"Access, awareness, and use of Electronic information resources by Science Postgraduate students of Gulbarga University, Kalaburagi: A Study"

Pradeep Kumar D, Maranna O,

Research Scholar, DLIS, Rani Channamma University, Belagavi& Librarian, Sharnbasveshwar College of Science, Kalaburagi,Pradeep.mlis09@gmail.com

Professor, Department of Library and Information Science, Vijayanagara Sri Krishnadevaraya University, Bellary. omaranna@vskub.ac.in

---

Abstract: The study aims to investigate the access, awareness, and use of electronic information resources (EIR) among the Science PG students of Gulbarga University, Kalaburagi, the main objectives of the study are to find the purpose of using the EIR. The study adopted a survey method the target population is 150 science PG students of Gulbarga University out of which 120(80%) of responses were received the primary data were collected through Google Forms and the data was analyzed through Excel. The majority of the science PG students are aware of electronic information resources and also they access the EIR in the library and information Centre, lack of ICT knowledge and information overload are the main problems we are facing. The study recommended that the library authority conduct orientation programs and workshops for users to better EIR access.

Keywords: E-Resources, Science, PG students, Gulbarga University,

1. Introduction

Advancement of Information Communication Technology has changed every aspect of human life today, knowledge generation is very fast and closer to every user hence in the higher education system electronic information resources play a very significant role in their academic, research, and career development. In the application of ICT information processing, organizing, storing, and accessing is much faster and easier for the users to access their required information easily.

In the present scenario, the library and information centers are also more competitive to meet the complex and ever-changing needs of the user community effectively and economically, universities are important learning centers and also knowledge hubs for every nation. Today university libraries are moving towards an electronic environment which will help the users as they can access electronic information resources when required and it's very fast and user-friendly.

Electronic information resources are a digital platform to access a wide range of information required by the user, EIR includes electronic databases, websites, e-books, e-journals, e-magazines,

e-newspapers, digital libraries, e-theses, etc. In the current scenario electronic information resources are very useful to postgraduate students to get authentic and updated information for their personal and professional development.

2. Review of literature:

(Gaffar & Gunjal, 2019), the author investigates the usage, access, and awareness of electronic journals by the research scholars of Biju Patnaik Central Library of the National Institute of Technology, Rourkela. The majority of the research scholars are aware of and access the electronic journals in that Science Direct and DOAJ are accessing databases. Search strategies, the internet is a problem for accessing e-journals and a study suggested that the library has to conduct user education programs to the users.

(Konappa, 2020), the author aims to identify the access and use of electronic information resources by the faculty members of Rajiv Gandhi University of Knowledge Centre. The majority of the faculty access electronic information resources through the internet which makes it very easy to get the information, also faculties are using simple search strategies to access the electronic information resources available on the internet, where the majority of the faculties accessing the electronic information resources for their academic and research purpose, where poor network connectivity is the common problem faced by the faculties. The study suggested that the library staff has to help all the faculties to get authentic information for their needs.

(Sharma, n.d.), The study investigates the awareness, accessibility, and use of electronic resources by the faculty and research scholars of Social Science at Maharishi Dayanand University Haryana. The majority of the research scholars and faculty members are aware of and access the electronic resources in their library, web of Science, Scopus, and UGC-Infonet, JSTOR consortium are the most used databases for their academic and research. The majority of the research scholars access electronic information in their digital libraries. The restricted time in the digital library is the main problem in accessing electronic resources. The study also suggested that the library staff should conduct library orientations for the students.

(Das et al., 2013) authors highlighted that the majority of the science research scholars of Berhampur University are aware of electronic information resources like e-resources, e-databases, and e-journals, The majority of the research scholars are using e-resources for their research and career development purposes and most of the research scholars are familiar with the electronic journals. Slow internet and insufficient e-resource subscriptions are the major problems. The study suggested that the library has to provide sufficient internet services and procure sufficient electronic resources for the users.

