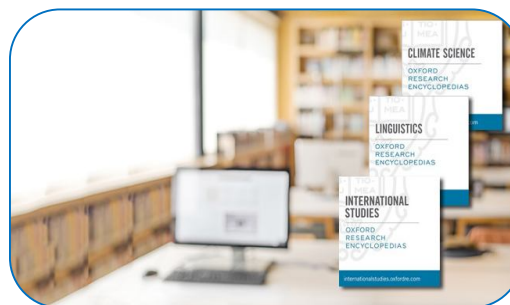




## USE OF ELECTRONIC RESOURCES BY RESEARCH SCHOLARS OF LIFE-SCIENCES, KARNATAK UNIVERSITY, DHARWAD: A STUDY

**Girmallesh H. N. and B. D. Kumbar**  
Department of Library and Information Science,  
Karnatak University, Dharwad 580003, India



### ABSTRACT:

*Electronic resources (E-resources) have become the most sought after library reserves, in satisfying the varied needs of patrons expeditiously. Information technology has brought phenomenal change and has become an important tool for information dissemination, storing and retrieving, as a result E-Information sources have acquired major portion of library collection. The present study has been chosen on use of E- resources by the life science research scholars of Karnatak University, Dharwad to verify how E-resources have brought changes in the progress of research and development and what are the constrains in transforming print mode of library to digital library and seek possible suggestions for the improvement in library resources. The results revealed the electronic are quite useful to research scholars of life sciences and these are good alternatives compared conventional print resources or hard copies. Digitalization of agricultural university libraries is quite useful for dissemination of knowledge among biological science research scholars.*

**KEYWORDS:** Biological sciences, E-resources, Karnatak University, Knowledge dissemination, Research developments.

### 1. INTRODUCTION

The rapid advancement in Information and communications technology (ICT) has brought transformational changes in the information scenario and has given rise to a number of options to handle verified information sources conveniently and effortlessly. Today libraries are shifting their role from the custodian of traditional information resources to the provider of service-oriented digital information resources. Widespread use of computers, increased reliance on computer networks, rapid growth of Internet and explosion in the quality, and quantity of information compelled libraries to adopt new means and methods for the storage, retrieval and dissemination of information.

E-resources have become the most sought after library reserves, in satisfying the varied needs of patrons expeditiously. Information technology has changed the way world functions and has become an important tool for information dissemination, storing and retrieving. As a result E-Information sources have acquired major portion of library collection. Also we are seeing that E-resources over web have become an invaluable tool for learning teaching and research.

#### 1.2. Need for the study:

At present the libraries are moving from the traditional print sources to dynamic and more flexible E-resources and providing easy access to all the users of library. With this concern the present study has been selected on use of E- Resources by the life science research scholars of Karnatak University, Dharwad.

### 1.3. Objectives of the study:

The main objectives of the study are to investigate and unfold awareness, utilization level of e-resources and services by life science research scholars of Karnatak University, Dharwad, India.

- 1) To find out the level of awareness among research scholars on E-resources.
- 2) To find out the frequency of use of E-resources.
- 3) To identify user requirements and priorities of network based e-resources.
- 4) To find out the problems faced by the research scholars while accessing and use of E-resources.
- 5) To analyze the research scholars dependency on E-resources.
- 6) To identify place from which the research scholars access e-resources and to unmask the satisfaction regarding the infrastructure facility and e-resources available to them.

### 2. METHODOLOGY:

A questionnaire method is followed for the present study to explore and collect the data from research scholars of Life science departments of Karnatak University, Dharwad.

### 3. ANALYSIS AND INTERPRETATION

#### 3.1 Gender wise distribution of respondents

The gender wise distribution of respondents is given in Table 1, of the total 60 respondents surveyed 41 (78.33%) were male and 19 (31.66%) were female. The data suggest that majority of biological researchers were male dominant community.

**Table -1 Gender-wise respondents**

Sl. No.	Gender	No. of respondents	Percent
1	Male	41	68.33 %
2	Female	19	31.66 %

#### 3.2 Age wise distribution of respondents

The age wise distribution respondents is presented in Table 2, and majority of respondents were in the age group of 24-26 years (58.33%), followed by 26 years and above (33.33%).

