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5-17-2019

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Singh, Sukhbir; Garg, Neha; and Sharma, Dr. Chetan, "Role and Impact of E-Journals: A Case Study of University Institute of Engineering and Technology (UIET), Kurukshetra University" (2019). *Library Philosophy and Practice (e-journal)*. 3042. <https://digitalcommons.unl.edu/libphilprac/3042>

Role and Impact of E-Journals: A Case Study of University Institute of Engineering and Technology (UIET), Kurukshetra University

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Abstract

Present study aims to determine the use and awareness of e-journals among teachers and research scholars of University Institute of Engineering and Technology (UIET). Study also targets to define the purpose of e-journals' use, access place, preferred format and frequency to use. Data was collected from 60 users of different departments of UIET. Study indicates that majority of the respondents use e-journals for their research assignments. Majority of respondents retrieve e-resources mainly through simple search techniques and methods such as key word, author and title.

Keyword: *E-journals, Awareness, Faculty Members, Research scholar, UIET*

Introduction

In the present scenario influence of the internet and related technology has brought a great transformation in the library services especially in retrieval of information resources. The electronic resources played a major role in the academic and special libraries as these resources increase the research outcome because libraries are subscribing more number of online resources to satisfy the erratic needs of research scholars and faculty members. Majority of the faculty and research scholars dependents on online journals for teaching and research work. It is certain to make a study on the various aspects of e-journals and related issues.

The electronic resources are digitalized format in which information is stored electronically and made accessible through internet. The major features of e-resources include faster speed, referring, indexing richer in content, reuse, timeliness. The libraries are moving towards digital resources by the addition of this web based technologies which is found to be less expensive and highly useful for easy access of information. In the digital era, resources like e-journals, e-books, CD-ROMs, Online Databases, web OPAC and other attributes of internet are replacing the print media.

Statement of Problem

Present study is an effort to evaluate the use and awareness of e-journals by the faculty and research scholars of UIET and find out the problems and restraints faced by the users for accessing and make recommendations for proper use e-journals.

University Institute of Engineering and Technology (UIET)

UIET was established in 2004 under the umbrella of Kurukshetra University with the goal of quality technical education and to take on research in Engineering and Technology. The institute offers B. Tech, M. Tech and Ph.D programmes in various branches of engineering i.e. Computer Science, Biotechnology, Mechanical, Material Science, Electrical Engineering, Electronics and Communication Engineering. University campus provides a wonderful environment for the whole personality development of the students. The Institute provides an excellent infrastructure to enhance the technical skills of the students but also provides ample space for freedom extracurricular activities.

Objectives

- To know about the awareness of e-journals.
- To know about the frequency of using e-journals.
- To know about the preferences in using e-journals.
- To know about the time spent in using e-journals.
- To know about the purpose behind using the e-journals.

Review of Literature

A number of studies have been conducted on use of e-journals; some of the relevant studies have been discussed as under:

Nanda (2017) conducted a study on use and awareness of e-journals among the faculty members and research scholars of Veer Surendra Sai University of Technology (VSSUT). Study revealed that majority of faculty members and research scholars are aware about e journal, they use e-journals for research work and department is the most preferred location for accessing e-journal. Science Direct is the most searched e-database by research scholars and faculty members. **Kwadzo (2015)** in his study on awareness and use of Electronic Databases by the students of Geography and Resource Development found that only 96.9% of students of Ghana University are able to operate an electronic database and 87.5% satisfied with information available online. According to them, they can access the required information through an online portal. **Singh and Khan (2015)** in their study on IIT libraries experienced that users prefer e-resources as it can be accessed anytime, anywhere also it saves time. The

study revealed that e-resources preferred by the users because these resources are easy to access, relevant and more information may be retrieved. **Rahman et al (2014)** concluded that majority of users preferred to use both the formats of the documents i.e. print as well as electronic for seeking information and e-journals are generally used regularly 2-3 times in a week. **Murugesan (2013)** conducted a study on 90 faculty members with special reference to know about the use of e-resources. The study revealed that most of the arts departments are not providing internet facility for the use of e-resources, faculty member was mostly depending on e-resources for their required information. **Khan (2012)** accomplished a study on 80 research scholars and students of Botany of Aligarh Muslim University on use of e-journals. The study revealed that majority of respondents was aware of e-journals and prefer PDF format for reading e journals articles. **Nishaand Ali (2012)** conducted a study on 100 users of IIT Delhi and Delhi University each to know about the use of e journals and found that majority of users used e-journal for research purpose. Study also explored that majority of users used “keyword” for searching e-journals. 40% users in IIT Delhi and 60% users of Delhi University opined that training programmes would enhance e-journals use. **Bennett et al (2010)** explored that the engineering faculties were still used tables of contents and journal browsing to support current awareness and other information-seeking needs and they rely heavily on library-subscribed databases.

