

# Use of Electronic Resources among Teachers and Scholars in Banaras Hindu University, Varanasi, Uttar Pradesh (Bharat): A Survey

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## ABSTRACT

The advancement of the information technology and web technology have brought changes to existing information storage and retrieval system such as Digital library, online database, digital repository, virtual library, etc. Libraries have witnessed tremendous changes in recent years in terms of their collection and services. Information explosion and user's demand of the users required the development of a more comprehensive library collection. Publishers have now started publishing on-line version/electronic versions of their printed journals. Owing to the cost of journals, many colleges and universities are unable to procure these journals. Ministry of HRD and UGC has started procuring the e-resources from the 25 world-class publishers under consortia mode at a much reduced price for all university libraries. BHU library is one of the beneficiaries of this UGC-INFONET Digital Library Consortium. The present study is the part of Ph.D. research work of one of the authors. To ascertain the usage of the e-resources available to the BHU library by the teachers and scholars, this survey was conducted. The present investigation discusses the use of electronic resources (e-journals, e-books, online/ offline databases, web resources) which are made available by the INFLIBNET Centre in e-resource consortium like UGC-INFONET Digital Library Consortium by the teachers and scholars of BHU. The present study was conducted as a part of doctoral research work from January 2015 to July 2015.

**KeyTerms:** Online Resources, e-journal, e-books, online databases, e-journal consortia, UGC-INFONET Digital Library Consortium, Banaras Hindu University, University Library, Uttar Pradesh.

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## INTRODUCTION

Electronic resources are a rich source of information for those students who want extra learning materials in addition to their regular classroom activities. Furthermore, cloud computing has made it possible for students and researchers to always keep their data with them. E-resources are mainly available in the form of e-journals, e-books, offline/online databases. Under UGC-INFONET Digital Library Consortium (erstwhile E-Journals Consortium of INFLIBNET), these resources have been subscribed centrally for the member university libraries and IP based access has been provided to the member university library users. Based on their utilization, access to e-resources for next year is renewed. The present study examines the usage of e-resources available under UGC-INFONET Digital Library Consortium and other subscribed under different consortia like DeLCon, N-LIST, IACTE among the library

users especially teachers and scholars.

## Types of Electronic Resources

- E-Journals (Electronic Journals) ;
- E-Books (Electronic Books);
- E-thesis & Dissertation (ETD);
- Online Databases on specific subjects
- CD-ROM Databases/ Offline Databases of Theses and Dissertations;
- In-House Databases of Books, Journals, Theses & Dissertations, Experts and Reports;
- Electronic Mail (e-mail) and its Attachments
- Institution/Digital Repository: Institutional repository also knows as digital and e-print archive of the research output created by faculty members, research scholars, and students of Institutions or organizations

or universities. It provides facility to a simple method for deposit and access to their research publication. The creator of information can contribute or upload their publication to access inside the institution as well as outside of the institution without any barriers. It offers the facility for capturing, organize, archive, disseminate and manage digital information resources to any institutions.

- Scholarly Web Resources: The internet is having lots of scholarly, useful, first hand, academic, peer-reviewed and refereed sources like electronic journals, electronic books, online databases, patents, standard, database articles, bulletin boards, articles, researcher directories and more. The library does not acquire all the standard sources of the required information to fulfill the miscellaneous information need of users.

### E-Resources Available under UGC-INFONET Digital Library Consortia

Some e-resources have been subscribed under this consortium for all the member university libraries from the 25 world-class publishers on much reduced negotiated prices. Now UGC-INFONET Digital Library Consortium, AICTE-INDEST and N-LIST Consortium have been merged into a new consortium which is called as e- SodhSindhu which is a new consortium for access to e-resources by the university community, colleges, and centrally funded technical institutions in India.

