



# AWARENESS AND USABILITY OF E-RESOURCES AMONG UNDERGRADUATE STUDENTS

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**Abstract:** E-resources are valuable resources for 21<sup>st</sup> century learners. In the digital age, ICT is regarded as the backbone of entire teaching learning process. The main objective of the study is to study the awareness and usability of E-resources for undergraduate students. The study was conducted by following survey method, in which a sample of 60 students were selected through convenience sampling. Self-developed tool was used for data collection. The findings of the study highlight that students of non-govt. aided institutions are moderately aware about E-Books, E-Journals and their usability. So, E-resources has significant implications for enhancing the potentialities of the learners.

**Key Terms** - ICT, E-resources, awareness, availability, usability and undergraduate students.

## Introduction:

Electronic resources are playing a vital role in educational sector especially in the field of higher education. E-resources are powerful weapons to equip the need and requirements of 21<sup>st</sup> century learners. E-resources commonly known as electronic resources which means information are provided in electronic format. Thus, an electronic resource is information that is accessible through ICT facilities, such as computer, internet and another digital network. Basically, electronic resources are widely accessible through the internet, a global information infrastructure, which allows electronic publishing. Books and journals are now being published on the internet and are referred to as E-books and E-journals, online databases, E-conference papers, e-thesis and e-newspaper. E-resources provide efficient access to research information beyond university boundaries. These are rich sources of information for those students who want extra learning materials in addition to their regular classroom activities. Today internet has become the backbone of the Society. The emergency of the internet and the web has led to changes in the process of scholarly publishing, communication and to find the relevant information. Using internet is to get the shortest and fastest way to the most relevant and updated information on any research area (Tekale, 2018)

## *E- Resources: Concept and Definition*

An electronic resource is defined as a resource which requires computer access or any electronic product that delivers a collection of data (Kumar, 2006). E-resources which include documents in electronic or E-resources are those formats that can be accessed via Internet in digital library environment. The E-resources are basically divided into two major types i.e., e journal E-Books online databases and other electronic resources which may include CD-ROM, Diskettes and other portable computer databases (Mahato,2023)

## **E-Resources: Definition**

According to Sukula (2010), “An electronic resource is an electronic information resource that can be accessed on the web, on or off campus. User can get the information what he or she wants, when it is needed”.

## **Review of related literature:**

Garg and Tamrakar (2014) conducted a study on Utilization of Electronic Resources by Postgraduate Students, Research Scholars and Faculty members of Indian Institute of Technology, Kharagpur. The research findings showed that Majority of users (63.10%) showed the awareness of e-journals and databases Available in the library on their subjects.

Wulystan et al. (2014) investigated the accessibility and usage of e-resources among agricultural researchers and extension staff in five out of seven agricultural zones in Tanzania. The findings showed that sources of e-resources used by these researchers and staff, as well as assessing their information literacy levels and the factors influencing their usage of e-resources remains low.

Obande (2020) in his study highlighted that Students are aware of E resources such as E- journals, E-newspapers, E-Books, availability of Internet but student faced poor Internet connectivity and staff indifference.

Deepika (2022) highlighted in her study that some users could not use the E-resources due to the lack of user education, awareness campaigns, language difficulties, IT skills and understanding the importance of libraries to actively launch well planned user awareness and education initiatives.

## **Rationale of the study:**

The study on the awareness and availability of e-resources is imperative due to the significant role these resources in academic and research endeavours. Garg and Tamrakar (2014) demonstrated that a majority of users in their study were aware of the e-journals and databases available in their library, indicating a growing recognition of the potential benefits of electronic resources. However, Wulystan Pius Mtega et.al (2014) highlighted the disparities in access and usage among agricultural researchers and extension staff in Tanzania, revealing persistent challenges in leveraging these resources effectively. Similarly, Obande (2020) underscored the presence of awareness among students regarding e-resources but noted hindrances such as poor internet connectivity and staff indifference, indicating a gap between awareness and practical utilization. Moreover, Deepika K. (2022) emphasized the significance of user education, awareness campaigns, and IT skills in enhancing the utilization of e-resources, underscoring the need for proactive initiatives by libraries. Hence, the rationale for conducting a study on the awareness and availability of e-resources lies in addressing these discrepancies, optimizing resource utilization, and fostering a conducive environment for academic and research pursuits.

## **Research questions:**

- What is the current E- resources available for undergraduate students in the Institution?
- What is the level of awareness of E-resources among undergraduate students?
- What is the extent of usability of E-resources among undergraduate students?

## **Objectives of the study:**

- To find out the availability of E-resources for undergraduate students.
- To study the level of awareness of E-resources among undergraduate students.
- To find out the extent of usability of E-resources among undergraduate students.

## **Methodology-**

As per the objectives, Survey method is adopted for the present study.

## **Population-**

All the students pursuing undergraduate programme in U.N. (auto) College of Sc. & Tech., Adaspur and Brahmanjharilo Mahavidyalaya, Cuttack are Constituted the population for the present study.

**Sample:**

The investigator has taken 30 sample from U.N. (auto) College of Sc. & Tech., Adaspur and 30 sample from Brahmanjharilo Mahavidyalaya, Cuttack by using convenience sampling technique. So, in all total 60 samples are selected for the present study.

