

AWARENESS AND USE OF SOCIAL SCIENCE CYBER LIBRARY AMONG RESEARCH SCHOLARS OF ALIGARH MUSLIM UNIVERSITY, ALIGARH

Nafees Ahmad

S. Mustafa K. Q. Zaidi

Mr. Nafees Ahmad

Research Scholar

Department of Library and
Information Science,

Aligarh Muslim University,
Aligarh – 202 002, UTTAR

PRADESH

Email: azminafees@gmail.com

Corresponding Author

Dr. S. Mustafa K. Q. Zaidi,

Associate Professor (Retd.),

Department of Library and
Information Science,

Aligarh Muslim University,
Aligarh – 202 002, UTTAR

PRADESH

This study has been undertaken to evaluate the level of awareness and use of Social Science Cyber Library (Cybrary) and its impact on the research scholars' academic performance belonging to various fields of study under Faculty of Social Sciences, Aligarh Muslim University, Aligarh. The objectives of the study also include identifying most used e-resource, adequateness of e-resources available and problem faced while accessing them. The survey method was employed for conducting the research. 100 structured questionnaires were self-administered by the researcher among the research scholars. Out of total 100, 88 questionnaires were collected back successfully. The major findings of the study include that most of the respondents are aware of the Cybrary and its resources, their research work has been improved and they have rated the e-resources collection as good. Research scholars are of the view that e-resources are easy to use, easily and widely accessible, time saving and more preferred in comparison to conventional sources of information. Slow internet connectivity, lack of resources and retrieval problems are some of the major problems. The respondents have also suggested some measures to improve the services such as increased resources, regular updating and organizing orientation programs.

Keywords: Aligarh Muslim University, Awareness and Use, Cybrary, Electronic Resources, Open Access, Social Science Cyber Library, User Study.

INTRODUCTION

As the purpose of the libraries in ancient age was confined only to the storage and preservation of books, libraries were considered as the store houses of books. The very nature of the institution was passive at that time as the usage aspect of the resources was never emphasized. With the passage of time, changing information needs of the people, advances in the technology and improved library collections and services, the role of libraries has changed from a passive store house to an active, inseparable and integral part of the modern information-based society. Libraries are now playing the role of global information centers providing users the opportunity to access and retrieve the required information from anywhere and at any time (Mazumdar, 2007).

E-resources have been the major factors bringing the paradigm shift as far as the use of library resources and services are concerned. These resources are available in various forms such as e-books, e-journals, video lectures, subject gateways, databases and useful websites etc. Features like easy, remote, wider and simultaneous accessibility and timely availability make these e- resources more preferred and desirable among the academic community in accessing the required information from the information ocean pin pointedly at the right time and in the right form. Availability of electronic resources on internet freely as a result of open access movement has been very useful for the researchers' community.

Research scholars engaged in search of new knowledge are supposed to be one of the most sincere users of any service provided to the student community. So their opinion regarding the services and facilities are more valuable, significant and reliable. The present study is an attempt made to evaluate one of the services of Aligarh Muslim University from the research scholars' point of view. Thus, the scope of the present study is limited only to the Research Scholars of Social Science Faculty of Aligarh Muslim University, Aligarh in terms of their awareness and use of the Social Science Cyber Library (Cybrary).

SOCIAL SCIENCE CYBER LIBRARY

Recognizing various benefits of electronic resources in general and open sources in particular, Aligarh Muslim University has made the positive effort in this regard by setting up Social Science Cyber Library (Cybrary) which basically serves as an aggregator of various kinds of electronic information sources available in

open access domain. It provides links for a large number of open access resources which includes e-books, e-journals, video lectures, subject gateways, databases and useful websites etc. in the field of social sciences at one place. Enhancing academic performance through optimum utilization of these freely available resources by students, researchers and the faculty members is the major objective of establishing Cybrary. The Cybrary was inaugurated by the then Honorable President of India on December 27, 2013. The Cyber Library is accessible through its website <http://www.socscycybraryamu.ac.in/> (Zehra & Munshi, 2015).

