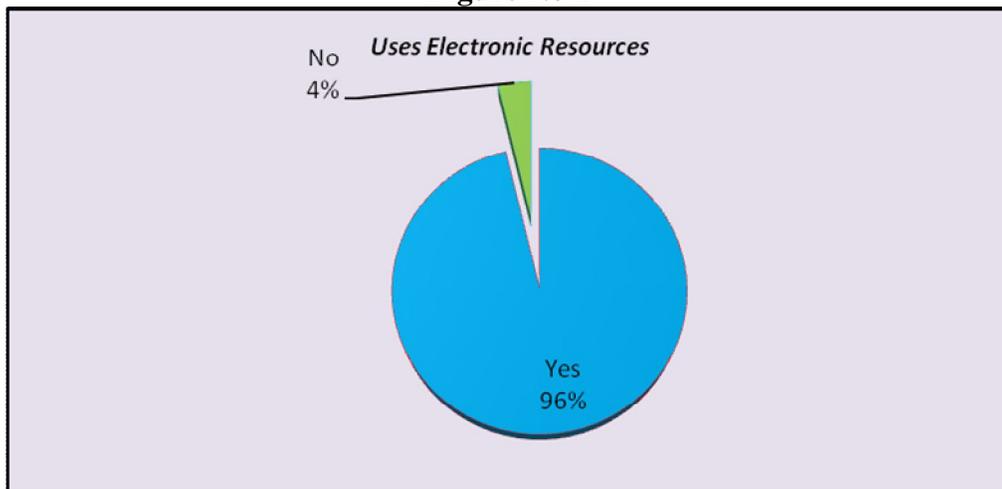
Researcher asked a question to the responded that they use electronic resources or not. The above graph reveals majority of respondents were using e-resources i.e. 96% and only 4% are not using electronic resources.

Types of Electronic Resources used by the Respondent
Table No 3

S.N.	Electronic resources	Respondents	Percentage
1	Electronic journals	27	24.5%
2	E- books	33	30%
3	Online-databases	42	38.18%
4	Any other	8	7.27%
	Total	110	100%

The above chart shows that mostly used electronic resources are online databases i.e. 38.18% followed by e-books 30%; 24.5% electronic journals and 7% other electronic resources.

Awareness about Electronic Resources
Table .No 4

S.N.	E- Resource	Respondent	Percentage
1.	By library staff	9	8.82%
2.	E- Mail alert service	15	14.70%
3.	Internet	70	68.62%
4.	Citations	6	5.88%
5.	Any other	2	1.96%
Total		102	100%

The above table reveals majority of responses 68.62% were aware from internet, followed by 14.70% email alert services; 8.82% by library staff; 5.88% from citations and 1.96% from others.

Impact of E- Resources on Study and Research
Figure No 4
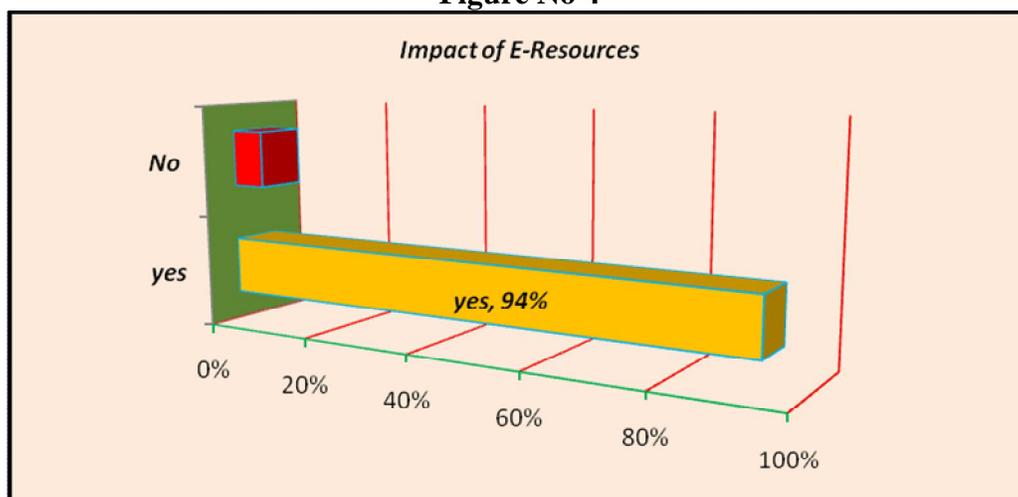
From the above table and chart we came to know that 94% people agree that electronic resources have impact on study and research and only 6% said no.