### Emergence of E-Sodhsindhu (eSS): A New Consortium for Access to E-Resources by the University Community

"The emergence of e-ShodhSindhu which is a Consortium for Higher Education Electronic Resources provides access to e-resources to Universities, Colleges and Centrally Funded Technical Institutions in India. Based on the recommendation of an Expert Committee, the MHRD has formed e-ShodhSindhu merging three consortia initiatives, namely UGC-INFONET Digital Library Consortium, NLIST, and INDEST-AICTE Consortium. e-ShodhSindhu will continue to provide current as well as archival access to more than 15,000 core and peer-reviewed journals and some bibliographic, citation and factual databases in different disciplines from a large number of publishers and aggregators to its member institutions including centrally-funded technical institutions, universities and colleges that are covered under 12(B) and 2(f) Sections of the UGC Act. It is an MHRD Initiatives which is being executed by the INFLIBNET Centre (<https://www.inflibnet.ac.in/ess/about.php>)"<sup>1</sup>.

### Members of E-SodhSindhu Consortium

Table 1 shows the List of members of E-SodhSindhu which comprises of State Universities, Central Universities, Deemed Universities, National Law Schools/Institutions, Inter-University Centres, Centrally Funded Institutions, and other Technical

### Banaras Hindu University (BHU Library)

Banaras Hindu University is an internationally reputed temple of learning, situated in the holy city of Varanasi. This creative and innovative university was founded by the great nationalist leader, Pandit Madan Mohan Malviya, in 1916 with the cooperation of great personalities like Dr. Annie Besant, who viewed it as the University of India. Banaras Hindu University was created under the Parliamentary legislation - B.H.U. Act of 1915. It played a stellar role in the independence movement and has developed into the greatest center of learning in India. It has produced many great freedom fighters and builders of modern India and has immensely contributed to the progress of the nation through a large number of renowned scholars, artists, scientists and technologists who have graced its portals.

Members of E-SodhSindhu Consortium

Categories of Institutions	Universities
12 (B) / 2 (f) State Universities	145
Central Universities	42
Deemed University (UGC Funded)	22
National Law Schools/ Universities	15
Inter-University Centre of UGC	06
<b>Universities</b>	<b>230</b>
<b>Centrally Funded Technical Institutions</b>	
NIT, SLIET, and NERIST	33
IITs and IISc	24
IIMs	19
IIITs, IIST, NITIE, NIIFF, NITTTR	11
IISERs	07
SPAs	03
<b>Total CFTIs</b>	<b>97</b>
<b>Technical Institutions</b>	
AICTE Funded Engineering Colleges	72
<b>Grand Total</b>	<b>399</b>

(Source: <https://www.inflibnet.ac.in/ess/member.php>)

Presently the Banaras Hindu University Library System consists of Central Library at the apex and 3 Institute Libraries, 8 Faculty Libraries, 25 Departmental Libraries, with a total collection of over 13 lakh volumes to serve the students, faculty members, researchers, and technical staff of fourteen faculties consisting of 126 subject departments of the university. Lending for home study, Lending to Departmental Libraries, Reprographic service, Internet facility, Online access to select Journals, Database search through DELNET, INFLIBNET and Electronic Document Delivery Service. (<http://www.bhu.ac.in/bhulibrary/services.htm> access on 02/06/2018)<sup>2</sup>.

### OBJECTIVES

- To examine the level of awareness of e-resources among the teachers and scholars
- To find out the purpose of using e-resources
- To examine the preference of formats of e-resources
- To find out the preferred time and place to access e-resources
- To find out the impact of e-resources on their achievements
- To identify the problems in accessing the e-resources among the library users
- To find out opinions and suggestions from the users to address the problems for improvement of access to e-resources

### Significance of the Study

The study has been significant in terms of its findings of usage. The study would suggest the ways and means for improving the access to e-resources among the library users. This study has been delimited to the select library users of Banaras Hindu University Library Users mainly teachers and scholars who have been visiting the library regularly for their teaching-learning and research activities. The scope of the study is confined to the teachers and scholars of BHU Library only within the specified period of study.

