

Use of E-Resources by Faculty and Students of Affiliated Colleges to Bangalore University, Karnataka: A Study

Nagaraja Naik M¹, Lokesha Naik², MC Gudimani³

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Abstract

E-Resources are a mode of access and play an important role in dissemination of information. The students and faculty members are two important groups of users who are continuously engaged in learning and teaching. A step is made in the present search article focuses on the study of electronic information resources in the affiliated colleges to Bangalore University, Bangalore. Its main objectives is to find out the purpose of using the internet, find out awareness and use of e-Resources, identify the purpose and reasons for using the e-Resources, find out searching of e-Resources and to identify satisfaction level on ICT facilities, resources and services. This study is based on primary data collected from students and faculty members using a questionnaire. The study found that all the users were aware about using internet and e-Resources. Majority of respondents 782 (95.37%) are aware and using e-news papers. maximum respondents 735 (89.63%) are using e-Resources to update and learn more about their career, majority of the respondents except statement decreases time spend articles have either disagreed or given no opinion for all the statements on e-journal. The study has recommended that educated the users to use Boolean logic operators, which is one of the best retrieval methods for retrieving relevant information.

Keywords: Bangalore University; e-Resources; e-Books; Internet; Library; ICT; Affiliated colleges; e-journals; Online Database; Information; E-Thesis/ Dissertations; Faculty members; Students.

INTRODUCTION

Library is information centre for learning minds, which contains books, periodicals, digital resources and so on. The main purpose of any library is to satisfy the learners' needs. Library is a part of any academic centre to serve information and support their educational activities. Its main tasks are to acquiring, organizing, preserving, retrieving and disseminate the information and knowledge to the learners. Right from birth of library to the present electronic era, the main objectives of library is achieving its goals. Hence, libraries must give right information to right

Authors Affiliation:^{1,2}Librarian, Department of Library and Information Science, Government First Grade College, Honnali, Davanagere 577217, Karnataka, India, ³University Librarian, Department of Library and Information Science, Kannada University, Hampi 583276, Karnataka, India.

Address for Correspondence: Nagaraja Naik M, Librarian, Department of Library and Information Science, Government First Grade College, Honnali, Davanagere 577217, Karnataka, India.

E-mail: naik007bpt@gmail.com

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learners in right time.

Electronic Information Resources

As the order of the day, due to fast development and applications of digital information resources, library and information sources and services have changed from manual method to digital method. Internet is an interconnecting network of computers, offering information communication to each other from remote corners of the worldwide to each other. At the same time, the demand of learners has also been changed. In these times, library services are more users' oriented and online services like digital information resources, institutional repository, electronic information resources and other may be provided.

Review of Literature

Igbinovia M.O, Odelami B. (2022) the results revealed that the under graduates' frequency of electronic information resources use was slightly high and such use was for both academic and non-academic purposes.

Gautam, A.S. & Sinha, M.K. (2020) the present study have a look at is part of PhD studies work of one of the authors. To envision the usage of the e-resources to be had to the BHU library by means of the teachers and scholars, this survey was performed. the prevailing research discusses the usage of digital resources (e-journals, e-books, on-line/offline databases, net sources) which can be made available by the *Inflibnet* Centre in e-aid consortium like *UGC-Infonet* virtual Library Consortium by means of the academics and pupils of BHU. The present observe become performed as a part of doctoral research paintings from January 2015 to July 2015.

Narasappa (2018) studied about ICT skills among library professionals and he stated that "adequate knowledge of information technology and its application in libraries with a positive attitude can make the real difference between the real and desired situation. Again the author expressed professor should be IT skilled".

Reddy, & Reddy, (2017) in their study on "Utilization of e-Resources by the Engineering College librarians in Acharya Nagarjuna University area, Andhra Pradesh" the findings of the study revealed that (28.6%) of the engineering college libraries is not publicizing e-sources. A significant percentage of users (38.7%) replied that their libraries are not publicizing e-sources. The methods expressed by the users for publicity of e-sources are, arranging exhibitions (51.4%), arranging guided tours in the library (30.1%), displaying the

periodic list of new arrivals (11.9%) and circulating the lists of new arrivals (6.4%). A few users (15.3%) replied that their libraries are not providing user education/orientation programme in the use of e-sources. In (28.6%) of libraries, the user education/orientation programme in the use of e-sources is not provided as per the replies of librarians. As per the study, most of the engineering users (84.7%) require orientation in the use of e-sources. The methods expressed by the users for orientation of e-sources are a lecture (35.1%), library tour (39.2%) and library guide (25.7%).