**Table- 2 Age-wise respondents**

Sl. No.	Age	No. of respondents	Percent
1	Below 21-23	5	8.33 %
2	24-26	35	58.33 %
3	26 and above	20	33.33 %

#### 3.3 Availability and accessibility of ICT infrastructure for research scholars at department

Data on availability and accessibility of ICT infrastructure in research scholars department shows that 70% of the biological science departments had computer facility (70.00%) and internet facility (91.00%) (Table 3).

**Table-3 Availability and accessibility of ICT infrastructure for research scholars at department**

Sl. No.	ICT Infrastructure	Response		Total
		Yes	No	
1	Availability of computers	42 (70 %)	18 (30 %)	60 (100 %)
2	Accessibility of internet	55 (91.66 %)	05 (8.33 %)	60 (100 %)

### 3.4 Frequency of use of e-resources

Data on usage of e-resources by respondents is presented in Table 4. Thirty one (61.66%) respondents are using e-resources on daily basis followed by 21.81% of research scholars use e-resources 2-3 times a week. Less frequency of researchers use e-resources 2-3 times in a month (10.90%) and once in a month (9.09%).

**Table-4 Frequency of E-resources used by respondents**

Sl. No.	Frequency of usage	Number	Percent
1	Daily	37	61.66 %
2	2-3 times a week	12	21.81 %
3	2-3 times a month	06	10.90 %
4	Once in a month	05	9.09 %

### 3.5 Location of e-resources used by respondents

Majority of research scholars use e-resources in the department where they are working (80.00%) and 16.66% of researchers also use e-resources in the university library (Table 5).

**Table-5 Location of E-resources used by respondents**

Sl. No.	Location of usage	Number	Percent
1	University Library	10	16.66 %
2	Department	48	80.0 %
3	Home	02	3.3 %
4	Cybercafé/Browsing Center	00	0.0 %

### 3.6. Types of e-resources used by respondents to locate information

Analysis reveals that majority of biological science research scholars (88.30%) use e-journals and 5% use e-thesis and e-dissertation. 3.3% of scholars e-books and e-databases respectively.

**Table-6 Types of E-resources used by respondents**

Sl. No.	Types of E-resources used	Number	Percent
1	E-Journals	53	88.3 %
2	E-databases	02	3.3 %
3	E-books	02	3.3 %
4	E-theses and dissertation	03	5.0 %

### 3.7 Preference of e-resources used by respondents

Data on preference of e-resources used by biological science research scholars is presented in Table 7. Fifty one (85.00%) research scholars use online resources including e-journals and e-books. Less frequency of researchers also use print (8.3%) and audiovisual materials (6.6%).

**Table-7 Preference of E-resources used by respondents**

Sl. No.	Preference	Number	Percent
1	Print Sources	05	8.3 %
2	Audio-visual material (CD and DVD)	04	6.6 %
3	Online resources (E-Journals/Databases/E-books)	51	85.0 %
4	CD-ROM (offline source)	00	0.0 %

### 3.8 Purpose of using e-resources

Data reveals that 58.3% of researchers use e-resources for finding the information in the area of specialization, 33.3% of biological research scholars use e-resources to get information in the area of research. Similarly, 8.3% of researchers used e-resources to update their knowledge.

**Table-8 Purpose of E-resources used by respondents**

Sl. No.	Purpose	Number	Percent
1	For finding relevant information in the area of specialization	35	58.3 %
2	For updating knowledge	05	8.3 %
3	For getting information in the area of research	20	33.3 %

### 3.9 Awareness of varied E-resources available in the areas of biological sciences

Survey data on the awareness of e-resources in the area of biological sciences, 53.33% are aware of web of science, 43.33% are aware of scopus, 71.66% are aware of Science Direct and 35.0% are aware of J-stor.

**Table-9 Awareness of varied E-resources available in the areas of biological sciences**

Sl. No.	Particulars	BIOONE	WEB OF SCIENCE	SCOPUS	SCIENCE DIRECT	J-stor
1	Awareness of different E-resources in the field of biological sciences	07 (11.66 %)	32 (53.33 %)	26 (43.33 %)	43 (71.66 %)	21 (35 %)

### 3.10 Overall satisfactions of E-resources in research and academic efficiency of biological scientists

Survey data disclosed that 38.3% of biological science researchers are fully satisfied with e-resources, 46.6% are partially satisfied, and 6.6% are least satisfied (Table 10).