Table 1: General Information about Cybrary

Sl. No.	Resource type		No. of Links
1	E-Books		3075
2	E-journal	Free	1532
		Subscribed	107
3	Conference Proceedings		16
4	In-house Publications		21
5	Video Lectures		192
6	E-theses		13
7	Useful websites		178
8	Subject Gateways		159
9	Databases		118
10	Software Links		69

*Data retrieved form <http://www.socscycybraryamu.ac.in/>

Cybrary has a huge collection of e-resources available free of cost in various forms and languages. E-books section of the Cybrary contains e- books as well as audio books in different languages and on different subjects. Same is the case with e-journals with only one exception that the links for some subscription-based journals which are subscribed by the

Maulana Azad Library, the central library of Aligarh Muslim University. As far as e-theses are concerned, Cybrary provides links of several e-theses and dissertation repositories such as Shodhganga and Krishkosh etc. It also provides links for various useful websites, subject gateways, databases and software.

REVIEW OF RELATED LITERATURE

Many studies have been conducted by a number of researchers concerning various forms of e-resources and open access publications across the globe. These studies had varying objectives such as ascertaining the level of awareness, use and satisfaction regarding e-resources among different demographic groups, purpose and frequency of using these sources, identifying problems faced in accessing and examining the benefits, importance and impact of e-resources and open access publication on academic performance of the user community. It has been concluded by Deka (2020) that in the field of research and development, scholarly use of e-resources have a very significant role to play particularly in developing countries. Kaba and Said (2015) found a high level of awareness of e-resources and OA among the users. However, Sivakami and Rajendran (2019) reported that male faculty members are more aware of e-resources than the female. 98.18 % of the respondents were reported to be aware of the OA in Roy, Majumdar and Dey (2014). This study also found that 80% of the faculty members were aware of DOAJ besides other websites like www.wikipedia.com, www.freedictionary.com and encyclopedia.com etc. The supervisor / fellow researchers and the

library websites have been the major sources of their awareness of e-resources (Nanda, 2017). The study conducted by Devi and Keshava (2020) has found that majority of the respondents are not aware of electronic resources.

As far as the purpose of using e-resources is concerned the most of the respondents were using it for academic purpose such as course related information and future opportunities in their field of study (Anuradha, Gopakumar & Baradol, 2011). It is observed that majority of the users use these e-resources to update knowledge and to get required information for research (Tamrakar & Garg, 2016). According to Sharma (2009) teachers and scholars use e-resources generally to get desired information and they have become dependent, in a way, on these sources. Among all the e-resources available e-journals and e-books are the most used e-resources (Shivaraju & Sivasami, 2019). E-resources are time saving, easy to use, easily available and widely accessible and more preferred (Deoghuria and Roy, 2007) and because of these features e-resources have become an integral part of academic community. However, Roy et al. (2014) have found that 65.45% users prefer print resources over the e-resources. Slow internet speed, lack of training, retrieval of irrelevant information, unfamiliarity with the open access resources, ICT infrastructure and skills are the major problems found while accessing these resources (Sohail and Ahmad, 2017; Lwoga, 2013). The study conducted by Soni, Gupta and Shrivastava (2018) suggest that it would be beneficial to organize various orientation and training programs for teachers and students if maximum utilization of available e-

resources is to be achieved. This has also been suggested in the study conducted by Gurikar and Hadagali (2019). The present study is an attempt to understand various aspects of open access electronic resources as mentioned above from the research scholars 'point of view. The authors also intended to find out if there exists any difference of opinion among scholars with respect to their gender.