### LITERATURE REVIEW

To have a greater understanding of the previous study conducted in the use of e-resources, the comprehensive review of literature has been conducted and out of which

few studies have been mentioned in the following paras:

Gautam & Sinha in their paper mentioned that ICT has brought revolutionary changes in the functioning of libraries and information centres<sup>3</sup>. The impact of ICT including WWW and the Internet is visible in every walk of life. The libraries are not the exception. Due to electronic publishing, many Electronic Resources in the form of e-journals, e-books, and on-line/off-line databases are being published. The academic libraries especially colleges and university libraries have been procuring these resources for their libraries. Due to escalation in the cost of learning resources both printed and electronic resources and financial problems the academic libraries are facing, the consortia models are being adopted and experimented for the procurement and access to electronic resources by the colleges and universities.

The first part of the paper introduces the Electronic Resources, and its procurement under consortia models successfully implemented by INFLIBNET Centre since 2003. Under the UGC-INFONET Programme, about 179 university libraries have been given access to Electronic Resources which comprises of e-journals and online databases. The second part of the paper describes the use of Electronic Resources by the research scholars and teachers of Allahabad University. To ascertain the usage of the journals by the research scholars and teachers of Allahabad University the present study has been conceived to find out the use of electronic resources which have been given access to the research scholars and teachers in the university campus mainly at Central Library and Departmental Libraries.

To what extent the available Electronic Resources are being utilized by the library users and what are their awareness level, usage pattern, preference of the publishers/journals, etc. For this study survey method has been used using questionnaire as a data collection tool. The findings of the study reveal that the library users belonging to the younger generation have adopted the Internet, online/offline electronic resources or web resources very quickly and at the same time the elderly library users are not comfortable using the Internet, social media and Electronic Resources. They rely more on traditional printed resources. To make the optimum use of the Electronic Resources available for the university library users through consortia, extensive and frequent user's awareness programmes needs to be organized by the library in collaboration with INFLIBNET and other agencies

Kumar, Sonkar & Rajbanshi find out the information-seeking behavior of research scholars of Babasaheb Bhimrao Ambedkar University, Lucknow. A well-defined questionnaire was used to collect data. The major findings of the study show that research scholars seek information for updating knowledge, research work and preparing articles for seminars and workshops. Scholars of BBAU feel more comfortable by asking teachers or friends and consulting library catalogue than asking for library staff for accessing library resources. Research scholars are facing problems in using old materials 50(35.71%) and unavailable 28(27.4%) of required materials in the library. All the research scholars 140(100%) use the internet facilities for accessing the information. The majority of the research scholars spend time Daily 129(92.14%) on the internet.

Lingaiah has discussed that the government of India has taken various steps to introduce Electronic Resources facility in academic institutions for the benefit of Research Scholars.

Sinha & Chanda have examined the usage of electronic resources which are made available to Assam University

Library users under two important consortium viz., UGC-INFONET Digital Library Consortium and DeLCON Consortium by the scientific community library users of Assam University, Silchar. The study examined the use of e-resources and also suggested organizing regular e-resources user's awareness programme for maximum utilization of e-resources and also emphasized on improvement of ICT infrastructure to provide the maximum number of Internet access points in Central Library, Departmental Libraries and Students Hostels<sup>4</sup>.

Kumar & Manjunath investigated the impact of internet use on the academic performance of teachers and researchers in the university set up. It further aims to know how the user compares internet sources with traditional information sources. The study has demonstrated the high use of internet sources and services by teachers and researchers in the university set up. Study results also indicated that the internet has made an impact on their academic performance.

Faizul Nisha & Naushad Ali P.M. surveyed the use of e-journals in higher educational institutions of Delhi and it was found that most of the library users are aware of e-journals. The study pointed out the main purpose of the use of e-journals is for supporting research and development activities<sup>5</sup>.