(Kpakiko et al., 2023), the authors aim to determine the awareness, perception, and reaction to the usage of the Science Hub website among the postgraduate students of Usman Danfodiyo University, Sokoto. Most PG students are aware of existing science hub websites and access them for their academic purposes. Because Science Hub is free access and provides free access to expensive online articles. the study suggested that the library staff has to give awareness about more access to the Science Hub website to their end users.

(Anjorin & Awujoola, 2023), the study reveals how the internet is important to access electronic information resources for the undergraduate students of the University of Ibadan, Nigeria. the institution has to provide provision of internet connection to access the electronic information

resources to the students and faculty. Majority of undergraduate students access electronic information resources for their academic purposes, power supply is the main problem with accessing electronic information resources.

(Odunewu et al., 2022), the authors reveal the use of electronic information resources by postgraduate students of Olabisi Onabanjio University using the Davis Technology Acceptance Model. The majority of postgraduate students are influenced by TAM Parameters to use Electronic information resources and the majority of the students are indicating that using EIR improves academic performance and research development, the postgraduate students are positively impacted by electronic information resources.

(Chime & Ekwueme, 2023), the study was examined that what are the challenges faced by the postgraduate students of federal university to use of electronic information resources for their research output. the study revealed that time-consuming, plagiarism, inadequate ICT facilities in the library, and lack of cooperation from the library staff. The study also recommended that awareness should be created for all users of the library and provide sufficient ICT facilities to the end users.

(Ivwighreghweta & Eireyi-Fidelis, 2022) the study revealed that there is a high level of awareness and use of electronic academic databases by lecturers and Postgraduate students. JSTOR, Elsevier, DOAJ, ProQuest, Science Directs, and LexisNexis were put maximum usage and the majority of postgraduate students are using electronic information resources to complete their assignments, seminar presentations, and update day-to-day knowledge in their subject knowledge, lack internet bandwidth and search skills are major problems. The study recommended that the library authority has to organize orientation, workshops, and seminars to help access the EIR.

 (Uwandu, 2022) the study reveals that e-magazines, e-journals, e-books, e-newspapers, e-conference proceedings, Online Public Access Catalogue(OPAC), CD-ROM Databases, electronic databases, e-thesis and dissertations, and internet resources are the types of electronic information resources available in their libraries, postgraduate students usage of EIR is low extent in the library, wide range of information access unlimited access and updated information is main advantage of the EIR, inadequate funds, poor internet connectivity, lack of ICT skills are main problems to access the EIR. The study also recommended that university libraries should provide the required basic facilities to the users.

   3. Objectives of the Study:

The following are important objectives of the study:

   1. To determine the access and awareness of electronic information resources among Science PG students of Gulbarga University.

   2. To find out the frequency of access and Purpose of using electronic information resources.

   3. To find out the place's preference to access the electronic information resources.

   4. To know the impact and factors influencing access to electronic information resources.

   5. To find out the challenges faced in accessing electronic information resources.

4. Methodology:

The present study has considered Science PG students of Gulbarga University, Kalaburagi, The survey method was adopted and a structured questionnaire was prepared through Google Forms the same link has been shared through the students' Email and WhatsApp groups to collect the primary data. A total of 150 responses were targeted out of which 120(80%) were received from Gulbarga University science postgraduate students. The data obtained was analyzed in MS Excel.

5. Data Analysis and Interpretation

Table 5.1

Gender-wise, Age wise, and department wise distribution

Category	Gender			Age				Department			
	Male	Female	Total	21-22	23-24	Above 25	Total	Chemistry	Mathematics	Physics	Total
Respondents	75	45	120	90	13	17	120	82	17	21	120
Percentage	62.50%	37.50%	100.00%	75.00%	10.83%	14.17%	100.00%	68.33%	14.17%	17.50%	100.00%
Total	120			120				120			

The table 5.1 results show that the gender-wise distribution of Science Postgraduate students of Gulbarga University in 75(62.50%) respondents are male remaining 45(37.50%) respondents are female and 90(75%) respondents are 21-22 age group, 13(10.83%) of respondents are 23-24 age group remaining 17(14.17%) are above 25 age group, 82(68.33%) respondents are chemistry department students, 17(14.17%) of respondents are mathematics and 21(17.50%) of respondents are physics department.