Hussain, & Singh, (2017) in their study on "Internet usage in Punjab libraries". Revealed that majority of the population consists of PG Students (17%), Scholars (8.9%) Professionals courses (6.7%) under graduates (2.2%). 72.3% of respondents have used the internet in the libraries. 36.2% of users who used the internet at working place. 8.5% of the users have no opinion to use the internet. 83% of the users are using the internet to update their knowledge, 53.2% of users are using the internet to the literature search, further reveals that 51.1 percent of respondents used the internet to send and receive e-mail, 48.9% of the users used for reading articles. 100% respondents use Google engine most preferred to search, 83% have used Google Chrome, 29.8% of users have used UC browser in Punjab libraries.

Kishore Kumar & Naik (2016) have conducted a study examined the use of ICT in 42 nursing college libraries by investigating the ICT infrastructure, the current status of nursing college library automation, barriers in implementing library automation and librarians' attitude towards the use of ICT.

Kishore Kumar, and Naik,(2015) have jointly conducted a study on "Usage of Wi-Fi Service among Users' of Bangalore Medical College and Research Institute Library, Bangalore". The main purpose among 75% of users was to avail this facility for searching articles through an online database. *Jange (2010)* conducts a study on "Use of the internet as an information source by engineering faculty and students and its impact on libraries of regional engineering colleges of India: a study". An attempt has been made to study the use of the Internet as an Information Source among engineering faculty and Students and the impact of Internet technology on Libraries of National Institutes of Technology in India to enhance the optimization of rich information resources and services on the net to the academic and research pursuit of denizens. The nature of the research study, keeping in view the population to be covered, their characteristics and

the technology employed, has necessitated a multi methodological strategy to collect and analyze the data by using survey research methods which includes Questionnaire, Interview and Observation, as a means to elicit information pertaining to this study. A total of 850 questionnaires and Interview Schedules were distributed to the faculty and students, 665 questionnaires were duly obtained with a response rate of 78.24%. Further, a total of 17 questionnaires were distributed to the Librarians of Regional Engineering Colleges in India, out of which 10 were duly obtained, with a feedback of 58.82%. New line new line the most popular perception of Internet technology is 'Wealth of huge useful current information and E-mail service and World Wide Web (WWW) are the most frequently used Internet services among the engineering community and opined fairly better satisfaction with the current state of Internet to support in their academic and research activities. The research study encompasses independent variables mainly Designation, Age, Qualification, Teaching and Research Experience and Formal Training of respondents. In this paper, efforts were made to examine the relationship between the variables Use of Internet (UOI) and Level of Satisfaction 14 (LOS), as a two major dependent variables of the research study. The various dimensions included are quantification of these two variables, newline to evaluate multiple effects, a set of four variables i.e. age, teaching and research experience and level of satisfaction were put to Regression Analysis to see the multiple effects internet services.

Objectives of the Study

The following are the major objectives of the study

- To find out the purpose of using the internet among the students and faculty members.
- To find out awareness and use of e-Resources among the students and faculty members of the Bangalore University affiliated colleges.
- To identify the purpose and reasons for using the e-Resources among the students and faculty members of the Bangalore University affiliated colleges.
- To find out searching of e-Resources among the students and faculty members of the Bangalore University affiliated colleges.
- To trace out the problems faced by the students and faculty members of the Bangalore University affiliated colleges.
- To identify satisfaction level on ICT facilities, Resources and Services.

- To provide suitable measures and suggestions to improve the existing electronic information resources and services.

METHODOLOGY

The population from which the sample is drawn belonged to the Bangalore University, Bangalore, Karnataka. Bangalore University has affiliated 684 Unaided, Aided, Autonomous and Government colleges during 2021-22. Since the large colleges were affiliated to university the researcher has decided to collect data from 75 NAAC accredited colleges.