Mohammad & Parvez conducted a study on Internet use among the PG students of the science faculty of Aligarh Muslim University and the majority of users are satisfied with the accuracy of internet-based information sources.

Margam Madhusudhan has conducted a study on the use of Electronic Resources by research scholars of Kurukshetra University, Kurukshetra (India) using questionnaires administered to the 60 numbers of research scholars. The response rate is 83 percent. The paper discusses the purpose of the use of e-resources and also made suggestions for improvement in access to electronic resources<sup>6</sup>.

Kaur & Verma in their joint study on using electronic resources available in IIT Delhi Library. The study finds that the use of electronic resources has been increasing which might be due to users awareness programmes which are being regularly organized by the IIT Delhi Library<sup>7</sup>.

Besides these, many studies have been conducted on Assam University Library users at different points of time (Sinha, Chanda & Sinha, Sinha, Bhattacharjee & Bhattacharjee) and found that users are visiting the library regularly to make use of e-journals for their research works. The users always pointing out to increase the numbers of Internet access points in Central Library, Departmental Libraries and hostels also to have more access.

## METHODOLOGY

In the present study, the survey method was employed to collect relevant data from the users on the use of e-resources. The self-designed questionnaire has been administered as a main data collection tool to the respondents of BHU Library. The sample size of the study was 200. Out of which 187 respondents have returned filled-in questionnaires to the researcher. The results have been shown in tabular and graphical format. The present study was conducted from January 2015 to July 2015. For collecting data from the respondent's Simple Random Technique was adopted for sampling design.

## DATA ANALYSIS

Based on a filled up questionnaire received from the respondents, the data have been analysed and inferences have been drawn using standard statistical techniques. All the results have been presented in the form of tables and graphs and the present results have been shown in

percentage (%) only. The software Microsoft Excel 2010 has been used to calculate the percentage and creating graphs.

### General Background/Personal Characteristics of the Respondents

A total of 200 questionnaires were distributed to the respondents, out of which 187 questionnaires duly filled in by the respondents were received back. The overall response rate is (93.5%) which is a good response rate for the survey research.

Table 1: Respondents of the Study

Questionnaire	Responses Received	(%age)
Received	187	93.5
Not Received	13	6.5
<b>Total Distributed</b>	<b>200</b>	<b>100</b>

### Gender Wise Distribution of Respondents

Table 2: Gender Wise Distribution of Respondents

Gender	Respondents	(%age)
Male	106	56.68
Female	81	43.32
<b>Total</b>	<b>187</b>	<b>100</b>

Out of 187 respondents, more than 55% of respondents belong to males (106=56.68%) whereas the number of female respondents is 81(43.31%) which reveals that some male respondents are more than that of the female.

### Awareness and Use of E-Resources

Table 3: Awareness of Digital Library Consortium

Awareness	Respondents	(%age)
Yes	173	92.51
No	14	7.49
<b>Total</b>	<b>187</b>	<b>100</b>

(Source: Primary data obtained from the Questionnaire)

The survey findings as shown in table 3 indicate that out of 187 respondents, 173(92.51%) respondents are aware of UGC INFONET Consortium and the remaining 14(7.49%) respondents are not aware of this programme. It is suggested that there is a need for conducting user awareness programme to access the electronic resources of the UGC INFONET Consortium on an urgent basis.

### Frequency of Using Electronic Resources

The survey results as shown in table 4 and fig 4 indicate that the majority of respondents 84(44.92%) use Electronic Resources on "Daily basis" which is followed by 61(32.62%) respondents who use Electronic Resources "Occasionally". About 27(14.44%) respondents use Electronic Resources "Once a Week" whereas a very less number of respondents 15 (08.02%) use Electronic Resources "Once in a Month" (fig 4).