Frequency of using E- resources

Table .No 5

S.N.	Frequency	Respondent	Percentage
1.	Daily	43	53.75%
2.	Once in a week	14	17.5%
3.	Twice in a week	16	20%
4.	Once in a month	7	8.75%
	Total =	80	100%

The above table shows that in this question we asked to the respondents that how frequently they use electronic resources. The responses received from the respondents that 53.75% used it daily, 20% used twice in a week; 17.5% once in a week and only 8.75% once in a month.

Reading of E-resources non-stop

Table .No 6

S.N.	Time/	Percentage	Percentage
1.	More than two hours	18	22.5%
2.	More than one hours	40	50%
3.	Less than one hours	22	27.5%
Total =		80	

The above table shows that majority of respondents read electronic resources more than on hours i.e. 50%, 27.5% less than one hour and 22.5% read it more than two hours.

Browsing of E-resources for study & research

Table .No 7

| S.N.	Method	Respondent	Percentage
1.	Type the web address directly	37	38.14%
2.	Use search engine	47	48.45%
3.	Thorough library website	8	8.24%
4.	Any other	5	5.15%
	Total	97	100%

The Above table shows that respondents mostly uses search engines for browsing of e-resources for study and research i.e. 48.45%, 38.14% people browse e-resources by typing the web address directly , 8.24% through library websites and only 5.15% browse from other sources.

Most popular E-resources among the users:

Figure No 5
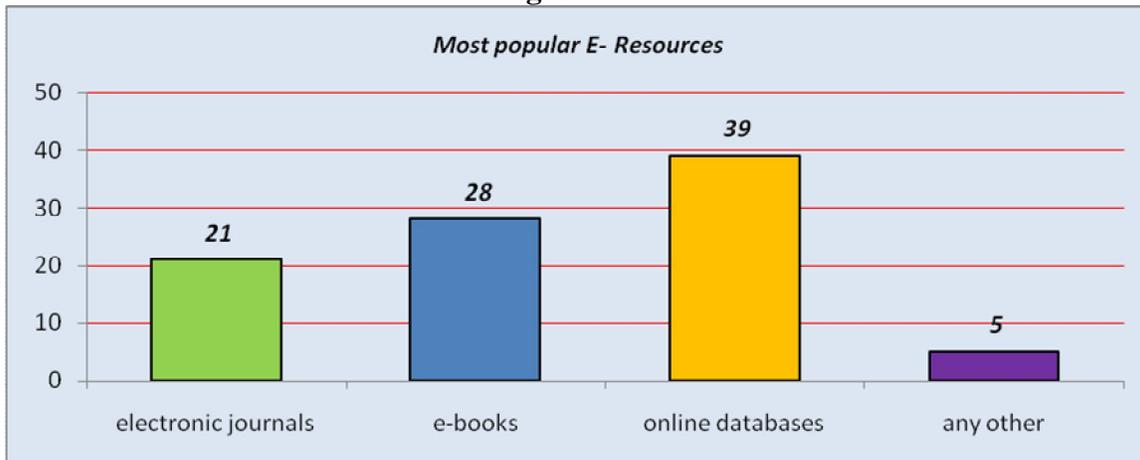
For that question 93 numbers of responses collated by the author in which the above chart revealed that most popular e-resources among them is online databases 41.93%, eBooks 30.1%, 22.58% electronic journals and 5.37% any other.

Place of Accessing E- resources

Table .No 8

S.N.	Place	Respondent	Percentage
1.	Library	13	12.62%
2.	Computer center	15	14.5%
3.	Hostel	7	6.7%
4.	Home	48	46.60%
5.	Cyber café	9	8.7%
6.	Any other	11	10.67%
Total		103	100%

The table revealed that 46.60% respondents access e-resources from home, 14.5% from computer center, 12.62% from library; 10.67 from other sources; 8.7% from cyber cafe and 6.7% from hostel

Participation in training program organized by Library

Figure No 6
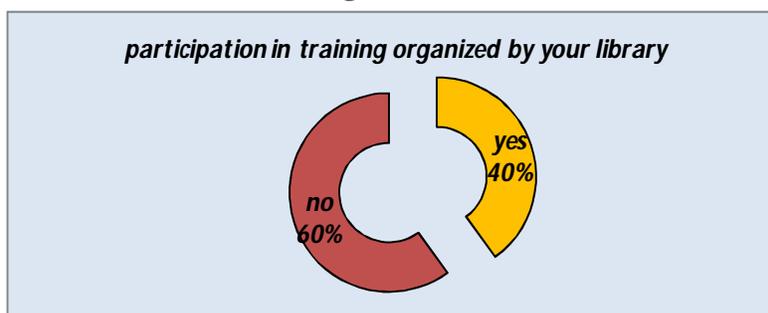
The above figure no 6 shows that majority of users (60%) said that they have never attended any training program related to e-resources, organized by library and 40% said yes.