**Table-10 Overall satisfactions of E-resources in research and academic efficiency of biological scientists**

Sl. No.	Satisfaction	Number	Percent
1	Fully satisfied	23	38.3 %
2	Partially satisfied	28	46.6 %
3	Least satisfied	04	6.6 %
4	Cannot say	05	8.3 %

### 3.11 Impact of E-resources in research of biological scientists

Survey analysis showed that 58.33% of biological science researchers fully agree that e-resources had most impact on their research. 41.66% of researchers strongly agree that e-resources quite useful in their research.

**Table-11 Impact of E-resources in research of biological scientists**

Sl. No.	Impact of E-resources in research work	Number	Percent
1	Strongly Agree	25	41.66 %
2	Agree	35	58.33 %
3	Disagree	00	00 %
4	Strongly disagree	00	00 %
5	Uncertain	00	0.0 %

### 3.12 Problems faced while accessing E-resources

Respondents were enquired to give their opinion on problems faced by them while accessing e-resources and data is given in Table 12. Majority of researchers (78.33%) slow internet speed was main problem in accessing e-resources. Similarly, 48.33%, 21.66% 18.33% of researchers are opined that proxy server problem, lack of information literacy and no proper guidance and training respectively were the factors in hindering access of e-resources.

**Table-12 Problems faced while accessing E-resources**

Particulars	Number	Percent
Slow internet speed	47	78.33 %
Lack of ICT infrastructure	05	8.33 %
Lack of information literacy	13	21.66 %
Incomplete subject coverage	08	13.33 %
Proxy server problem	29	48.33 %
No proper guidance and training	11	18.33 %
Others	00	0.00 %

#### 4. FINDINGS OF THE STUDY

The survey data reveals that majority of majority of biological science departments of Karnatak University possess availability of computers (70.0%) and accessibility to internet (91.66%). 61.66% of biological researchers use e-resources on daily basis and majority of them (80.0%) access e-resources in department where they are working. 88.3% of researchers used e-journals and then e-books (3.3%). Majority of biological science research scholars use e-resources to find relevant information in the area of specialization. Biological science researchers are aware of famous e-resource sites such as Web of Science, Scopus, Science Direct and J-stor. 38.3% and 56.6% of researchers are fully and partially satisfied in usage of e-resources.

58.33% of researchers agree that e-resources had strong impact on their knowledge, research capability. However, majority of the researchers felt that slow internet facility is the hindrance in successful usage of e-resources. The above findings are concurrence with opinion given by researchers of the other fields (Farahi and Gandhi, 2011). Similar to the current survey Hadagali and Kumbar (2011) and Hussain and Ansari (2010) conducted survey on usage of e-resources and strongly support the usefulness of e-resources in academics and research.

#### 5. RECOMMENDATIONS AND CONCLUSION

It is evident from the current study that e-resources should be integral part of University and college libraries and are useful in accessing information. It is recommended the authorities of University of agricultural sciences to facilitate high-speed computer terminals at university library, departments, and research institutes. The library web page should be designed in such a way that it should provide information and guidelines for utilization of e-resources. University library personnel should conduct short term training course on ways, means and procedures to access e-resources.

#### REFERENCES

- Farahi, M.T. & Ansari, M.M.A. (2010). Utilization of e-information resources in medical colleges: A case study. *SRELS Journal of Information Management*, 48: 281-288
- Hadagali, G.S. & Kumbar, B.D. (2011). Use of electronic resources in university libraries of Karnataka state. *Information Studies*, 17: 211-224.
- Hussain, A. & Ansari, M.M.A. (2010). User perception of usability of e-resources at IMT, Gaziabad: A case study. *Gyanakosh: The Journal of Library and Information Management*, 1: 31-47.
- Manorama Tripathi & Jeevan, V.K.J. (2013). A selective review of research on e-resources usage in academic libraries. *Library Review*, 62: 134-156.
- Samph Kumar, P.T. & Kumar, G.T. (2010). Perception and usage of e-resources and internet by Indian academics. *The Electronic Library*, 28: 137-156.