For the present study, since there are a large number of students 26,000 from the colleges, sample was limited to 4 percent i.e. 1040 students. The total numbers of teachers 5,500 in these colleges, therefore, 4% i.e. 220 teachers were taken for sample size. Total population of the study is 1260 from affiliated college libraries, out of this, 1042 students and 218 teachers.

The researcher has distributed questionnaire to 1260 respondents. Out of 1260 questionnaires the researcher has received 900 filled-in questionnaires from the respondents. The collected questionnaires were edited, tabulated and used for analysis.

Data Analysis

Gender-wise distribution of respondents

Gender plays major role in use of information

Table 1 A: Status wise distributions of respondents

Status	No. of Respondents	Percentage
Faculty	167	18.56
Students	733	81.44
Total	900	100.00

It is noticed from the above table that majority of respondents 733 (81.44%) were students and rest of the respondents 167 (18.56%) were faculty members. Hence, majority of the respondents were from students.

sources. This table helps the researcher to find out the usage level of gender and whether there is a difference of gender in visiting the library or not. Data collected on gender wise is displayed in table 1.

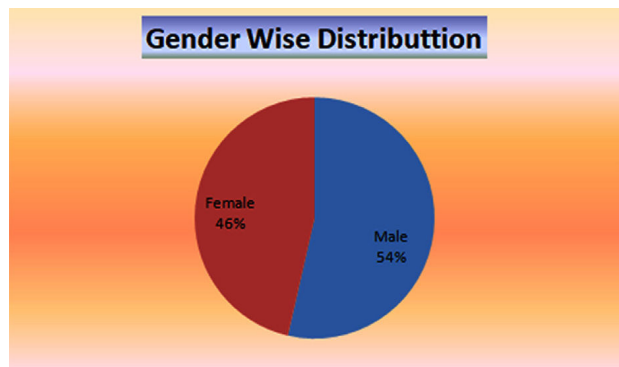
It is found from the above table that majority of the respondents 482 (53.56%) were from male and rest of the respondents were female. So, it is found that more number of respondents were from the male community.

Findings

- Out of 900 respondents, 816 (90.67%) have

Table 1 B: Gender-wise distribution of respondents

Gender	No. of Respondents	Percentage
Male	482	53.56
Female	418	46.44
Total	900	100



Awareness and Purpose of Using Internet Awareness of Internet

Table 2: Internet use

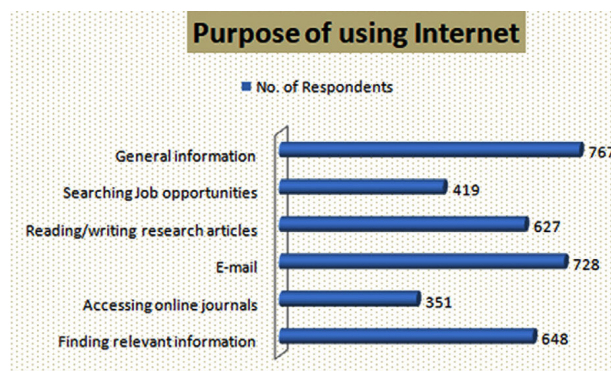
Internet-use	No of Respondents	Percentage
Yes	816	90.67
No	84	9.33
Total	900	100

It is clear from the above table that out of 900 respondents, 816 (90.67%) have stated that they were using the internet and only less number of respondents 84 (9.33%) have stated that they were not using the Internet. Hence, majority of the respondents were using the Internet.

Purpose of using/browsing Internet

Table 3: Purpose of using/browsing Internet

Purpose of using Internet	No. of Respondents	Percentage
General information	767	94.00
E-mail	728	89.22
Finding relevant information	648	79.41
Reading/writing research articles	627	76.84
Searching Job opportunities	419	51.35
Accessing online journals	351	43.01