Table 5.2

User Awareness of Electronic Information Resources

Sl.No	User awareness	Response	Percentage
1	Yes	90	75.00%
2	No	30	25.00%

Total		120	100.00%

The result of Table no.5.2 indicates that 90(75%) of respondents are aware of the e-resources subscribed to their library remaining 30(25%) of respondents are not aware of the e-resources subscription to the library.

Table 5.3

Preference to use of Electronic Information resources

Sl.No	Preference to use	Response	Percentage
1	Electronic Resources	96	80.00%
2	Printed Resources	24	20.00%
Total		120	100.00%

The table 5.4 indicates the preference for to use of electronic information resources by the science postgraduate students of Gulbarga University in that 96(80%) of respondents preferred electronic information resources only 24(20%) of respondents preferred printed resources only.

Table 5.4

Purpose of Accessing Electronic Information Resources

Sl.No	Purpose of Accessing	Response	Percentage
1	For completion of the assignment	40	33.33%
2	To keep ourselves up to date on the subject	10	8.33%
3	To find out relevant information in the area of your specialization	50	41.67%
4	For Career Development	20	16.67%
Total		120	100.00%

The table no.5.4 results show that the purpose of accessing the EIR by science postgraduate students of Gulbarga University that 50(41.67%) of respondents access the EIR to find out relevant information in the area of their specialization, 40(33.33%) of respondents access for completion of the assignments, 20(16.67%) of respondents are accessing the EIR for career development and 10(8.33%) of respondents are accessing the EIR to keep themselves up to date on the subject.

Table 5.5

Access points of Electronic Information Resources

Sl.No	Access points	Response	Percentage
1	Computer Lab	20	16.67%

2	Mobile	50	41.67%
3	Library and Information Centre	30	25.00%
4	At Hostel	10	8.33%
5	At Home	10	8.33%
Total		120	100.00%

The result of table no.5.5 indicates that the access point of EIR by the science postgraduate students of Gulbarga University, Kalaburagi in that 50(41.67%) of respondents are accessing the EIR on their mobile phone, 30(25%) of respondents are accessing in the library and information Centre, 20(16.67%) of the respondents are accessing the EIR in the computer lab and 10(8.33%) of respondents are access in Hostel and their home.

Table 5.6

Types of Electronic Information Resources

Sl.No	Types	Response	Percentage
1	E-Journals	20	16.67%
2	E-Books	45	37.50%
3	E-Magazines	15	12.50%
4	E- Newspapers	20	16.67%
5	E- Thesis	20	16.67%
Total		120	100.00%

Table 5.6 is representing that what types of electronic information resources are most frequently used by the science postgraduate students of Gulbarga University, in that 45(37.50%) of respondents used electronic books (e-books), 20(16.67%) of respondents used E-journals and respectively e-newspapers, E-thesis and 15(12.50%) of respondents are using E-magazines.

Table 5.7

Factors influence the usage of Electronic Information resources

Sl.No	Factors influence	Percentage	Response
1	Easy to access the information	60	50.00%
2	To improve professional competence	17	14.17%
3	Access to a wider range of information	23	19.17%
4	Provides instant access to current updated information	20	16.67%

		120	100.00%
Total			

The table no.5.7 indicates what factors are influencing the use of EIR for their study of Science postgraduate students of Gulbarga University in that is shows 60(%0%) of respondents are influenced to EIR are easy to access the information, 23(19.17%) of respondents are influencing to access to a wide range of information, 20(16.67%) of respondents are influencing to access current updated information and 17(14.17%) of respondents are influencing to improve professional competence.

