

# Awareness and Use of Electronic Resources by the Faculty Members and Research Scholars with Special Reference to Alliance University, Bengaluru, Karnataka: A Study

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**Abstract** - The purpose of this study is to find out the extent to which electronic resources are utilized among the faculty and research scholars at Alliance University, Bengaluru. Questionnaire method was used to make a survey of use of electronic resources by the faculty members and research scholars. The analysis of the data thus collected covers, purpose of e-resources use, most used type of e-resources, problem faced while accessing the e-resources and satisfaction level of the users. Responses received shows that electronic resources are preferred for searching the scholarly information. Study reveals that majority of the respondents are aware of electronic resources. Majority of the respondents are using e-journals for seeking the information and maximum number of users under study prefer e-resources for their research/project work. It is noteworthy that majority of users under the study reveals that electronic resources have created positive impact on teaching and research.

**Keywords:** Digital Library, Electronic Resources, Electronic Services, ICT Services, Alliance University, Bangalore

## I. INTRODUCTION

The 21<sup>st</sup> century was shaped by sweeping changes in communication technologies. The emergence and use of information technology is the century's most significant development affecting scholarly communication. Today, libraries are shifting their role from the custodian of traditional information resources to the provider of service-oriented digital information resources. Information explosion, exponential growth of literature due to research and development activities and unprecedented and unpredictable end user expectations for information calls for the acquisition of digital resources and electronic subscriptions in the library and information centers today. Also with the rising cost of print based information and limited library budgets, conventional libraries are not able to satisfy the entire needs of the users. So libraries have started to acquire the electronic resources along with the printed resources.

Alliance University is a private University established in Karnataka State by Act No.34 of year 2010 and is recognized by the University Grants Commission (UGC), New Delhi. Alliance University is a renowned university of higher learning located on an extensive state-of-the-art campus in Bengaluru offering a variety of degree courses.

The University has baccalaureate concentrations, postgraduate offerings, doctoral degree programs and several professional certificate programs. Alliance University Central Library housed in an independent, dome shaped building with four floors and a total carpet area of 50,000 Sq. Ft. This area is divided into the following sections: Circulation; Reference; Periodical; Audiovisual; Book Bank; and the Kannada language section. The Central Library has ample seating capacity on all floors and can accommodate 1000 users. Library has very rich collection of resources both in print as well as electronic forms.

## II. REVIEW OF LITERATURE

The importance and wide ranging scope of electronic resources in supporting teaching, research and learning activities in field of higher education is acknowledge worldwide. The literature also shows that numbers of studies are conducted on use of e-resources and services for academic research and teaching in higher education. S. Thanuskodi, (2012) shows in his study that choosing the e-resources by the users for their information needs is 47% compare to print 32.78. He also observed that majority 50.56% of respondents are highly satisfied with accessing the e-resources.

User's expectations of libraries resources and services are changing as they able to access the more information online. Vinod Kumar Singh (2013) conducted study on use of electronic resources and services by Indian Institute of Management, Bangalore. He finds majority (94.74%) of the respondents revels that they do not visit the library regularly because e-resources of library are accessible from their workstation through LAN. Majority of the respondents using e-resources for writing articles/research papers (94.59%) and research work/project (91.89%). In this study also reveals that majority (78.38%) of the respondents stated that e-resources increase the productivity of their academic work. U S Millawithanachchi (2012) optioned that one of influenced factor on usage of e-resources is technology. Library web interface can make the difference in usage of e-resources. Developing the IT infrastructure, improve the computer and IT skills among the users are other influenced factors on usage of e-resources. There are several studies

have conducted on usage of e-resources, the present study attempts to fill this gap by presenting research on awareness and use electronic resources among the faculty and research scholars at Alliance University, Bengaluru.

### III. OBJECTIVES OF THE STUDY

The Objectives of the study are:

1. To know the level of awareness about E-resources
2. To find out the from whom users are influenced to access the e-resources
3. To know most used e-resources type
4. To find out the search methods used for searching the e-resources
5. To examine the purposes of accessing and preferred features of e-resources
6. To find the major advantages and barriers in accessing the electronic resources
7. To suggest suitable recommendations to improve facilities and services related to the use of e-resources.

### IV. METHODOLOGY

The Questionnaire method has been employed to collect the data for the present study and to select the sample population; Random sampling method has been used. Accordingly the questionnaire was distributed among 110 Faculty/Research scholars of Alliance University, Bengaluru, out of which 79 members have responded.