**Tools used:**

In this study, two self-developed questionnaires are used to find the availability of E-resources for undergraduate students and to access the level of awareness and a self-developed rating scale to find out the extent of usability of E-Resources among undergraduate students.

**Procedure of data collection:**

In order to make the data bias free and make the analysis effective one, researcher personally visited to the non-government degree colleges of Cuttack District with the tools and collected the respective related data.

**Statistical techniques used:**

The investigator used simple percentage analysis as per the objectives of the study.

**Data analysis and interpretation:****Table1 – availability of e-resources for undergraduate students.**

Sl.No.	E-RESOURCES	AVAILABLE	NOT-AVAILABLE	REMARK
1	Online data base	50(83.33%)	10(16.66%)	Available
2	E magazines	47(78.33%)	13(21.66%)	Available
3	E news paper	45(75%)	15(25%)	Available
4	E journals	16(26.66%)	44(73.33%)	Not Available
5	Internet	57(95%)	03 (5%)	Available
6	E books	27(45%)	33(55%)	Not Available
7	E mail	53(88.33%)	07(11.66%)	Available

The Table no.-1 depicts that 83.33% of respondents have access to online databases, indicating that this resource is widely available. 78.33% of respondents can access e-magazines, making them widely available as well. E-newspapers are available to 75% of respondents, showing reasonable accessibility. Only 26.66% of respondents have access to e-journals, indicating a significant portion of students lacking this resource, The internet is highly accessible, with 95% of respondents having access to it. Only 45% of respondents can access e-books, suggesting a considerable portion of students lacking access to electronic books. E-mail is widely available, with 88.33% of respondents having access to it.

**Table- 2- To study the level of awareness of E-resources among undergraduate students**

Sl. No	STATEMENTS	YES (%)	NO (%)
1	Aware of the availability of E-resources	98.1	0.9
2	Accessed e-books for academic studies	73.6	26.4
3	Access scholarly articles through online databases	54.7	45.3
4	Attended any workshops or seminars on utilizing e-resources	66	34
5	Aware of the different types of e-resources available, such as databases, e-journals, and multimedia content	86.8	13.2
6	E-resources are as valuable as physical resources for academic purposes	88.7	11.3
7	University adequately promotes awareness of available e-resources	77.4	22.6

8	Recommended e-resources to peers for academic purposes	90.6	9.4
9	Prefer using e-books over traditional textbooks for your studies	67.9	32.1
10	Ever faced difficulty accessing e-resources due to technical issues	73.6	26.4

Table 2 encompasses the level of awareness of E-resources among undergraduate students. From the above table it was found that 98.1 percent students are aware about the availability of e-resources whereas only 0.9 percent students deny the fact. 73.6% students accessed e-books for academic studies while 26.4% do not access e-books. Students can access scholarly articles through online databases was opined by 54.7%. majority students (66%) responded that they attended any workshops or seminars on utilizing e-resources while only 34% did not attend such programs. 86.8% students are aware of the different types of e-resources available, such as databases, e-journals, and multimedia content whereas 13.2% are not aware about it. Only few students i.e., 11.3 % deny that E-resources are as valuable as physical resources for academic purposes while 88.7% students gave positive opinion in this regard. University adequately promotes awareness of available e-resources was responded by 77.4%. Most of the students (90.6%) gave their opinion that they recommended e-resources to peers for academic purposes whereas only 9.4% students did not recommend. 32.1% prefer traditional textbooks for their studies whereas 67.9% prefer e-books for study purpose. Some students (73.6%) opined that they face difficulties accessing e-resources due to technical issues.

**Table-3: Usability of e-resources for undergraduate students**

Sl. No.	Questions	Never	rarely	Occasionally	Frequently	Always
1	How frequently do you use e-book?	03(5%)	6(10%)	10(16.67%)	35(58.33%)	6(10%)
2	How often you visit university's library to access e-resources?	06(10%)	05(8.33%)	14(23.33%)	29(48.33%)	06(10%)
3	Do you access e-journals for your academic research?	05(8.33%)	03(5)	16(26.67%)	32(53.33%)	04(6.67%)
4	Do you access other e-resources (such as data bases, multimedia content etc.) for academic needs?	02(3.33%)	08(13.33%)	12(20%)	33(55%)	05(8.33%)
5	How do you utilize features such as highlighting, note-taking	07(11.67%)	09(15%)	14(23.33%)	26(43.33%)	04(6.67%)

	and bookmarking in e-books?					
6	Do you encounter any technical issues (e.g., slow loading, errors) when accessing e-books?	00(00%)	08(13.33%)	06(10%)	35(58.33%)	11(18.33%)

Table 3 shows that 58.33% students frequently use e-books while 10% students regularly visit university's library to access e-resources. 8.33% students never access e-journals for academic research while 53.33% students access it frequently. Few students (8.33) gave their opinion that they regularly access other e-resources (such as data bases, multimedia content etc.) for academic needs where as 55% frequently used the same. Only 11.67% students said that they utilize features such as highlighting, note-taking and bookmarking in e-books. Apart from these 58.33% students highlighted that they face technical issues while accessing e-books.