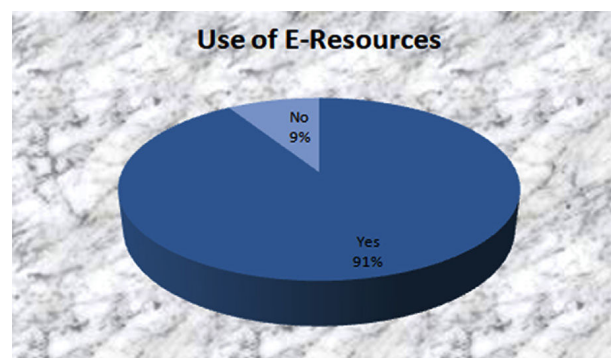


It is noted from above table and figure that majority of the respondents 767 (94.00%), 728 (89.22%), 648 (79.41%), 627 (76.84%) and 419 (51.35%) have stated that they have used internet for general information, e-mail, finding relevant information, writing research articles and for searching jobs. It was also noticed that 351 (43.01%) respondents have stated that their purpose was accessing online journals. Hence, majority of the respondents using internet for general information, e-mail, finding relevant information, writing research articles and for searching jobs.

Use of E-Resources

Table 4: Use of e-Resources

Sl. No.	Use of e-Resource	No. of Respondents	Percentage
1	Yes	820	91.11
2	No	80	8.89
Total		900	100.00



It is found from the above table that 820 (91.11%) of the respondents were using e-resource, remaining 80 (8.89%) of the respondents were not using the e-resources. Hence, majority of respondents used the electronic information resources in the library.

Awareness and use of e-Resources

It is noted that majority of respondents 782 (95.37%) were aware and using e-newspapers 736 (89.76%), 633 (77.20%), 591 (72.07%), and 527 (64.27%) were aware and using of e-Resources such as search engines (89.76%), Electronic theses and dissertations (77.20%), e-books (72.07%), and e-magazines (64.27%). It also noted that library website, subject gateways and e-standards were

Table 5: Awareness and use of e-Resources

Sl. No.	Use & Awareness on e-Resources	No of Respondents N=820	Percentage
1	e-Newspapers	782	95.37
2	Search Engines	736	89.76
3	e-Books	591	72.07
4	ETD	633	77.2
5	e-Magazine	527	64.27
6	e-Journals	349	42.56
7	Web Portal	311	37.92
8	E-Databases	302	36.83
9	e-Reports	288	35.12
10	Library Website	165	20.12
11	Subject Gateway	156	19.02
12	e-Standards	107	13.05

least used by the respondents. Overall, majority of the respondents were aware of the e-newspapers,

search engines, ETDs, e-books, and e-magazines.

Purpose of Using e-Resources

Table 6: Purpose of using e-Resources

Sl. No.	Purpose of using e-Resources	No. of Respondents N=820	Percentage
1	Learning	735	89.63
2	Entertainment	683	83.30
3	For Assignment	618	75.37
4	For Examination	445	54.27
5	Looking for job	425	51.83
6	Teaching	89	10.85

The above table and figure shows that majority of the respondents 735 (89.63%) were using e-Resources to update and learn more about their career, followed by 683 (83.30%) and 618 (89.63%) of the users use the e-Resources for entertainment and doing the assignment. Next highest

respondents have stated that they used e-Resources for preparing their examination 445 (54.27%), searching jobs for their future developments 425 (54.27%) and only 89 (10.85%) of the respondents used for teaching purpose.

Motivating factor to use e-Resources

Table 7: Motivating factor to use e-Resources

Factors	N=820				
	SA	A	N	D	SD
Helps to keep up-to-date with areas of research interest/course work	384 46.32%	276 33.66%	76 9.27%	45 5.49%	39 4.76%
Provides fast and reliable communication	308 37.56%	295 35.98%	133 16.28%	49 5.98%	35 4.27%
User-friendly search engines helps to retrieve the documents easily	274 33.41%	269 32.80%	208 25.37%	48 5.86%	21 2.56%
Makes easy to publish documents in journals, conferences, etc.	165 20.12%	246 30.00%	253 30.85%	105 12.80%	51 6.22%
Provides access to various documents in different formats	337 41.10%	217 26.46%	162 19.76%	67 7.56%	37 4.51%

It is found from above table that the highest number of respondents 384 (46.32%), 308 (37.56%), 274 (33.41%) and 377 (41.10%) strongly agreed and stated that helped them to keep up-to-date areas of research interest, provided fast and reliable communication, user friendly search engines and provided access to various documents easily. On the other hand, more number of respondents 246 (30.00%) have agreed that it is easy to publish documents followed by

second highest respondents have given neutral opinion for easy to publish documents.