AIMS AND OBJECTIVES

The aim of the study is to evaluate the level of awareness and use of Social Science Cyber Library (Cybrary) and its resources amongst the research scholars of Aligarh Muslim University. The study also aims at finding out the level of satisfaction and impact of Cybrary on the researchers' community. Following are the objectives of the study:

- a) To ascertain the level of awareness and use of the Cybrary and its resources among the research scholars;
- b) To study the purpose and frequency of using electronic resources available in the Cybrary;
- c) To examine the most used electronic resources of Cybrary by the research scholars ;
- d) To find out the factors that make electronic resources more preferred among the research scholars ;
- e) To find out the major problems faced by research scholars while accessing and using the electronic resources ;

METHODOLOGY

The present study is survey based descriptive research in nature as it aims at

describing the situation in terms of awareness and use of Cybrary. The population of the present study is confined only to the research scholars of faculty of social sciences in Aligarh Muslim University, Aligarh. There are 490 research scholars registered in various departments of faculty of social sciences. The sample size selected for data collection was 100 research scholars out of the total 490. The data were collected for required information from the sample population using structured questionnaire having both open ended and closed ended questions. 100 questionnaires were self-administered by the researchers among the research scholars of various departments that come under the social science faculty. Out of the total 100 questionnaires distributed, 88 were successfully received back. The collected data were coded and analyzed using Microsoft Excel Worksheet. The analyzed data and results have been presented in the form of tables.

DATA ANALYSIS AND INTERPRETATION

Gender wise analysis of data has been done to have better understanding of perceptions regarding awareness and use of Cybrary. The responses collected from the sample population are discussed in detail with the help of following tables. 100 questionnaires were distributed among the research scholars and 88 were successfully collected back so the response rate was 88%. It is clear from the table 2 that out of the total respondents, 64 (72.7 %) are male and 24 (27.3%) are female. While looking at the department-wise distribution of the respondents it shows that the maximum number of respondents

Table 2: Department-wise distribution of the respondents

Name of Department	Male	Female	Total	Percentage (%)
Islamic Studies	8	3	11	12.5
History	8	8	16	18.2
Education	8	1	9	10.2
Political Science	12	3	15	17
Psychology	5	0	5	5.7
Sociology	3	1	4	4.5
Physical Education	4	0	4	4.5
Economics	6	3	9	10.2
Library and Information Science	7	1	8	9.1
Mass Communication	3	4	7	8
Total	64	24	88	100

belong to the department of History (18.2 %), followed by Department of Political Science (17%), Islamic Studies (12.5%), Education and Economics (10.2%) each, Library and Information Science (9.1%), Mass Communication (8%), Psychology (5.7%) and the least number from Sociology and Physical Education with 4.5 % each.

Awareness of Cybrary and its resources

The table 3 deals with the information regarding level of awareness and use of Social Science Cyber Library (Cybrary). The table shows that majority of the respondents both male and female (96.9%) and (95.8%) respectively are

aware of the Cybrary. However, there is no clear difference between both male and female in terms of awareness of Cybrary. The rate of awareness of the resources also was found to be high as 79.7% male and 66.7 % female respondents were aware of it but a considerable ratio of respondents that is 20.3% and 33.3 % male and female respectively were unaware of the resources available on Cybrary.

Channels of Awareness

The table 4 provides the information regarding the sources through which the scholars came to know about the available resources on the Cybrary. It is found that concerned supervisor

Table 3: Awareness of Cybrary and its resources

Awareness		Male (64)		Female (24)	
		Count	%	Count	%
Awareness of Cybrary	Yes	62	96.9	23	95.8
	No	2	3.1	1	4.2
Awareness of Resources	Yes	51	79.7	16	66.7
	No	13	20.3	8	33.3

and fellow- researchers and the University websites have been the most useful sources for making the researchers aware of the resource availability. Advertisement is the third major source, followed by the library personnel. Only one respondent opted for a source other than the above listed but he has not mentioned what is that other source. When analyzed from the angle of the year of registration to research program, it is understood that in recent years the scholars are getting to know the Cybrary through all channels mentioned unlike the year 2014 wherein the communication through University website and Library personnel were the only two sources of awareness to the researchers. Scholars were allowed to choose any number of options which makes total number of responses, from all the sources and years of registration, 106 which is more than the total number of the respondents.