### V. ANALYSIS

#### A. Characteristics of Study Population

Table I shows that out of 79 respondents, more than two third of the study population consisted of Assistant Professors 70.88%, while rest of the population consisted of Professors 6.33 %, Associate Professors 7.60% and Research Scholars 15.19%. The population Studied consisted of more representatives from the College of Engineering and Design but on the whole it is a representative of all the departments. Majority of the respondents are from male population (62.02 % ) than the female population (37.98%). 18.99% belongs to age group of below 30 years, 27.85% belongs to age group of below 30-35 years, 24.05% belongs to age group of below 40-45 years, 16.45% belongs to age group of below 40-45 years and 12.66% belongs to age group above 45 years.

TABLE I CHARACTERISTICS OF STUDY POPULATION

Designation	No. of Respondents	%
Professors	05	6.33
Associate Professors	06	7.60
Assistant Professors	56	70.88
Research Scholars	12	15.19
Total	79	100

#### B. Awareness of E-Resources

Table II shows users awareness about E-resources. It can be seen from the table that majority 78 (98.73%) respondents were aware of e-resources and only 1 (1.27%) respondent was not aware of E-resources.

TABLE II AWARENESS OF E-RESOURCES

Valid	Yes	No
Awareness of E-resources	78 (98.73%)	(1.27%)

#### C. Place of Access to E-Resources

The e-resources are accessed from different kind of places by the faculties and research scholars of Alliance University are shown in the table III. It can be found that 52 (65.8%) faculty and research scholars access the e-resources in the Library, 55 (69.6%) respondents access e-resources in their respective department. 15 (19%) respondents access the e-resources in other institutional libraries, 32 (40.5%) respondents access the e-resources information in their home and 1 (1.3%) respondents access the e-resources in cyber cafe.

TABLE III PLACE OF ACCESS TO E-RESOURCES

Valid	Response
Library	52 (65.80%)
Department	55 (69.60%)
Other institutional libraries	15 (19.00%)
Home	32 (40.50%)
Cyber cafe	1 (1.30%)

#### D. Influence Made To Known about E-Resources

Table IV shows that the faculties and research scholars are came to know about e-resources from various kinds of resources persons. It can be found that 56 (70.9%) respondents knowing about e-resources from Professional Colleagues, 24 (30.4%) respondents knowing about e-resources from Teachers / Guide, 17 (21.5%) respondents knowing about E-resources from their own friends, 30 (38%) respondents knowing about e-resources from Library staff, 39 (49.4%) respondents knowing about E-resources from through Library Orientation Programme.

TABLE IV KNOW ABOUT E-RESOURCES FROM

Valid	Response
Professional Colleagues	56 (70.90%)
Teachers / Guide	24 (30.40%)
Own Friends	17 (21.50%)
Library staff	30 (38.00%)
Through Library Orientation Programme	39 (49.40%)

*E. Adequacy of E-Resources*

Scholarly information is produced in the different kinds of e-resources in this digital era. The table 5 shows the opinions of the respondents about different type of e-resources that they have accessed for searching information. The majority of the respondents said, e-books (86.1%) and e-journals (96.2%) are most accessed source of information. Followed by, e-magazines (65.80%), e-newspapers (58.2%), E-thesis/Dissertations (57%), e-conference proceedings (51.9%). Other preferred source of type of e-resources is audio/video materials (17.7%), CD-ROM Databases (11.40%) and e-standards (10.107%).

TABLE V USAGE OF DIFFERENT TYPES OF E-RESOURCES

Valid	Response
E-books	68 (86.10%)
E-journals	76 (96.20%)
E-newspapers	46 (58.20%)
E-magazines	52 (65.80%)
E-thesis and Dissertations	45 (57.00%)
E-conference Proceedings	41 (51.90%)
E-standards	8 (10.10%)
Audio-Video Materials	14 (17.70%)
CD ROM Databases	9 (11.40%)

*F. Different Way of Learning to Use the E-Resources*

Table VI shows that the faculties and research scholars have learned different ways to use the e-resources for their studies. 62 (78.5%) respondents have learned from self-study by trial and error method, 17 (21.5%) respondents have learned from Online Tutorials, 22 (27.8%) respondents have learned by attending library training programs, 17 (21.5%) respondents have learned to use e-resources from printed guides provided by the library, 16 (20.3%) respondents have taken guidance from teachers to use the E-resources, 28 (35.4%) respondents have taken guidance from friends/colleagues, 44 (55.7%) respondents have learned to use e-resources through internet browsing.

*G. Search Methods Used for Searching the E-Resources*

Table VII shows the different type of search methods used by faculties and research scholars for retrieving the

information from the e-resources. It can be seen from the table that 53 (67.1%) respondents use basic search /quick search method for retrieving the information from the E-resources, 61 (77.2%) respondents use advanced search method for searching the information from the e-resources, 7 (8.9%) respondents use expert search method for searching the e-resources, 15 (19%) respondents use Citation locator/Cited Reference search method for retrieving the information from the e-resources.