Table 5.8

Frequency of Use of Electronic Information Resources

Sl. No	Frequency	Response	Percentage
1	Daily	44	36.67%
2	Weekly once	21	17.50%
3	Monthly once	10	8.33%
4	On required basis	25	20.83%
5	Occasionally	20	16.67%
Total		120	100.00%

The table no.5.8 indicates the frequency of use of electronic information resources by the science postgraduate students of Gulbarga University, in that 44(36.67%) of respondents are using EIR daily, 25(20.83%) of respondents are using it on their required basis, 21(17.50%) of respondents are using weekly once, 20(16.67%) of respondents are using occasionally and remaining 10(8.33%) of respondents are using EIR on monthly once.

Table 5.9

Awareness of usage of Electronic Information resources portals

Sl.No	Awareness of usage	Response	Percentage
1	SWAYAM: Massive Open Online Courses	10	3.85%
2	SWAYAMPRABHA: View Digital Courses on TV	10	3.85%
3	e-Acharya (INFLIBNET Gandhinagar)	10	3.85%
4	e-PG Pathshala (INFLIBNET Gandhinagar)	90	34.62%
5	e-ShodhSindhu (e-SS)	40	15.38%
6	Virtual Labs: Web-enabled experiments designed for remote operation	15	5.77%

7	National Digital Library of India (NDLI)	25	9.62%
8	Shodhganga: A Reservoir of Indian Theses	20	7.69%
9	IRINS: Research Information Management System	10	3.85%
10	NPTEL Video Lectures	10	3.85%
10	YouTube	20	7.69%
Total		260	100.00%

*Multiple responses permitted

Table no.5.9 results show that awareness and usage of EIR portals, the findings show that the majority of the respondents that is 90(34.62%) are aware of and use e-Pg Patashala, 40(15.38%) of respondents are aware of e-shodhsindhu, 25(9.62%) of respondents are aware and use of NDLI National digital library of India, 20(7.69%) of respondents are aware and use YouTube and shodhaganga EIR portals, remaining 10(3.85%) of respondents are aware and use in EIR portals is SWAYAM, SWAYAMPRABHA, E-Acharya, IRINS(Indian Research Information Network system and NPTEL Video lectures.

Table 5.10

Preferred format for reading full-text articles

Sl.No	Preferred format	Percentage	Response
1	PDF	95	79.17%
2	HTML	25	20.83%
Total		120	100.00%

The table no.5.10 results shows the preferred formats for reading EIR by the science postgraduate students of Gulbarga University 95(79.17%) of respondents preferred PDF format, and 25(20.83%) respondents preferred HTML format.

Table 5.11

Problems faced while accessing Electronic Information resources

Sl.No	Problems	Percentage	Response
1	Lack of knowledge about information technology	30	25.00%
2	Limited Access to Computer	13	10.83%
3	Inadequate infrastructure facilities of e-resources	10	8.33%
4	Poor network connection for e-resources	15	12.50%

5	Limited computer terminals in the library	15	12.50%
6	Access to e-resources is time-consuming	10	8.33%
7	Lack of publicity on the contents of the available e-resources by the university	10	8.33%
8	Lack of training for e-resources	12	10.00%
9	information Overload	5	4.17%
Total		120	100.00%

The table no.5.11 shows the what problems are faced while accessing the electronic information resources by the Science postgraduate students of Gulbarga University, 30(25%) of respondents face the Lack of knowledge about information technology, 15(12.50%) of respondents face poor network connection and limited computers in the library, 13(10.83%) of respondents are facing limited access 12(10%) of respondents are facing lack of training and 10(8.33%) of respondents are facing Inadequate infrastructure facilities respectively time-consuming, lack of publicity and 5(4.17%) of respondents are facing information overload is the problem to access the Electronic information resources.

6. Findings and suggestions for the study

The main findings of the study are as follows:

➢ The majority of the respondents, 90(75%) of postgraduate students are 21-22 age groups.

➢ The study discovered that 90(75%) of science postgraduate students of Gulbarga University are aware of the subscription of electronic information resources to their library and information Centre

➢ The study also finds that the majority 90(80%) of respondents are prefer to read electronic information resources

➢ The study also discussed that 50(41.67%) of respondents are accessing electronic information resources to find out relevant information on their subject.