Frequency of visit to Cybrary

A question was asked about the frequency of visits to the Cybrary and the information regarding this is provided in the table 5 which reflects that majority of the respondents both male (40.6%) and female (50%) visit the Cybrary occasionally. It is found that the number of scholars visiting Cybrary few times in month is almost same with both the male (14.1%) and female (12.5%) users. The ratio of the respondents both male and female visiting Cybrary few times in a week is very close as it counts for 29.7% and 25% respectively. It is a matter of concern for the institution or people responsible for management of Cybrary that a very small proportion of the respondents use the Cybrary daily. However, there is not much difference in the frequency of visiting library between the male and female respondents.

Table 4: Channels of Awareness

Channels of awareness	Year of Registration						Total
	2014	2015	2016	2017	2018	2019	
University website	2	6	3	6	10	8	35
Advertisement	0	8	2	5	6	2	23
Library personnel	1	0	1	1	6	2	11
Supervisor/Fellow researchers	0	1	4	9	13	9	36
Other sources	0	0	0	1	0	0	1
Total	3	15	10	22	35	21	106

Table 5: Frequency of visit to Cybrary

Frequency	Male (64)		Female (24)	
	Count	%	Count	%
Daily	8	12.5	1	4.2
Few times a week	19	29.7	6	25
Few times a month	9	14.1	3	12.5
Occasionally	26	40.6	12	50
Never	2	3.1	2	8.3

Purposes of visiting Cybrary

The users were asked to mention the purposes for which they use or visit the Cybrary. The table 6 reflects that 75% of the female respondents use it for research work. For getting relevant information in their field of specialization, 20.8 % female respondents make use of the Cybrary resources. No female respondent uses the Cybrary for reading current information. Only few of the female research scholars make use of the resources available in the Cybrary for keeping their knowledge up-to-date and for gathering information for publishing. The responses of male research scholars suggest that 70.3% of them use the cyber library for research purpose, followed by 28.1% for getting relevant information, 26.6% for updating knowledge, 25% for current news and 21.9% for publishing purposes.

Table 6: Purposes of visiting Cybrary

Purpose	Male (64)		Female (24)	
	Count	%	Count	%
Research	45	70.3	18	75
Publishing	14	21.9	1	4.2
Knowledge	17	26.6	1	4.2
Current news	16	25	0	0
Relevant info	18	28.1	5	20.8

Frequently used e-resources

The table 7 provides information about the most frequently used e- resources. It is evident that e-Journals are the most used e-resources for both male and female researchers. Useful websites found to be the next most important resource for scholars of both the gender. E- Books are the third preference of the scholars in the Cybrary. Preference for online databases, subject

gateways, software and in- house publication is almost same in both the cases. The gender wise difference appears only regarding the use of e-thesis and video lectures as in both the male scholars are found accessing more than their counterpart.

Table 7: Frequently used e-resources

Most used e-resources	Male (64)		Female (24)	
	Count	%	Count	%
E-Books	29	45.3	7	29.2
E-Journals	34	53.1	12	50
Online databases	9	14.1	3	12.5
Useful websites	31	48.4	9	37.5
E- theses	17	26.6	2	8.3
Video lectures	12	18.8	1	4.2
Conference proceedings	9	14.1	2	8.3
In-house publications	3	4.7	1	4.2
Subject gateways	3	4.7	1	4.2
Software	4	6.3	1	4.2

Preferred Search Engine

A multiple choice question was asked about the preferred search engine and responses are given in the table 8 which shows that all the female respondents have chosen Google as their most preferred search engine, whereas, 6.3% male scholars preferred Yahoo and Bing each as their preferred search engine.

Table 8: Preferred Search Engine

Search Engine	Male (64)		Female (24)	
	Count	%	Count	%
Google	61	95.3	24	100
Yahoo	4	6.3	0	0
Bing	4	6.3	0	0
Other	1	1.6	0	0

Adequacy of retrieved information

The table 9 is about the adequacy of the retrieved information and it is clear from the table that 50% female and the 40.6 % of the male

respondents found the information adequate sometimes, while 33% female and the 35.9% male scholars found the retrieved information to be adequate most of the time. There is only small number of the respondents who said that they found information adequate always.