Table 4: Frequency of Accessing to Electronic Resources

Frequency of using E-Resource	Respondents	(%age)
Daily	84	44.92
Once a Week	27	14.44
Once in a Month	15	08.02
Occasionally	61	32.62
<b>Total</b>	<b>187</b>	<b>100</b>

### Time Spent on Access to Electronic Resources

The survey result as shown in table 5 shows that out of 187 respondents, majority of respondents 92(49.20%) spend "less

than one-hour" time to access the electronic resources which is followed by 54(28.87%) respondents who use the e-resources for "Two to Four hours" in a day while 28(14.97%) spend "Less than two hours" time to access to e-resources. It has been observed that very few users 13(06.95%) are serious who spend "Four to Six hours" time while searching and accessing e-resources. Hence, we conclude that users are accessing Electronic Resources as per their requirement and there is a need to motivate users to extensively use the e-resources which are available for them to support their research activities.

Table 5: Time Spent on Access to e-Resources

Time	Respondents	(%age)
Less than one hour	92	49.20
Two to four hour	54	28.87
Less than two hour	28	14.97
Four to six-hour	13	06.95
<b>Total</b>	<b>187</b>	<b>100</b>

### Preference of File Format

The survey results as shown in table 6 highlights that out of 187 respondents, more than 63% (119=63.64%) respondents prefer ".pdf file format", which is followed by 43(22.99%) ".doc file format", whereas remaining part of respondents (25=13.37%) ".html file format". The majority of the users are comfortable with .pdf because it looks like print documents.

Table 6: Preference of File Format for Reading and Carrying

File format	Respondents	(%age)
PDF	119	63.64
HTML	25	13.37
DOC	43	22.99
<b>Total</b>	<b>187</b>	<b>100</b>

### Preference of Place for Using Electronic Resources

A good number of respondents 74(39.57%) accessed e-Resources from their "respective department and library", whereas about 45(24.06%) respondents accessed e-Resources from their respective "Wi-Fi Zone" and 38(20.32%) respondents accessed e-Resources at Home while 17(9.90%) respondents accessed e-resources at Computer Lab and only 13(06.95%), accessed e-Resources from "Cyber Café". Many open-access resources may be accessed from home and cyber café.

Table 7: Preference of Place for Using e-Resources

Preference of Place	Respondents	(%age)
Library	74	39.57
Computer Lab	17	9.90
Cyber café	13	06.95
Home	38	20.32
Wi-Fi zones	45	24.06
<b>Total</b>	<b>187</b>	<b>100</b>

### Source of Information about UGC INFONET Digital Library

The survey result as shown in table 8 shows that out of total respondents, the majority of faculty members and scholars are applying many search strategies to access e-resources. Out of various strategies, University WebSite 69(36.89%) is most appropriate guide for the users to search the e-resources which are followed by the help received from the library staff 43(22.99%) whereas many users know this information from Internet/WebSites 25(13.36%) and other sources are less than 12%.

Table 8: Source of Information about UGC INFONET

Source of Information	Respondents	(%age)
Through Internet/websites	25	13.36
University/Library website	69	36.89
Books/Journals	16	08.55
From Librarian/friends/staff	43	22.99
Faculty member/Supervisor	22	11.76
Lectures/Seminars/Orientation Programme	12	06.41

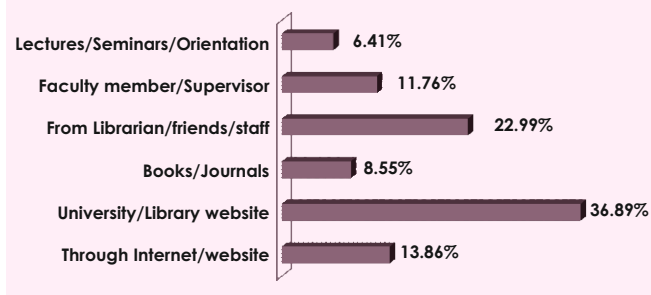


Fig. 1: Source of Information about UGC INFONET Digital Library

### Preference of Using Various Types of Electronic Resources

The result as indicated in table 9 shows that out of 187 respondents, a good number of respondents 182(97.32%) prefer to use e-journals which are followed 175(93.58%) respondents who prefer to access Internet Information Resources 156(83.42%) respondents prefer to access e-books, 134(71.34%) prefer to access online database, 95(50.80%) prefer to access ETD, 79(42.24%) prefer to access research reports whereas only 68(36.36%) respondents are prefer to access CD-ROM Database.