Recommendation of electronic resources by your professor/ supervisor

Table .No 9

S.N.	e- resources	Response	Percentage
1.	Yes	52	65%
2.	No	28	35%
Total	80		100%

The above table revealed that 65% respondents said that professors and supervisor recommended their research scholars for access the electronic resources and 35% said no.

Type of E- Resources which recommended by professor

Table .No 10

S.N.	E-Resources	Respondent	Percentage
1.	Electronic journal	34	36.1%
2.	E- Books	29	30.85%
3.	Online databases	24	25.53%
4.	CD/DVD ROM	6	6.38%
5.	Any other	1	1.06%
Total	94		100%

The table revealed that resources recommended by the professors are 36.1% electronic journals, 30.85% e-books; 25.53% online databases; 6.38% CD/DVD ROM and 1.06% other resources.

Purpose of using online web- resources

Table .No 11

S.N.	Purpose	Respondent	Percentage
1.	For study and research	60	51.2%
2.	For teaching and learning	28	23.93%
3.	For assignments	13	11.11%
4.	For keep to up to date	10	8.54%
5.	Any other	6	5.12%
Total	117		100%

The above table revealed that purpose of using web resources shows that 51.2% people used it for study and research, 23.93% for teaching and learning, 11.11% for assignments, 8.54% to keep updated and 5.12% for other reasons.

Reasons of using Electronic Resources over print resources

Table .No 12

S.N.	Reasons	Number	Percentage
1.	24x7 availability	29	29.59%
2.	Easy browsing and searching	35	35.71%
3.	Multiple user access	14	14.28%
4.	Convenient	12	12.24%
5.	Any other	8	8.16%
	Total	98	

The above table revealed the reason for using e-resources over print resources. 35.71% people said that these resources are easy to browse and search, 29.59% said that these resources are all time available, 14.28% multiple user access , 12.24% said that these are convenient, and 8.16% have given other reasons.

Availability of Adequate E- resources

Figure No 7
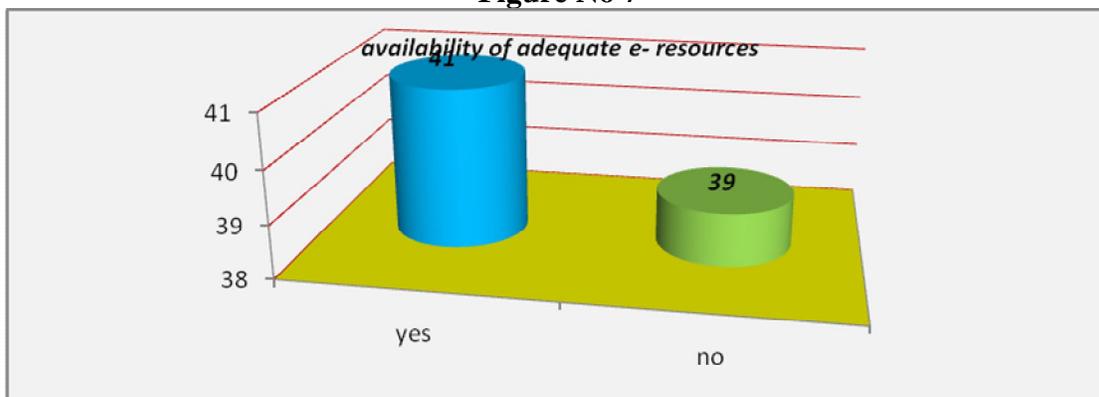
The above chart revealed that the respondents were asked to answer the availability of adequate e-resources in University Library. Majority of respondents said yes i.e. 51% and 49% said no.

Method for preferring full text articles.

Table .No 13

S.N.	Methods	Number	Percentage
1.	Take print out	33	35.10%
2.	Read online	26	27.65%
3.	Save in storage devices for further use	27	28.72%
4.	Any other	8	8.51%
	Total	94	100%

The above table revealed the methods of using full text articles by respondents. 35.10% take printout, 28.72% save in storage devices and 27.65% read these articles online and only 8.51% have given other reasons.