TABLE VI DIFFERENT WAY OF LEARNING TO USE THE E-RESOURCES

Valid	Response
Self-study by trial and error method	62 (78.5%)
Online Tutorials	17 (21.5%)
Attending library training programs	22 (27.8%)
Printed guides provided by the library	17 (21.5%)
Guidance from teachers	16 (20.3%)
Guidance from Friends/colleagues	28 (35.4%)
Browsing through Internet	44 (55.7%)

TABLE VII SEARCH METHODS

Valid	Response
Basic Search /Quick Search	53 (67.1%)
Advanced Search Method	61 (77.2%)
Expert Search Method	7 (8.9%)
Citation Locator/Cited Reference Search Method	15 (19%)

*H. Purpose of Using the E-Resources by Respondents*

Table VIII shows that purpose of using the e-resources by the faculty and Research scholars. It can be seen from the table that majority of respondents, that is, 62 (78.48%) respondents indicated that they are using E-resources for their research/ project Work, followed by 36 respondents (45.56%) indicate e-resources are useful for getting current information, 07 (8.86%) respondents not sure that using E-resources for Professional development, 3 (3.79%) respondents indicated that e-resources somewhat useful to writing and publishing articles and 1 (1.26%) respondent indicate E-resources are Not Useful to Teaching.

TABLE VIII PURPOSE OF USING THE E-RESOURCES

Valid	Very Useful	Useful	Not Sure	Somewhat Useful	Not Useful
Research/ Project Work	62 (78.48%)	16 (20.25%)	-	-	1 (1.26%)
Teaching	43 (54.43%)	33 (41.77%)	1 (1.26%)	1 (1.26%)	1 (1.26%)
Getting current Information	34 (43.03%)	36 (45.56%)	6 (7.59%)	2 (2.53%)	1 (1.26%)
Professional development	36 (45.56%)	34 (43.03%)	7 (8.86%)	2 (2.53%)	-
Writing and publishing articles	54 (68.35%)	19 (24.05%)	3 (3.79%)	3 (3.79%)	-

*I. Features of E-Resources*

Table IX shows that the faculties and research scholar’s opinion on important features of E-resources. It can be seen from the table the majority of 54 (68.35%) respondents consider that one of the most important feature is ease of search/ fast searching feature, 37 (46.83%) respondents

consider current and up-to-date information feature is very important, 25 (31.64%) respondents consider RSS/E-mailing feature is important, 10 (12.65%) respondents optioned that Text-to-speech option feature is Less Important and only 4 (5.06%) respondents consider Help & support feature is Not Important.

TABLE IX FEATURES OF E-RESOURCES

Valid	Most Important	Very Important	Important	Less Important	Not Important
Ease of search/ fast searching	54	17	7	0	1
Multi-user access	23	32	18	4	2
Easy to download	42	28	9	0	0
Current and up-to-date information	32	37	9	1	0
Access to additional information	22	33	20	2	2
Text-to-speech option	14	27	20	10	8
RSS/E-mail	20	21	25	8	5
Help & support	22	23	23	7	4

*J. Impact of Usage of E-Resources on Teaching/Research*

Table X shows that the faculties and research scholar’s opinion on Impact of usage of e-resources on teaching/research work. It can be seen from the table 5.0 the majority of 67 (84.8%) respondents use of E-resources for easier and faster access to information of their interest, 41 (51.9%) respondents use of e-resources to Improve professional/academic productivity, 30 (38%) respondents use of e-resources to acquire more authentic and reliable information for their teaching/research, 43 (54.4%) respondents use of e-resources to access to a current and up-to-date information, 37 (46.8%) respondents use of e-resources to exploring wider area of information sources nearer to your topic, 34 (43%) respondents use of e-resources to expedite the research process for their teaching/research, 20 (25.3%) respondents use of e-resources to share information/ research with distant colleagues of their subject.