Research Methodology

University Institute of Engineering and Technology (UIET) is maintained by Kurukshetra University. Survey method was designed to collect the primary data from faculty members and research scholars of University Institute of Engineering and Technology. A well-structured questionnaire was designed to collect the primary data. 75 questionnaires were distributed, out of which total 60 filled questionnaires 50 from faculty members and 10 from research scholars received back. The questionnaires were distributed personally and collected by the investigator. A brief discussion was also made with the respondents on different questions inquired in the questionnaire the suggestions and opinions given by the respondents were incorporated in the analysis.

Data Analysis and Interpretation

Category Wise Distribution of Respondents

S. No.	Respondents	Faculty Members	Research Scholars
1.	Male	20 (40%)	6 (60 %)
2.	Female	30 (60%)	4(40%)

Table 1

Table 1 shows that majority of the respondents is fabricated by female with 30(60%) whereas 20(40%) teachers are male among the faculty members. In case of research scholars 6(60%) are males and 4(40%) are female.

Awareness about E-Journals

S. No.	Awareness	Yes	No	Mean
1.	Faculty Members	50 (100%)	---	1.00
2.	Research Scholars	10 (100%)	---	
3.	Total	60 (100%)	---	

Table 2

Table 2 shows that all the 100% respondents under study are well aware about the e-journals which is a really a good sign, it shows that academic fraternity is moving towards the right direction and making the maximum use of latest technology for upliftment of education. Mean value of awareness of e-journal among respondents is 1.00.

Knowledge of Databases Subscribing by the Library

S. No.	Awareness	Yes	No	Mean
1.	Faculty Members	45(90%)	5 (10%)	1.00
2.	Research Scholars	10 (100%)	---	

Table 3

Table 3 indicates that 45(90%) faculty members and 10(100%) research scholars have knowledge of databases of their respective field subscribing by the university Library. The mean value of knowledge of databases subscription by the Library is 1.00.

Frequency of Access E-journal

S. No.	Frequency	Faculty Members	Research Scholars	Mean	Standard Deviation
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1.	Daily	33(66%)	7 (70%)	1.52	.911
2.	1-3 times in a week	10 (20%)	3 (30%)		
3.	Weekly	5 (10%)	---		
4.	Monthly	---	---		
5.	Occasionally	2 (4%)	---		

Table 4

Table 4 reflects that majority of faculty members and research scholar i.e. 33(66%) and 7(70%) respectively access e- journals daily. 10(20%) faculty members and 3(30%) research scholars make the use of e-journal 1-3 times in a week. Only 2(4%) teachers use e-journals occasionally or only when they have extreme need of these resources. The value of standard deviation in frequency of access of e-journals is .911 and mean of above result is 1.52.

Purpose of Using E-Journals

S. No.	Purpose	Faculty Members	Research Scholars	Mean	Standard Deviation
1.	Research work	39 (78%)	8 (80%)	1.30	.619
2.	Publishing Research Papers	6 (12%)	2 (20%)		
3.	To Update Subject Domain Knowledge	5 (10%)	---		
4.	Carrier Development	---	---		

Table 5

Table 5 shows that 39 (78%) faculty members and 8(80%) research scholars use e-journals for research work. Result reveals that 6(12%) faculty members and 2(20%) research scholars use e-journals for publishing research papers. 5(10%) faculty members make the use of e-journal for updating domain knowledge of their respective subject. The value of standard deviation in purpose of using e-journals is .619 and mean of above result is 1.30.

Preferred Format of Journal

S. No.	Preferred Format	Faculty Members	Research Scholars	Mean	Standard Deviation
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1.	Electronic	30 (60%)	5 (50%)	1.72	.904
2.	Print	5 (10%)	2 (20%)		
3.	Both	15 (30%)	3 (30%)		

Table 6

Table 6 shows that 30 (60%) faculty members and 5(50%) research scholars prefers electronic format of journal. The data also shows that 5(10%) teachers and 2(20%) and research scholars prefer print format of journal and remaining respondents prefer both print as well as electronic format of journal. The mean value and standard deviation of above data is 1.72 and .904 respectively.