Overall, majority of the respondents strongly agreed and agreed for e-Resources keeps them update, provides fast and reliable communication, user friendly makes easy to publish and provides access to various documents.

Rating of the information retrieved from Internet

Table 8: Rating of the information retrieved from Internet

N=820				
Features	Excellent	Good	Average	Poor
Accessibility	13 (1.59%)	308 (37.56%)	145 (17.68%)	354 (43.17)
Accuracy	5 (0.61%)	390 (47.56%)	309 (37.68%)	116 (14.15%)
Authoritative	1 (0.12%)	191 (23.30%)	279 (34.02%)	349 (42.56%)
Consistency	28 (3.41%)	286 (34.88%)	427 (52.07%)	79 (9.63%)
Ease of use	3 (0.37%)	2 (0.24%)	90 (10.98%)	725 (88.41%)
Time-Saving	3 (0.37%)	50 (6.10%)	279 (34.02%)	488 (59.51%)

From the table, it is found that with regard to accessibility, second highest number of respondents 308 (37.56%) have rated as good third highest respondents rated as average 145 (17.68%) least number of respondents rated as excellent 13 (1.59%) and the respondents which is the highest 354 (43.17%) among all rated as poor.

(88.41%) and 488 (59.51%) stated poor followed by second highest respondents rated as average.

For consistency, majority 427 (52.07%) have rated as average and next highest rated as good 286 (34.88%), poor 79 (9.63%) and excellent 28 (3.41%).

On the other hand for accuracy, highest respondents 390 (47.56%) have rated as good followed by second highest 309 (37.68%) rated as average and least number of respondents rated as poor 116 (14.15%) and excellent 5 (0.61%) respectively. Whereas, for authoritative, easy to use and time-saving, majority of the respondents 349 (42.56%), 725

Overall, majority of the respondents have rated as poor for time-saving, ease of use, authoritative and accessibility. It was also noticed that highest number of respondents 427 (52.07%) rated as average for consistency, 309 (37.68%) rated on good for accuracy and third highest respondents rated good 308 (37.56%) for accessibility.

Rating on e-Journals

Ratings on e-journals have been collected from the respondents. After collection the data was analyzed and displayed in table 4.3.13.

Table 9: Rating on e-Journals

Rating on e-Journals	Strongly agree	Agree	Strongly disagreed	Disagree	No Opinion
E-Resources are more user-friendly than printed resources	53 (6.47%)	00 (00%)	9 (1.10%)	380 (46.34%)	378 (46.10%)
Updated frequently than the printed resources	8 (1.00%)	81 (9.88%)	46 (5.61%)	457 (55.73%)	228 (27.80%)
Enhance access/visibility to scientific papers	1 (0.12%)	50 (6.10%)	54 (6.59%)	514 (65.68%)	201 (24.51%)
Decreases the quality/rigor of research papers	54 (6.59%)	32 (3.90%)	318 (38.78%)	66 (8.05%)	350 (42.68%)
Decrease the time spent on article search	00 (00%)	16 (1.95%)	341 (41.59%)	343 (41.83%)	120 (14.63%)
Increases scholarly productivity in terms of publishing papers.	45 (5.49%)	88 (10.73%)	1 (0.12%)	387 (47.20%)	299 (36.46%)
Keeps current information about global R&D	00 (00%)	00 (00%)	60 (7.32%)	711 (86.71%)	49 (5.98%)
Distribution of articles easier and less costly	51 (6.21%)	4 (0.49%)	96 (11.71%)	622 (75.85%)	47 (8.27%)

It is found from the above table that majority of respondents 711 (86.71%), 622 (75.85%) 514 (65.68%) and 457 (55.73%) have disagreed for e-Resources keeps current information about global R&D, distribution of articles easier and less costly, enhance access/visibility to scientific papers, and updated frequently than printed resources.

It was noticed that second highest respondents have not given opinion for e-Resources are more user-friendly than printed resources and enhance access/visibility to scientific papers. On the other hand almost equal number of respondents

341 (41.59%) and 343 (41.83%) have strongly disagreed and agreed for decreases time spend on article search and again highest number of respondents 387 (47.20%) and 299 (36.46%) have stated that e-journals increase scholarly productivity in terms of publishing papers. Finally almost equal number of respondents 380 (46.34%) and 378 (46.10%) have disagreed and given no opinion for the statement e-Resources are more user friendly than printed resources. Overall, majority of the respondents except statement decreases time spend articles have either disagreed or given no opinion for all the statements on e-journal.