Table 9: Preference of Using Various Types of Electronic Resources (N=187 Each)

Electronic Resources	Respondents	(%age)
CD-ROM database	68	36.36
Online database	134	71.65
E-Books	156	83.42
E-Journals	182	97.32
ETD	95	50.80
Research Reports	79	42.24
Internet Information Resources	175	93.58

### Response Purpose of Seeking Information/Accessing to e-Resources

Out of 187 respondents, 95(50.80%) research scholar and faculty members are using the electronic resources for "Research/Teaching/Guiding student", 46(24.59%) respondents are using for "To update knowledge/abreast with latest developments" whereas 21(11.22%) respondents for seminar preparation and the remaining 9(4.81%) respondents are using for undertake project purposes.

Table 10: Response Purpose of Seeking Information/Accessing to e-Resources

Purpose of seeking information	Respondents	(%age)
Research/Teaching/Guiding student	95	50.80
To update knowledge/abreast With the latest developments	46	24.59
Writing paper/Assignment	21	11.22
Seminar preparation	16	8.55
Undertake project	9	4.81
<b>Total</b>	<b>187</b>	<b>100</b>

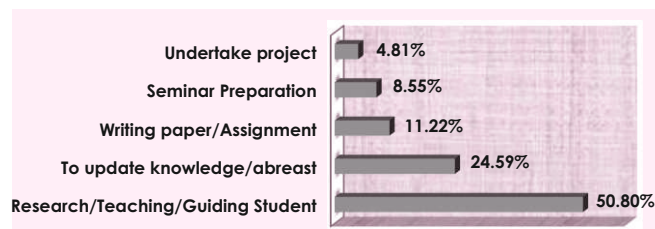


Fig. 2: Response Purpose of Seeking Information/Accessing to e-Resources

From the above one can notice that respondents are using the UGC-INFONET for Research/Teaching/Guiding student, to update knowledge/abreast with the latest developments.

### Satisfaction Level of Respondents While Using e-Resources

Table 11: Satisfaction Level of Respondents While Using e-Resources

Satisfaction level of Electronic Resources	Respondents	(%age)
Very much dissatisfied	12	6.41
Not Satisfied	18	9.62
Natural	10	5.34
Satisfied	95	50.80
Very much satisfied	52	27.80
<b>Total</b>	<b>187</b>	<b>100</b>

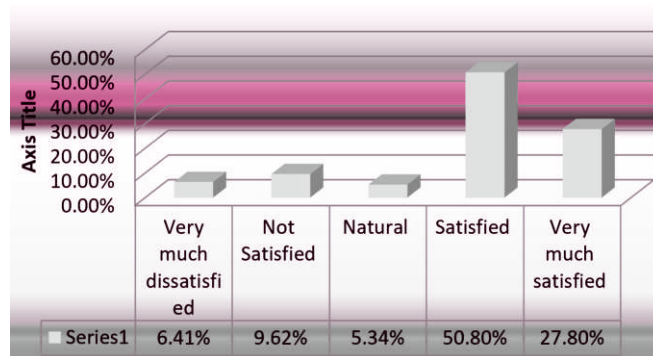


Fig.3: Satisfaction Level of Respondents While Using e-Resources

Survey findings of the study of user's satisfaction level as shown in table 11 shows that out of 187 respondents reveal that more than 95(50.80%) are "Satisfied" while using e-resources available under the UGC-INFONET Consortium and 52(27.80%) respondents are "Very much satisfied", whereas 18(9.62%) users are not satisfied, while 12(6.41%) are very much dissatisfied and 10(5.34%) users remain "Natural".