Table 9 : Adequacy of retrieved information

Adequacy of information retrieved	Male (64)		Female (24)	
	Count	%	Count	%
Always	12	18.8	2	8
Sometimes	26	40.6	12	50
Most of the time	23	35.9	8	33
No response	3	4.7	2	8

Success rate in retrieval

The table 10 deals with the success rate in finding the relevant information from the e-resources available in the Cybrary. It is evident from the table that only 6.3% male scholars had 100% success rate in finding relevant information. Majority of them said that their success rate is between 50 and 74 %. 25% of them find the success rate between 75 and 99 %. There are 6.3% male scholars who found it 25-49% and 3.1% less than 25%. The responses of female scholars indicate that 25% of them find their success rate between 50 and 74 and the same

Table 10: Success rate in retrieval

Success rate (%)	Male (64)		Female (24)	
	Count	%	Count.	%
100	4	6.3	4	16.7
75-99	16	25.0	4	16.7
50-74	38	59.4	6	25
25-49	4	6.3	6	25
Less than 25	2	3.1	4	16.7

percentage of them found it to be between 25 and 49%. Only 16.7% of them find it 100 % and 16.7% less than 25 % while 16.7% of them found it between 75 and 99%.

Impact of e-resources

The users were asked about another multiple answer type question to know the influence of e-resources on their study. The table 11 shows that among the male respondents 28.1% found it speeding up their research work, 31.3% as improved information competency, 21.9% as getting up to date information, 39.1% as faster and easier access to information and 28.1% as access to wide range of information. Among female respondents 33% found them as speeding up their research work, 21% as improved information competency, 13% as up-to-date information, 29% as faster and easier access to information and 21% as access to wide range of information.

Table 11: Impact of e-resources

E-resource influence	Male (64)		Female (24)	
	Count	%	Count	%
Expedite research/study	18	28.1	8	33
Improved competency	20	31.3	5	21
Up to date	14	21.9	3	13
Faster access to Information	25	39.1	7	29
Access to wide range of information	18	28.1	5	21

Rating of resources

A multiple question was asked to the respondents to rate the resources available in the Cybrary and the responses are provided in the

table 12. It is clear that 15.6% male scholars rated them as excellent, 65.6% as good, 17.2% as just satisfactory and 1.6% as poor. As far as the female scholars are concerned 8.3% rated them as excellent, 66% as good and 25% as just satisfactory. None of the female respondent rated them as poor.

Table 12: Rating of resources

E-resources	Male (64)		Female (24)	
	Count	%	Count	%
Excellent	10	15.6	2	8.3
Good	42	65.6	16	66.7
Just satisfactory	11	17.2	6	25
Poor	1	1.6	0	0

E-resources vs. print resources

The research scholars were asked to mention how e-resources are different from the conventional ones and to rank them. It is clear from the table 13 that 57.8% male respondents said that the e-resources are time saving, 53.1% found it more easy to use, 39.1% as more informative, 31.3% as more preferred, 48.4% as easily available and accessible, 35.9% as wider accessibility, 34.4% as ability to access multiple resources and 21.9% found the e-resources as the best as it can be easily uploaded/downloaded. The response of the female scholar is same for almost all the above discussed aspects of e-resources. 41.7% female scholars found the e-resources as time saving, easy to use, more informative, wider accessibility, and multiple resource accessibility and up loadable and downloadable. 54.2% found them as easily available and 33.3% as more preferred.