Searching of required information

The researcher has collected the data from the respondents with regard to search technique used. The analysis data is given in table 10.

Table 10: Searching of required information

N=820			
Sl. No.	Search	No. of Respondents	Percentage
1	Using the author/title name	719	87.68
2	Using the search engines	678	82.68
3	Directly typing the URL	519	63.29
4	Using Boolean Logic Operators	369	45.00

The above table shows that 719 (87.68%) of respondents were searching of required information using author or title of books or article, whereas 678 (82.68%) and 519 (63.29%) of the respondents were searching their required information

through search engines and directly typing the URL of website, and 369 (45.00%) respondents searched through Boolean Logic Operators.

Table 11: Problems faced while searching e-Resources

N=820			
Sl. No.	Major Problems faced	No. of Respondents	Percentage
1	Difficulty to read from a Computer	807	98.41
2	Lack of system speed	686	83.66
3	Difficulty in accessing full text	603	73.54
4	Payment facility made very difficult	322	39.27
5	Core journals are few in number	261	31.83

Above table shows that the respondents have faced were problems while accessing the e-Resources. Major problem is difficult to read from a computer 807 (98.41%), 686 (83.66%) of the respondents faced lack of speed, 603 (73.54%) of respondents were faced difficulty in accessing full-text

article from online, 322 (39.27%) respondents were faced payments facility made very difficult and 261 (31.83%) of the respondents reported that having core journals are few in number in their institution. Overall difficulty to read from a computer was the major problem faced by the respondents.

Satisfaction with e-Resources

Table 12: Satisfaction with e-Resources

e-Resources	Excellent	Good	Satisfactory	Poor	Not Available
Electronic Journal	0 0%	0 0%	56 6.83%	278 33.90%	486 59.27%
E-books	0 0%	50 6.10%	220 26.83%	72 8.78%	478 58.29%
Online Database	0 0%	176 21.46%	40 4.88%	588 71.71%	16 1.95%

Table Cont....

E-Thesis/ Dissertations	0 0%	0 0%	211 25.73%	114 13.90%	495 60.37%
CD ROM based databases	205 25.00%	63 7.68%	101 12.32%	436 53.17%	15 1.83%
e-Reports	47 5.73%	206 25.12%	476 58.05%	88 10.73%	3 0.37%
e-Standards	72 8.78%	213 25.98%	402 49.02%	130 15.85%	3 0.37%

For opinion on electronic information resources available in the college library, for e-Journals majority of the respondents 486 (59.27%) have stated that e-Journals were not available in the library. The next highest stated that poor 278 (33.90%) and satisfactory 56 (6.83%).

It was also noticed for e-Books majority of the respondents 478 (58.29%) have stated that e-book are not available followed by 220 (26.83%) were satisfied and least number of respondents rated as poor and good.

With regard to online databases 588 (71.71%) rated as poor followed by 176 (21.46%) rated as good, 40 (4.88%) of respondents opinioned satisfactory, 16 (1.95%) of respondents rated as not available and no one stated as excellent.

For e-Theses and dissertations 495 (6.37%) respondents stated that e-theses and dissertation were not available, 211 (25.73%) rated satisfactory and only 114 (13.90%) have rated as poor.

For CD ROM databases, majority of the respondents 436 (53.17%) have rated it as poor followed by 205 (25.00%) rated as excellent and others least preformed.

For e-Reports 476 (58.05%) rated as satisfactory followed by next highest respondents 206 (25.12%) rated it as good. The next preferred one was poor 88 (10.73%) and excellent 47 (5.73%).

With regard to e-Standards, almost 35% rated as excellent and good and highest number of respondents 402 (49.02%) rated as satisfactory.

Overall, majority of the colleges do not have e-Journals, e-Books and e-Theses & dissertations and e-Reports and opinion for e-reports and e-standards ranged from satisfactory to excellent, whereas for other sources such as CD-ROM database and online databases they rated as poor.