Navigation about E-Resources

Table .No 14

S.N.	Resource	Number	Percentage
1.	Easy	39	48.75%
2.	Difficult	28	35%
3.	Fairly easy	9	11.25%
4.	If difficult, please state why	4	5%
	Total	80	100%

The above table depicts that 48.75% respondents said that navigation among the e-resources is easy, 35% said it is difficult and 11.25% users supported that these are fairly easy and only 5% users given their reasons behind the difficulty.

Website for accessing free open access E-Resource

Table .No 15

S.N.	Response	Respondents	Percentage
1.	Yes	50	62%
2.	No	30	38%
Total	80		

The above table explore that the awareness about the websites for accessing free / open access e-resources. 62% are aware of websites and 38% said no.

According to respondent websites names.

Table .No 16

S.N.	Website names	Numbers	Percentage
1.	www.libgen.org	2	3.57%
2.	www.wikipedia.co.in	4	7.14%
3.	www.shodhganga.com	8	14.28%
4.	www.kavitakosh.com	1	1.78%
5.	www.Scholarlyarticles.com	3	5.35%
6.	www.Sarkarinaukri.com	2	3.57%
7.	www.sscadda.com	3	5.35%
8.	www.bankersadda.com	2	3.57%
9.	www.clsavior.com	1	1.78%
10.	www.Janpritipatrika.com	3	5.35%
11.	www.jstor.com	9	16.07%
12.	www.ugc.ac.in	5	8.92%
13.	www.pagalworld.com	6	10.71%
14.	www.songspk.com	2	3.57%
15.	www.studyself.in	3	5.35%
16.	www.knowledgeind.in	1	1.78%
17.	www.ligers.org	1	1.78%
18	Total	56	100%

The above table conclude that the jstor.com website were highly used by the researcher for accessing the e-resources (16.07%) than followed by shodhganga websites 14.28%; and pagal world 10.71%; UGC website 8.9% and rest of all website access description are given in above table.

Problems while accessing E-Resources

Table .No 17

S.N.	Problems	Respondent	Percentage
1.	Internet speed	59	67.81%
2.	No adequate resources	7	8.04%
3.	Inadequate resources	13	14.94%
4.	Any other	8	9.19%
Total =		57	100%

The above table revealed that the respondents were asked about the problems they face while using e-resources. 67.81% responses are having slow internet speed, 14.94% inadequate e-journals, 8.04% inadequate e-resources, and 9.19% have given other reasons.

Satisfaction with E-Resources

Table .No 18

S.N.	Satisfaction level	Respondent	Percentage
1.	Fully satisfied	24	30%
2.	Partially satisfied	51	63.75%
3.	Unsatisfied	3	3.75%
4.	Can't say	2	2.5%
	Total	80	100%

The above chart and table revealed that the satisfaction with available e-resources. 63.75% are partially satisfied, 30% are fully satisfied, 3.75% are not satisfied and 2.5% are not sure.

FINDINGS AND CONCLUSION

The library and information centre is a part of any educational institutions, which is the hub of the teaching, and learning activities where students, teacher and researchers get their required information according to their need. In our traditional libraries users have to spend more time for searching a small piece of information for that they were totally depend on the library professionals or library staff. But today's world is changing rapidly people are in a everything either this hush is of daily routine work or some inception work and it is very much true because in today's life a person don't have enough time to spend one thing, one has to do many things in these 24 hours only . This problem was also sought out with the application of new technology in library .With the discovery of such technology and their assimilation in library had truly benefited libraries as well as use rising new technologies include advance electronic resources point with them and are of different type also. The electronic resources (e resources) available in a library play a prominent role in facilitating access to required information to the users in an easy and expeditious manner. The e-resources, like CD Rom databases, the internet, are slowly

replacing the importance and usage of print media. It is imperative that one should be families with the use and exploitation of e-resources for their quick and effective usage for promotion of academic excellence and research. Electronic resources play the important role of the library they save the time of the use and give the quickly access to the information. In this paper authors explored that maximum numbers of responses 63.75% were received from respondents of age group of 21-25. 96% respondents were using e-resources from sampled data. The result shows that frequently used electronic resources were online databases i.e. 38.18%; majority of users were aware for e resources from Internet. 94% people agree that electronic resources have impact on study and research, 50% respondents read electronic resources more than on hours. 35.71% people said that these e-resources are easy to browse and search as compare to print resources, 67.81% respondents were facing problem of internet connectivity for accessing e-resources.in order to know the satisfaction to-words the e resources 63.75% users were partially satisfied.

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