### Major Findings of the study:

The following findings are observed on the basis of data analysis and interpretation.

#### a. Findings on availability

- 83.33% of respondents have access to online databases, indicating that this resource is widely available.
- 78.33% of respondents can access e-magazines, making them widely available as well.
- E-newspapers are available to 75% of respondents, showing reasonable accessibility.
- Only 26.66% of respondents have access to e-journals, indicating a significant portion of students lacking this resource.
- The internet is highly accessible, with 95% of respondents having access to it.
- Only 45% of respondents can access e-books, suggesting a considerable portion of students lacking access to electronic books.
- E-mail is widely available, with 88.33% of respondents having access to it.

#### b. Findings on awareness of e-resources

- High percentage of students i.e., 98.1 percent are aware about the availability of e-resources whereas only 0.9 percent students deny the fact.
- 73.6% students accessed e-books for academic studies while 26.4% do not access e-books.
- Students can access scholarly articles through online databases was opined by 54.7%.
- majority students (66%) responded that they attended any workshops or seminars on utilizing e-resources while only 34% did not attend such programmes.
- 86.8% students are aware of the different types of e-resources available, such as databases, e-journals, and multimedia content whereas 13.2% are not aware about it.
- Only few students i.e., 11.3 % deny that E-resources are as valuable as physical resources for academic purposes while 88.7% students gave positive opinion in this regard.
- University adequately promotes awareness of available e-resources was responded by 77.4%.
- Most of the students (90.6%) gave their opinion that they recommended e-resources to peers for academic purposes whereas only 9.4% students did not recommend.
- 32.1% prefer traditional textbooks for their studies whereas 67.9% prefer using e-books for study purpose. Some students (73.6%) opined that they face difficulties accessing e-resources due to technical issues.



### c. Findings on usability of E-resources

- 58.33% students frequently use e-books while 10% students regularly visit university's library to access e-resources.
- 8.33% students never access e-journals for academic research while 53.33% students access it frequently.
- Few students (8.33) gave their opinion that they regularly access other e-resources (such as data bases, multimedia content etc.) for academic needs where as 55% frequently used the same.
- Only 11.67% students said that they utilize features such as highlighting, note-taking and bookmarking in e-books.
- Apart from these 58.33% students highlighted that they face technical issues while accessing e-books.

### Suggestions for Further Studies:

The researcher tried to give their best in the area of Availability and Accessibility of E-resources. Further, there are some major areas left which can be selected by the future researchers for further studies.

Some of them are suggested below:

- The study can be conducted on access and usage of e-journals by research scholars.
- The study can be conducted on use of electronic information resources: a case study.
- The study can be conducted on postgraduation students' perception of e-resources in an academic library.

### Conclusion:

E-resources are powerful weapons to meet all the learning challenges in the 21<sup>st</sup> century. It was concluded that, there is a positive impact on availability and accessibility of electronic resources available for undergraduate students in U.N. (Auto) College of Sc. & Tech., Adaspur. Though it is situated in rural areas but it fulfils all the requirement of learners especially e-resources. As per the findings Online Databases, E-Magazines, E-Newspapers, E-Journals, E-Books, E-Mail, Images Databases and Internet are available while E-Databases, E-References sources, Statistical Sources, CD-ROMs and DVDs are not available Majority of the students are using E-journals for the purpose of to prepare presentation or notes.

### References

- Das, P. (2013) Access, Awareness & Use of Electronic Information Resources by Research Scholars of Berhampur University: A Study. American International Journal of Research in Humanities, Arts and Social Sciences, ISSN (Print): 2328-3734, ISSN (Online): 2328-3696, ISSN (CD-ROM): 2328-3688 <http://www.iasir.net>
- Deepika kumari, s. p. (2022). Usability of E- resources among library and information science students in Patna, Bihar : a study. *library philosophy and practice*.
- Garg, RG. & Tamrakar, AK. (2014). Utilization of Electronic-resources by the postgraduate students, research scholars and faculty members of Indian Institute of Technology, Kharagpur. Journal of Scientometric Research, Vol 3(2), pp75
- Habiba, U. & Chowdhury, S. (2012). Use Of Electronic Resources and Its Impact: A Study of Dhaka University Library Users. The Eastern Librarian, Volume 23(1), pp. 74-90. Retrieved from <http://www.banglajol.info/index.php/EL>
- Mahato, M. (2023). Awareness of e-resources among the library and information science students in SKB University: A study . *international journal of creative research thoughts*.
- Obande, B.O., Osakwe, J., Amunkete, K., Kechukwu, A.O., Iyawa, G., & Ujakpa, M.M. (2020). Awareness, Accessibility and Usability of E-resources: University Students Perspective. IST-Africa Institute and IIMC. ISBN: 978-1- 905824-64-9. Retrieved from: <http://www.ist-africa.org/Conference2020/>
- Tamrakar, AK. & Garg, RG. (2016). User perception towards e-resources and services of IIT- Guwahati Library. DESIDOC Journal of Library and Information Technology, 36 (1), 40-46