Opinion on electronic information services provided in the college library

Table 13: Opinion on Electronic Information Services (EISs) provided in the college library

Electronic Information Services	Excellent	Good	Satisfactory	Poor	Not Available
Internet Search Service	0 0%	1 0.12%	377 45.98%	123 15.00%	319 38.90%
Electronic Document Delivery Service	213 25.98%	188 22.93%	349 42.56%	65 7.93%	5 0.60%
Table of Content Page Service	220 26.83%	59 7.20%	394 48.05%	145 17.68%	2 0.24%
E-Mail Alert Service	206 25.12%	49 5.98%	176 21.47%	378 46.10%	11 1.34%
SDI	0 0%	251 30.61%	157 18.47%	406 49.51%	6 0.73%
CAS	202 24.63%	12 1.46%	186 22.68%	137 16.70%	283 34.17%
Online Database Search	247 30.12%	19 2.32%	172 20.98%	110 13.41%	272 33.17%

From the above table regarding opinion on Internet search services, highest number of respondents 377 (45.98%) have rated as satisfactory followed by 123 (15.00%) rated poor. There is only one respondent rated as good and no single respondent has rated as excellent. It is also important to notice that 319 (38.90%) have stated there service offered.

For document delivery service, five respondents have stated that no such service and also found that 349 (42.56%) rated satisfactory, followed by 213 (25.98%) and 188 (22.93%) have stated as excellent and good respectively.

For table of content page service, 394 (48.05%) rated as satisfactory followed by 220 (26.83%) rated as excellent and

145 (17.68%) rated as poor.

For ease of e-mail alert, highest number of respondent 378 (46.10%) rated as poor followed by 206 (25.12%) and 176 (21.47%) have rated as excellent and satisfactory and only 49 (5.98%) have rated as good.

For SDI, majority of the respondents 406 (49.51%) rated as poor 251 (30.31%) rated as good followed by 157 (18.47%) rated as satisfactory and no one has rated as excellent.

For CAS, highest number of respondents 283 (34.17%) stated no such service/not available and not aware. Second highest number of respondents 202(24.63%) rated as excellent.

For Online database search, the highest number of respondents 272 (33.17%) stated no such service available, not aware. Second highest number of respondents rated as excellent i.e., 247 (30.12%).

Overall it is noted that electronic document delivery services

table of content page service and online database search were rated from excellent to satisfactory and more number of respondents have stated that internet search service, CAS and Online database search service were not either available or not aware.

Satisfaction with ICT facilities, sources, services and overall opinion

Table 14: Satisfaction with ICT facilities, sources, services and overall opinion

Satisfaction	Excellent	Very Good	Good	Average	Poor
ICT Facilities in Library	46 5.61%	545 66.46%	46 5.61%	180 21.95%	3 0.37%
Library (Sources)	284 34.63%	85 10.37%	393 47.93%	58 7.07%	0 0%
Library (Services)	262 31.95%	343 41.83%	201 24.51%	6 0.73%	8 0.98%
Overall Opinion	270 32.93%	312 38.05%	226 27.56%	12 1.46%	0 0%

With regard to ICT facilities, majority of the respondents 545 (66.46%) rated as excellent followed by 180 (21.95%) rated as average. Very less number of respondents each has opined 46 (5.6%) excellent and 46 (5.61%) good.

On the other hand for library sources highest number of respondents 393 (47.93%) followed by 284 (34.63%) rated as good and excellent respectively and few have rated as average and poor.

Whereas for library services highest number of respondents 343 (41.83%) rated very good followed by 262 (31.95%) and 201 (24.51%) rated as excellent and good and only 14 respondents rated as average and poor respectively. For overall opinion, 98.54% of the total respondents have rated from excellent to good and only 12 (1.46%) have rated as average.

stated that they are using the internet and only less number of respondents 84 (9.33%) have stated that they are not using the Internet. Majority of the respondents are using the Internet.