Access Location of E-journals

S. No.	Access Location	Faculty Members	Research Scholars	Mean	Standard Deviation
1.	Department	32 (64%)	6 (60%)	1.82	1.384
2.	Campus	6 (12%)	2 (20%)		
3.	At Residence	9 (18%)	---		
4.	Hostel	---	1 (10%)		
5.	Library	---	---		
6.	Computer Lab	1 (2%)	3 (30%)		

Table 7

Table 7 shows the highest 32(64%) faculty members and 6(60%) research scholars access e-journals in their respective teaching departments. 6(12%) teachers and 2(20%) research scholar access e-journals anywhere in the university campus whereas 9 (18%) faculty members access e-journals at their residence. The data also indicates that 1(2%) faculty members and 3(30%) research scholars access e-journals from central computer lab. The value of standard deviation in accessing of e-journals is 1.384 and mean of above result is 1.82.

Source to Know about E-journals

S. No.	Source	Faculty Members	Research Scholars	Mean	Standard Deviation
1.	Internet	34 (68%)	5 (50%)	1.70	1.094
2.	Library website	7 (14%)	---		

3.	Teacher/ guide	5 (10%)	3 (30%)		
4.	Colleague	3 (6%)	2 (20%)		
5.	Library staff	1 (2%)	---		

Table 8

Table 8 shows the source to know about e-journal. 34(68%) faculty members and 5(50%) research scholars opined that Internet is the source to know about the e-journals. 7(14%) faculty members said that library website is the source to know about the various e-journals of their interest. 5(10%) teachers and 3(30%) research scholar get the information regarding the e-journals from teachers/guide whereas 3(6%) teachers and 2(20%) research scholars get the same information from colleagues. The value of mean and standard deviation for the above data is 1.70 and 1.094 respectively.

Search Strategy for Searching Research Paper in E-Journal

S. No.	Access point	Faculty Members	Research Scholars	Mean	Standard Deviation
1.	Keyword	11 (22%)	3 (30%)	2.90	1.548
2.	Author	3 (6%)	2(20%)		
3.	Title	29 (58%)	3 (30%)		
4.	ISSN/ISBN	---	---		
5.	Year of Publication	---	---		
6.	Journal Name	7 (14%)	2(20%)		

Table 9

The table 9 shows that majority of the respondents i.e. 29(58%) faculty members and 3(30%) research scholars use “title” for searching relevant research paper from the databases of e-journals. “Journal name” is preferred by 7(14%) faculty members and 2(20%) research scholars for accessing information related to the research papers. The above table shows those 3 (6%) faculty members and 2(20%) research scholars use “author name” for accessing research paper from e-journals. The mean value and standard deviation for the above responses is 2.90 and 1.548 respectively.

Most Preferred E-Journals Databases

S. No.	E-Journal Databases	Faculty Members	Research Scholars	Mean	Standard Deviation
1.	Elsevier/ Science Directs	14 (28%)	3 (30%)	3.33	1.980
2.	Indian Science Abstracts	9 (18%)	---		
3.	American Chemical Society	3 (6%)	2 (20%)		
4.	American Institute of Physics	5 (10%)	---		
5.	IEEE	15 (30%)	4 (40%)		
6.	Cambridge University Press	---	---		
7.	Scifinder	4(8%)	1(10%)		
8.	Emerald	---	---		

Table 10

Table 10 shows that IEEE is the most preferred e-journal database which is used by the majority of respondents i.e. 15(30%) teachers and 4(40%) research scholars. 14(28%) faculty members and 3(30%) research scholars prefer to use Elsevier/Science Direct. Indian science abstracts is preferred by the 9(18%) teachers. The above table shows that 5(10%) faculty members use American Institute of Physics whereas 2(20%) research scholars use American Chemical Society. Scifinder is preferred by 4(8%) faculty members and 1(10%) research scholar. The mean value and standard deviation for the preferred e-journal database is 3.33 and 1.980 respectively.

Barriers in Accessing E-journals

S. No.	Barriers	Faculty Members	Research Scholars	Mean	Standard Deviation
1.	Lack of Internet connectivity	20 (40%)	5 (50%)	2.20	1.493
2.	slow speed of downloading	19 (38%)	3 (30%)		
3.	Limited access to computer	---	1 (10%)		

4.	Lack of knowledge	---	---		
5.	Server	11 (22%)	1 (10%)		

Table 11

Table 11 shows those 20(40%) faculty members and 5(50%) research scholars face problem of Lack of Internet Connectivity when accessing e-journals. 19(38%) faculty members and 3(30%) research scholars face problem of Slow Speed of Downloading and 11(22%) faculty members and 1(10%) research scholars face server problem while accessing the e-journals. The value mean and standard deviation for the barrier in accessing e-journal is 2.20 and 1.493 respectively.