### Advantages of Access to Electronic Resources Available under UGC INFONET

Table 12: Advantages of Accessing to Electronic Resources

Advantages of Accessing to Electronic Resources	Respondents	(%age)
Convenience in Searching and Downloading	69	36.89
Time and space save	42	22.45
Effective and expedite communication	36	19.25
Searching and browsing facilities	27	14.43
Cross-reference linking	13	6.95

Because of their dynamic features like easy searching, copying, downloading, multi-user accessibility, round the clock access without any geographical limitations, etc. the utility of the electronic resources is better than print resources. The survey findings as shown in table 12 shows that a good number of respondents 69(36.89%) felt that Electronic Resources are convenient to access, 42(22.45%) users said that these save time and space whereas 36(19.25%) users felt that effectiveness and expedite is one of the advantages. While 27(14.43%) users are agreeing that searching and

browsing is a giant advantage of electronic resources and only 13(6.95%) users felt that cross-referencing is also an advantage of electronic resources out of many advantages.

### Problems in Accessing Electronic Resources

Table 13: Problems in Accessing Electronic Resources

Problems in Accessing e-Resources	Respondents	(%age)
Lack of knowledge to use	17	9.90
Lack of relevant sources	55	29.41
Technical problems (Frequent power cut, server down, etc.)	35	18.71
Overload creates problems in searching relevant information	42	22.45
Lack of assistance by library staff	12	6.41
The current database is not available	26	13.90



Fig. 4: Problems in Accessing Electronic Resources

The problems encountered while accessing to e-resources has been shown in which shows that the majority of the respondents think that lack of relevant sources is important problems while accessing to e-resources which are followed by 55(29.41%) respondents who find out that lack of relevant information in the consortium whereas 42(22.45%) respondents pointed out the problem related to "Overload creates problems in searching relevant information" and 35(18.71%) respondents says about the "Technical problems (Frequent power cut, server down, etc.)" problems while searching the e-resources. It has been found that users are not so much satisfied with the cooperation and helps which they might be needed while searching and downloading e-resources which are the not encouraging for the researchers to access e-journals from the UGC-INFONET Digital Library Consortium Site.

### Impact of E-Resources on Academic Staff's Teaching and Research

Table 14 shows that majority of the lecturers 89(47.59%) indicated that it aid research, this is followed by improving teaching ability 46(24.59%), 16(8.55%) of respondents are use electronic resources for brings academic to the forefront of your profession and remaining part of 11(5.88%) of respondents are use of electronic resources for helps to foster relationship among academics.

Table 14: Impact of E-Resources on Academic Staff's Teaching and Research Activities

Impact of E-Resources	Respondents	(%age)
Aids in Carrying out research	89	47.59
Brings academic to the forefront of your profession	16	8.55
Helps the development of the education system	25	13.36
Helps to foster relationship among academics	11	5.88
Improve teaching ability	46	24.59

### Suggested Solutions to Solve Problems to Access e-Resources

The searching for the solution by users is important to solve the problems of users to improve the services of the UGC-INFONET consortium. The questions were asked to the respondents about solutions to the problems and difficulties.

The responses were analyzed and presented in table 15. Many library users have suggested many solutions for the existing problems. The majority of library users suggested that to spread awareness about the use of electronic resources and to provide separate terminals for teachers/researchers/students in accessing e-journals. The findings are self-explanatory and if we solve all the problems, definitely the usage of e-resources will be increased.