- Majority of the respondents are using internet for general information, e-mail, finding relevant information, writing research articles and for searching jobs.
- Majority of the respondents 820 (91.11%) are using e-resource, remaining 80 (8.89%) of the respondents are not using the e-resource. Majority of respondents used the electronic information resource in the college library.
- Majority of respondents 782 (95.37%) are aware and using e-newspapers 736 (89.76%), 633 (77.20%), 591 (72.07%), and 527 (64.27%) are aware and using of e-Resources such as search engines (89.76%), Electronic theses and dissertations (77.20%), e-books (72.07%), and e-magazines (64.27%). It is also noted that library website, subject gateways and e-standards are least used by the respondents. Majority of the respondents are aware of the e-newspapers, search engines, ETDs, e-books, and e-magazines.
- Majority of the respondents 735 (89.63%) are

using e-Resources to update and learn more about their career, followed by 683 (83.30%) and 618 (89.63%) of the users use the e-Resources for entertainment and doing the assignment. Next highest respondents have stated that they used e-Resources for preparing their examination 445 (54.27%), searching jobs for their future developments 425 (54.27%) and only 89 (10.85%) of the respondents used for teaching purpose. Majority of the respondents are using e-Resources for learning purpose.

- Majority of respondents used search engines for looking relevant electronic information and their percentage is 689 (84.02%) followed by 605 (73.78%) of respondents also search in University/Library website. Very few of respondents 78 (9.51%) and 65 (7.92%) have searched through online database and subject gateways/directories/portals. More number of respondents used search engines to get electronic information.
- Highest number of respondents 384 (46.32%), 308 (37.56%), 274 (33.41%) and 377 (41.10%) strongly agreed and stated that e-Resources helped them to keep up-to-date areas of research interest, provided fast and reliable communication, user

friendly search engines and provided access to various documents easily. On the other hand, more number of respondents 246 (30.00%) have agreed that it is easy to publish documents followed by second highest respondents have given neutral opinion for easy to publish documents. Majority of the respondents strongly agreed and agreed for e-Resources keep them update, provides fast and reliable communication, user friendly makes easy to publish and provides access to various documents.

- Majority of respondents 711 (86.71%), 622 (75.85%) 514 (65.68%) and 457 (55.73%) have disagreed for e-Resources keeps current information about global R & D, distribution of articles easier and less costly, enhance access/visibility to scientific papers, and updated frequently than printed resources.
- Second highest respondents have not given opinion for e-Resources are more user friendly than printed resources and enhance access/visibility to scientific papers. On the other hand almost equal number of respondents 341 (41.59%) and 343 (41.83%) have strongly disagreed and agreed for decreases time spend on article search and again highest number of respondents 387 (47.20%) and 299 (36.46%) have stated that e-journals increase scholarly productivity in terms of publishing papers. Finally almost equal number of respondents 380 (46.34%) and 378 (46.10%) have disagreed and given no opinion for the statement e-Resources are more user friendly than printed resources. Overall, majority of the respondents except statement decreases time spend articles have either disagreed or given no opinion for all the statements on e-journal.

Suggestions

- It is noted from the findings that nearly 9% of the respondents were not using the e-Resources. In this digital environment, for almost all print resources, there is an equal electronic resource. E-Resources have more features when comparing with print resources, such as e-Resources can be accessed by any number of users simultaneously, from any part of the world. Hence, 100% access to e-Resources should be ensured the users community.
- It was noticed that majority of the respondents were not aware of Boolean logic

operators. Hence, users should be educated on how to use Boolean logic operators, which is one of the best retrieval methods for retrieving relevant information.

- One of the major problems faced by the respondents were they found difficulty to read through computer. Lack of speed and difficulty in accessing full text articles were the other major problems faced by the respondents. For accessing e-Resources, the internet band width should be high. Hence steps should be taken up eliminate the above mentioned problems; in order to access the resources are effectively.
- For few services such as document delivery services, internet search services and table of content page service, highest respondents have rated as satisfactory, where as high number of respondents stated that the libraries are not providing e-mail alert service and SDI. It was also noticed that highest number of respondents stated that there is no CAS and online data base search service. This shows that very few services have been reached to the users, some of the services are poor and some are not available. In this digital environment electronic service plays pivotal role. Hence, necessary steps should be taken to provide electronic services.

CONCLUSION

In this digital environment, most of the educational institutions are having e-Resources, which need computers, internet bandwidth, printers, and professionals in order to exploit the available resources. These days the academic libraries also spending sizable amount for subscription of print resources. If the users are not well educated to access the available resources, it will be great loss to the institutions as well as individuals.

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