Findings

- The study shows that 100% faculty members and research scholars are aware about e-journals and majority of them have knowledge of online database subscribed by their library.
- Study indicates that 66% faculty members and 70% research scholars use e-journals on daily basis whereas 20% faculty members and 30% research scholars use e-journals 1-3 times in a week.
- 100% respondents use e-journals for research work and for writing and publishing research paper.
- Majority of faculty members i.e., 60% and 50% research scholars prefers electronic format of e-journals whereas 30% faculty members and research scholars each prefers both electronic as well as print format of e-journals.
- A majority of faculty members and research scholars adopt keyword search to access e-journals whereas 6% faculty members and 20% research scholars search through author name.
- IEEE is the most preferred e-database by faculty members and research scholars with 30% and 40% responses respectively.
- Lack of internet connectivity is the major barrier as per 40% faculty members and 50% research scholars.

Conclusion

E-journals play very important role in present e-learning environment. In engineering institution researchers are highly depend on e-journals for their research assignments. It is pragmatic that e-journals are backbone of research in higher education, as academic community highly makes the use of digital format of journals. E-journals are very much popular among academics due to the various confirmatory feature i.e. readiness, easy to use, access anytime anywhere, easy to store and retrieve. Respondents actively use various e-journal databases subscribed by the library, IEEE is the most preferred and searched database among the users. It may be concluded that e-journals are the immortal part of academic system especially in higher education, availability and sustainability of e-journals is an urgent need of the hour for research and development.

References:

1. Angadi, M. (2017) Use Pattern of UGC-Infonet Consortium by Research scholars of UPE Universities of Karnataka State: A study. *International Journal of Library and Information Studies*, 7(3), 44-51.
2. Bennett, D., & Buhler, A. (2010). Browsing of e-journals by engineering faculty. *Issues in Science and Technology Librarianship*, 61(3).
3. Fakeh, S. S. K. W., Shahibi, M. S., Jamaludin, A., Hussin, N., Ali, J., Hanafiah, W. A.R. A., Azmi, A., (2014). A Case Study Usage of Electronic Journals by Research Scholars. *International Journal of Innovative Research in Computer Science & Technology (IJIRCST)*. 2(5), 28-34.
4. Gautam, A. S., & Sinha, M. K. (2017). Use of Electronic Resources among Research Scholars and Faculty Members of University of Allahabad, Uttar Pradesh, India: A Survey. *Library of Progress-Library Science, Information Technology & Computer*, 37(2).
5. Khan, S. I. (2012). Use of e-journals by students and research scholars in the Department of Botany of Aligarh Muslim University. *Library Philosophy and Practice*, 1.
6. Murugesan, N. (2013). Awareness and Utilization of E-Resources by Faculty Members with Special Reference to Angel College of Engineering and Technology Tirupur, Tamil Nadu: A Case Study. *Indian Journal of Information Sources and Services*, 3(2), 42-45.

7. Nanda, A. (2017). Use and Awareness of E-journals by the Faculty and Research Scholars of Veer Surendra Sai University of Technology: A Study. *DESIDOC Journal of Library & Information Technology*, 37(4), 274-280.
8. Nisha, F., & Ali, P. M. N. (2012). Use of e-journals by IIT-Delhi and Delhi University library users. *International Journal of Digital Library Services*, 2(3), 23-42.
9. Qasim, J., & Khan, A. M. (2015). Use of e-journals by the scientists of CSIR-Institute of Genomics and Integrative Biology (IGIB), Delhi, India: A study. *The Electronic Library*, 33(5), 928-942.
10. Swamy, D. K., & Kumar, D. (2014). Awareness and usage of e-journals and e- books by the students and research scholars of the University of Mysore: A study. *E-library Sci. res. J*, 2(7). 1-7.
11. Sigh, O. S. S., & Khan, M. T. M. (2015). Users' Attitude towards Electronic Resources in IIT Libraries: An Evaluative Study. *Innovative Librarianship: Adapting to Digital Realities*. 10th International CALIBER-2015, 440-452.
12. Tandilwoga, E., & Sukums, F. (2018). Health sciences faculty usage behaviour of electronic resources and their information literacy practices. *Global Knowledge, Memory and Communication*, 67(1/2), 2-18.