TABLE X IMPACT ON TEACHING/RESEARCH

Valid	Response
Easier and faster access to information of Interest	67 (84.8%)
Improve professional/academic Productivity	41 (51.9%)
Acquire more authentic and reliable Information	30 (38%)
Access to a current and up-to-date Information	43 (54.4%)
Exploring wider area of Information sources Nearer to topic	37 (46.8%)
Expedite the research Process	34 (43%)
Share information/ research with distant Colleagues	20 (25.3%)

*K. Advantages of Using the E-Resources*

Table XI shows the faculties and research scholar’s opinion regarding the advantages in use of e-resources. It can be

seen from the table that 62 (78.5%) responded indicated that less time in searching is main benefit in using of e-resources, 40 (50.6%) respondents respondent to availability of the journal much before he print copy is the benefit in using of e-resources, 16 (20.3%) respondents response to simultaneous usage is the advantage in using of e-resources, 46 (58.2%) respondents response to Easy accessibility is benefit in using of E-resources, 61 (77.2%) respondents highlighted that downloading facility is the advantage in using of e-resources, 27 (34.2%) respondents response to author can be contacted directly through e-mail is the benefit in using of e-resources and 14 (17.7%) respondents response to archival facility is the advantage in using of e-resources.

TABLE XI ADVANTAGES

Valid	Response
Less time in searching	62 (78.5%)
Availability of the Journal much before the print copy	40 (50.6%)
Simultaneous Usage	16 (20.3%)
Easy Accessibility	46 (58.2%)
Downloading Facility	61 (77.2%)
Author can be contacted directly through E-mail	27 (34.2%)
Archival Facility	14 (17.7%)

*L. Reasons behind the Dissatisfaction on E-Resources by Respondents*

Table XII shows the reasons behind the dissatisfaction on e-resources by faculties and research scholars. It can be seen from the table that 24 (30.4%) respondents opinion on the reason for dissatisfaction is infrastructure Issues while using e-resources, 34 (43%) feels that reading from computer screen is the problem, 23 (29.1%) respondents are on opinion that reason for displeasure is Slow Internet speed,

22 (27.8%) respondents are on opinion that dissatisfaction due to Inconvenience in using different formats and 36 (45.6%) respondents are on opinion that reason for dissatisfaction is available e-resource access within the campus.

TABLE XII DISSATISFACTION

Valid	Response
Infrastructure Issues	24 (30.40%)
Reading from computer screen	34 (43.40%)
E-resources are not as per need	21 (26.58%)
Slow Internet speed	23 (29.10%)
Inconvenience in using different formats	22 (27.80%)
Lack of Internet browsing skills	5 (6.32%)
Access available only within the campus	36 (45.60%)

*M. Support Needed for Effective Use of E-Resources*

Table XIII shows that opinion on different kind of Support needed to effective use of E-resources. 19 (55.9%) respondents suggest Information Literacy Programmes for effective use of e-resources, 12 (35.3%) respondents suggest online tutorial for effective use of E-resources, 7 (20.6%) respondents suggest Personal help by library staff for effective use of e-resources, 17 (50%) respondents suggest database training programmes for effective use of e-resources, 17 (50%) respondents propose Regular Email alerts for effective Use of E-resources.

TABLE XIII SUPPORT NEEDED

Valid	Response
Information Literacy Programmes	19 (55.9%)
Online tutorial	12 (35.3%)
Personal help by library staff	7 (20.6%)
Database Training Programmes	17 (50%)
Regular Email alerts	17 (50%)

**VI. RECOMMENDATIONS**

1. The study shows that almost of all respondent faculty and research scholars aware of electronic resources. Library should encourage them to use e-resources by providing access to more e-resources of their subject. Library can index the subject wise open source e-resources links in the library website.
2. Majority came to know about the e-resources of their subject from their professional colleagues teaches and guides. Library can take more initiatives to create the awareness of the both subscribed as well as open source e-resources of their subjects.
3. The study shows that majority of the respondents feels electronic resources are “ease to search”. Library can make one single search facility of the all the available e-resources to increase usage of the e-resources.

4. The study shows that majority of the respondents are learning to use the e-resources by self-study method and browsing through internet. This study indicated that there is lot of scope for library to organize the formal training programs. It is also possible that the training programs organized were not properly marketed or the schedule of Programme may not be convenient for the respondents.
5. Study shows that one of the main disadvantages of accessing the e-resources is “non-accessible outside the campus”. To promote and more use, e-resources should be made available outside the campus also.

**VII. CONCLUSION**

University and other institute libraries of higher education are now furnished with modern information and communication technology. New software tools and techniques are being implemented by the libraries to provide right information at right time abusers fingertips. Libraries are acquiring the information in the all the possible formats like e-journals, e-books, databases and other multimedia forms to meet the user’s information needs. Libraries now started procuring the e-resources through consortium to provide access of maximum e-resources at minimum cost. But usage of the e-resources is one of the main concern. The possible reason may be lack of awareness among the user community. To better return of investment on e-resources, libraries should organize more and more user education Programmes. Also libraries should teach the various search techniques to get relevant information from the online resources. Libraries should try to make these e-resources more users friendly and ensure optimum utilization of these e-resources.

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