➢ The study also highlights that 50(41.67%) of respondents are accessing the EIR on their mobile only 30(25%) of respondents access the EIR in the Library and Information Centre.

➢ The study reveals that 45(37.50%) of respondents who used most preferred EIR were E-books only.

➢ The study also found that 60(50%) of respondents are influenced by its easy-to-access information.

➢ The study highlights that 44(36.67%) of respondents are accessing the EIR on a daily

➢ The majority of the respondents are that is 90(34.62%) are aware of PG-Patashala in the EIR portals.

- ➤ The study also found that 30(25%) of respondents are facing the problem of a Lack of knowledge about information technology

- ➤ The study suggested conduct awareness programs and improve information technology skills.

7. Conclusion: In the present environment electronic information resources are available in a wide range because of ICT Information communication technology has been implemented in all fields hence the study has taken that access, awareness, and use of electronic information resources among the science postgraduate students of Gulbarga university, Kalaburagi. The Gulbarga University Library and Information Center has an outstanding collection of print and non-print materials and provides all kinds of services to its users. The library also subscribed to sufficient EIRs to provide the best services to the users. Based on the study majority of the Science postgraduate students are aware of and access the electronic information resources in the university library and also they are updating their subject and professional knowledge. The study also suggested that the library authority has to conduct more awareness programs for their end users to improve the use of electronic information resources.

References:

1. Anjorin, S. O., & Awujoola, A. O. (2023). Influence of Institutional Internet Connection on the Use of Electronic Information Resources by Undergraduates of University of Ibadan, Nigeria. *Library Philosophy & Practice*, 1–18.

2. Chime, A. C., & Ekwueme, L. O. (2023). Postgraduate Students' Use of Electronic Resources for Research Output in Federal University Libraries in the South East, Nigeria: Challenges and Strategies for Interventions. *Library Philosophy & Practice*, 1–20.

3. Das, P., Anushandhan, S. O., & Maharana, R. K. (2013). *Access, Awareness & Use of Electronic Information Resources by Research Scholars of Berhampur University: A Study*.

4. Gaffar, A., & Gunjal, B. (2019). Access and usage of e-journals by Research Scholars in National Institute of Technology (NIT) Rourkela, Odisha: A case study. *Journal of Indian Library Association*, *52*(1 & 2).

5. Ivwighreghweta, O., & Eireyi-Fidelis, S. (2022). Usage of Electronic Academic Database Resources Among Lecturers and Postgraduate Students in Western Delta Universities, Oghara, Delta State, Nigeria. *Library Philosophy & Practice*, 1–11.

6. Konappa, D. (2020). Access and Use of Electronic Information Resources by Faculties of RGUKT, Andra Pradesh: A Study. *Indian Journal of Information Sources and Services*, *10*(1), 7–12. https://doi.org/10.51983/ijiss.2020.10.1.484

7. Kpakiko, M. M., Japhet, A. A., & Badia, M. Z.-B. (2023). Awareness, Perceptions and Reactions on the Science Hub (Sci-Hub) Website Use among Postgraduate Students of Usmanu Danfodiyo University, Sokoto. *Library Philosophy & Practice*, 1–17.

8. Odunewu, A. O., Oyedipe, W. J., & Siddiqah Oyedokun. (2022). Investigating Postgraduate Students of Olabisi Onabanjo University's Use of Electronic Information Resources Using Technology Acceptance Model. *Library Philosophy & Practice*, 1–17.

9. Sharma, N. (n.d.). *ACCESS AND USE OF ELECTRONIC RESOURCES BY THE FACULTY MEMBERS AND RESEARCH SCHOLARS OF SOCIAL SCIENCES IN MAHARSHI DAYANAND UNIVERSITY, ROHTAK, HARYANA*.

10. Uwandu, L. I. (2022). Use of Electronic Information Resources by Postgraduate Students of Faculty of Education in Imo State University, Owerri Library. *Library Philosophy & Practice*, 1–16.