Table 13: E-resources vs. print resources

Factors	Male (64)		Female (24)	
	Count	%	Count	%
Time saving	37	57.8	10	41.7
Easy to use	34	53.1	10	41.7
More informative	25	39.1	10	41.7
More preferred	20	31.3	8	33.3
Easily available/accessible	31	48.4	13	54.2
Wider accessibility	23	35.9	10	41.7
Can access multiple resources	22	34.4	10	41.7
Easy upload/download	14	21.9	10	41.7

Problems faced in accessing e- resources through Cybrary

The table 14 provides the information about the problems being faced by the users while accessing the resources. The table shows that 37.5% male users indicated slow speed as a constraint in accessing e-resources, similarly 40.7% stated lack of resources, and 12.5% as

Table 14: Problems faced in accessing e- resources through Cybrary

Problems faced	Male (64)		Female (24)	
	Count	%	Count	%
Slow access speed	24	37.5	12	50
Lack of resources	26	40.6	7	29.2
Retrieval problem	8	12.5	2	8.3
Poor	6	9.4	3	12.5

retrieval problem and 9.4% as poorly designed resource web pages. 50% of the female research scholars indicated slow access speed, 29.25% as lack of resources, 8.3% as retrieval problem and 12.5% as the poorly designed resource web pages.

DISCUSSION AND CONCLUSION

The aim of the present study was to find out the level of awareness and use of e-resources among the scholars and the findings of the study show that most of them are well aware of the existence of Social Science Cyber Library and its resources. This is in corroboration with the result of many previous studies like Kaba and Said (2015). Their respective supervisors and fellow researchers have been the key sources for this awareness in conformity with the result of study conducted by Nanda (2017). In accordance with the findings of previous studies such as Tamrakar and Garg (2016) present study also finds that majority of the users visit Cybrary for academic and research purposes. As the study also aimed at identifying the most used e- resource, the results indicate that e-journals and e-books are used by most of the scholars for research purposes and to keep themselves updated in their field of study. This is similar to the findings of the study conducted by Shivaraju and Sivasami, (2019). The opinion of the research scholars was also sought in terms of advantages of e- resources over conventional documents and it was found that e-resources are time saving, easy to use, easily available and widely accessible, more informative and more preferred. It resembles the findings of studies like Deoghuria and Roy (2007). It was found that slow internet speed, retrieval problem, poorly designed web pages and lack of resources are some of the major problems faced by them while accessing e-resources. This has also been the same in similar studies like Sharma (2009) and Suhail and Ahmad (2017). It is suggested, on the basis of major findings, that increasing the number of e-resources particularly e-books and e-journals, organizing training and orientation

programs will be of great help enhancing the user's satisfaction with regard to the collection and service provided through Cybrary. Similar suggestions have been made in studies like Soni, Gupta and Shrivastava (2018) and Gurikar and Hadagali (2019).

It is clear from the discussion that establishment of Cybrary is a positive effort of Aligarh Muslim University through which access to a huge number of e- resources in the field of social sciences is provided 24/7 across the globe. Its awareness and use among the scholars is evident from the findings of the present study. As the study shows, Cybrary has impacted positively the academic and research productivity and also information competency of the users. However, lower number of daily visitors, inadequacy of retrieved information and lack of up-to-date information are some of the weaknesses of Cybrary that needs to be considered for improvement. Optimum utilization of the resources and higher satisfaction level of the users can be achieved by taking appropriate measures suggested in the study.

REFERENCES

1. Aligarh Muslim University, (2013). *Social science cyber library*. Retrieved October, 15, 2019 from <http://www.socscybraryamu.ac.in/>.
2. Anuradha, V., Gopakumar, V. & Baradol, A.K. (2011), Awareness and use of open access and free resources on the internet: a case study at BITS Pilani K K Birla Goa Campus, Goa, *Proceedings of 8th International CALIBER-2011*, Goa, 320-329. Retrieved