Table 15: Suggested Solutions to Solve Problems while using E-Resources

Solutions of problems about using UGC-INFONET consortium	Respondents	(%age)	Ranks
Arrange orientation course/internet training to user	92	49.19%	XIV
Encourage teachers/researchers/PG students to internet access	134	71.65%	X
Give circulation tips on the access to e-journals as guidelines	59	31.55%	XVI
Increase in the number of internet access points/terminals	157	83.95%	V
Installation of more computer terminals	136	72.72%	IX
Need for a morning time slot for research scholars	75	40.10%	XV
The need for dedicated power supply	142	75.93%	VIII
The need for installing high capacity server/voltage stabilizer	132	70.58%	XI
The need for more journals of social sci., humanities & languages	125	66.84%	XII
Need to give a proper interface to full-text e-journals,	147	78.60%	VII
Need to give user education to all users in accessing e-journals	168	89.83%	IV
Printing facility should be made available to users	82	43.85%	XIII
Provide internet connectivity to all the department/centre/offices	172	91.97%	III
Provide separate terminals for teachers/researchers/students	181	96.79%	II
Provision of the separate hall for teachers/researchers/student	112	59.89%	XI
Require extended hours for internet facility	152	81.28%	VI
To spread awareness about the use of Electronic Resources.	185	98.93%	I

### FINDINGS

- The majority (56.68%) of the respondents of the present study were male research scholars and faculty members whereas (43.31%) belongs to the female category;
- The highest (92.51%) of the users were aware of the E-ShodhSindhu Consortium whereas only (07.48%) of respondents were not aware of the E-ShodhSindhu Consortium;
- Majority of respondents (97.32%) are having the highest preference to use e-journals, which is followed by (93.58%) respondents who prefer for use of Internet Information Resources whereas only (36.36%) respondents have the lowest preference of using CD-ROM databases;
- Majority of (44.91%) respondents are using Electronic

Resources "Daily";

- The majority 55(29.41%) of the respondents think Lack of relevant sources;
- 36.89% of respondents are the most appropriate guide for the users to search the e-resources;
- Majority of highlighted that 119(63.63%) users prefer .pdf file format
- Highest (36.89%) of users felt that Electronic Resources are convenient to access;
- The majority (50.80%) of respondents are satisfied, (27.80%) are very much satisfied, whereas (09.62%) users are not satisfied, while (06.41%) are very much dissatisfied and (05.34%) users are Natural;
- Highest impact rate of the lecturers 89 (47.59%) indicated that it aid research;
- Maximum (50.80%) of research scholar and faculty members are using the electronic resources for Research/Teaching/Guiding student,

### SUGGESTIONS & RECOMMENDATIONS

- Adequate ICT infrastructure should be made available to access e-resources. Some Internet Access Points should be made available for library users in Central Library, Departments, Hostels, etc.
- High-Speed Internet should be provided in the campus with Campus-wide Wi-Fi Network;
- The Library services should be made available for extended hours;
- The library should organize User Awareness Training programme/workshop for enhanced access to the e-resources;
- Orientation Programme should be organized by the BHU Central Library for the fresher's research scholars and teachers who join the university;
- For PG Students also regular Orientation and Users Awareness Programmes to access e-books, e-journals, online databases, web resources, and open access resources should be organized at certain intervals;
- Users Feedback should be taken by the library to improve the services.
- Demand for procuring new e-resources should be invited from different schools and departments.

### CONCLUSION

Form the above study, it has been concluded that electronic resources are very much essential for conducting teaching-learning and research. Due to the emergence of Internet

and Electronic publishing, many publishers have started publishing online resources in the form of e-journals, e-books, online/offline databases of secondary and tertiary sources. Due to the higher cost of electronic resources, many e-resource consortia have come into existence. MHRD/UGC has authorized the INFLIBNET Centre to procure e-resources under consortium and provide access to all Indian Universities, colleges, and Centrally Funded Technical Institutions.

The study reveals that the awareness level among the BHU library users is very high and they prefer the university library as the main place to access the e-resources. They have many problems and also they suggested many suggestions to address the issues. The library users have suggested for better ICT infrastructure and need for conducting more Users Awareness Training Programmes.

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