- from <http://ir.inflibnet.ac.in/bitstream/1944/1626/1/33.pdf>
3. Deka, P. (2020). Scholarly use of open access electronic resources among research scholars of Dibrugarh University, Assam. *IJAEMA12* (6), 548-556. Retrieved from <http://www.ijaema.com/gallery/60-ijaema-june-4048.pdf>
 4. Deoghuria, S., & Roy, S. (2007), Open access: What scientists think? A survey of researcher's attitude towards open access. *ICSD-2007*, 568-577. Retrieved from <https://core.ac.uk/download/pdf/49286531.pdf>
 5. Devi, R., & Keshava, J. (2020). E-Resources: Perception and use by Ayurvedic Medical College Library users of North Karnataka. *Journal of Indian Library Association*, 56(1), 32-42.
 6. Gurikar, R. & Hadagali, G. S. (2019). Use of open access scholarly literature by the research scholars in university environment. *Journal of Indian Library Association*, 55(3), 45-53.
 7. Kaba, A., & Said, R. (2015), Open access awareness, use, and perception: A case study of AAU faculty members. *New Library World* 116(1/2): 94–103. Retrieved from <https://www.emeraldinsight.com/doi/abs/10.1108/NLW-05-2014-0053>
 8. Lwoga, E. (2013), Health sciences faculty perception and practices on OA scholarly communication, *Proceedings and reports of the 6th UbuntuNet Alliance Annual Conference*, 119-134. Retrieved from <https://pdfs.semanticscholar.org/6e98/0ac32e480d726b6940156653a06d6780374c.pdf>
 9. Mazumdar, N. R. (2007). Skills for library and information professionals working in borderless library. *INFLIBNET PLANNER-2007*, 421-429. Retrieved from <http://ir.inflibnet.ac.in:8080/ir/bitstream/1944/1372/1/47.pdf>
 10. Nanda, A. (2017). Use and awareness of e-journals by the faculty and research scholars of Veer Surendra Sai University of Technology: A study. *DESIDOC Journal of Library & Information Technology*, 37(4), 274-280. Retrieved from <https://publications.drdo.gov.in/ojs/index.php/djlit/article/download/10871/5987/>
 11. Roy, B., Majumdar, A.J. & Dey, C. (2014). Convergence to open access academic resources: A case study of research scholars of Assam University, Silchar, *NACLIN 2014*.139-150. Retrieved from <https://www.researchgate.net/publication/281268177>
 12. Sharma, C. (2009). Use and impact of e-resources at Guru Govind Singh Indraprastha University: A case study. *Electronic Journal of Academic and Special Librarianship*, 10(1), 3-8. Retrieved from http://southernlibrarianship.icaap.org/content/v10n01/sharma_c01.html
 13. Shivaraju, T.C., & Sivasami, K., (2019). Awareness and use of electronic resources by the faculty members and research scholars with special reference to Alliance University, Bengaluru, Karnataka: A Study. *Indian Journal of Information*

Sources and Services, 9(1), 40-44.

14. Sivakami, N., & Rajendran, N. (2019). Awareness, Access and Usage of E-resources among Faculty Members in Arts and Science Colleges. *Library Philosophy and Practice*, 1-9. Retrieved from <https://digitalcommons.unl.edu/libphilprac/2549/>
15. Sohail, Md., & Ahmad, S. (2017). Use of electronic resources and services by faculty members and students of Fiji National University. *DESIDOC Journal of Library & Information Technology*, 37(3), 165-171. Retrieved from <https://publications.drdo.gov.in/ojs/index.php/djlit/article/download/10567/5889/>
16. Soni, N. K., Gupta, K. K., & Shrivastava, J. (2018). Awareness and usage of electronic resources among LIS scholars of Jiwaji University, Gwalior: A survey. *DESIDOC Journal of Library & Information Technology*, 38(1), 56-62. Retrieved from <https://publications.drdo.gov.in/ojs/index.php/djlit/article/view/11524>
17. Tamrakar, A.K., & Garg, R.G. (2016). User perception towards e-resources and services of IIT-Guwahati *Library*. *DESIDOC Journal of Library & Information Technology*, 36(1), 40-46. Retrieved from <https://publications.drdo.gov.in/ojs/index.php/djlit/article/view/9238/5486>
18. Zehra, F., & Munshi, S.A. (2015) Social Science Cyber Library, An attempt towards e- learning at Aligarh Muslim University, *10th International CALIBER-2015*, Shimla, 421-433. Retrieved from <http://ir.inflibnet.ac.in:8080/ir/bitstream/1944/1882/1/43.pdf>

