

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Library Philosophy and Practice (e-journal)

Libraries at University of Nebraska-Lincoln

Summer 3-19-2021

Use of Electronic Information Resources in Government Engineering College Libraries in Telangana State: A Study

Arun Kumar
marunlib@gmail.com

Follow this and additional works at: <https://digitalcommons.unl.edu/libphilprac>



Part of the [Library and Information Science Commons](#)

Kumar, Arun, "Use of Electronic Information Resources in Government Engineering College Libraries in Telangana State: A Study" (2021). *Library Philosophy and Practice (e-journal)*. 5321.
<https://digitalcommons.unl.edu/libphilprac/5321>

Use of Electronic Information Resources in Government Engineering College Libraries in Telangana State: A Study

M. ARUN KUMAR, *Research Scholar*

Dept. of Library & Information Science

JNTUK, Kakinada, Andhra Pradesh

E-mail: marunlib@gmail.com

Mobile: +9885473455

&

Dr. M. ANJIAIAH

Assistant Professor

Dept. of Library and Information Science

Dravidian University, Kuppam, Andhra Pradesh

E-mail: anjaiahlib@gmail.com

Mobile: +919908694950

***Abstract:** Present study is a base on the use of electronic information resources by the faculty of Government engineering college libraries in Telangana State. This survey was particularly conducted to know the use of electronic information resources like E-Journals, E-Books, OPAC, E-Databases and Internet etc. in Government Engineering college libraries of Telangana State. The data were collected with the help of a questionnaire. The results show that maximum 89 (49.44%) of respondents visited to the library in daily. It was also noticed that maximum 165 (24.22%) of respondents were using E-Journals. Maximum 107 (59.44%) of respondents had good knowledge of using electronic information resources. Majority of 125 (35.81%) respondents were using electronic information resources for research purpose. Majority 149 (32.32%) of respondents feels that low internet speed is the major problem to access the electronic information resources.*

Key words: Electronic Information Resources, CD-ROMs, OPAC, E-Journals, E-Databases.

1. Introduction

In the age of information technology, there is a significant change in the form of library resources, library infrastructure, collection development and library services. Electronic information resources represents of increasingly essential component of the collection building activities of libraries. Electronic information resources can support enormous saving in time and efforts. Electronic information resources allows remote and timely access simultaneously by more than one person, save the physical storage space, reduce certain work in libraries such as circulation, filling, solves the problem of missing issues supporting for searching information. There are several forms and types of electronic information resources which are available on the internet, some of the popular ones that are gaining ground are the electronic journals, technical specifications, standards, patents, reports, trade reports, full text articles and hosts of other document sources.

2. Electronic Information Resources

Electronic information resources are basically distribution of information in any electronic form such as CD- ROM, floppy disk or magnetic tape or across a computer network like E-journals, E-Books, etc. In general, An electronic information resource is defined as a resource which requires computer access or any electronic product that delivers a collection of data, be it text referring to full text bases, electronic journals, image collections, other multimedia products and numerical, graphical or time based, as a commercially available title that has been published with an aim to being marketed. These may be delivered on CD-ROM, via internet and so on.

3. Engineering Education in India

The Engineering education in India has witnessed a major change over the past few years. Generous expansion in the interest for high-quality education has led to the selection of Information and Communication Technologies for expanding the effort of education.

Academic libraries in engineering institutions are conspicuous information organizations and play a key role in satisfying the information needs of users. The core motto of the academic library is to offer services to maintain the educational, cultural, economic and technological effort of users of its parent institution. The significance of library in specialized institution like engineering and technology is acknowledged by regulators of higher education in India .The All India Council of Technical Education (AICTE) has set some minimum standards in terms of library resources, infrastructure and services to ensure effective and efficient engineering education and research in India.

India has the potential to be a global technology leader. The Indian economy has been growing at the rate of 7 to 9% per year. The Indian manufacturing industry has also developed into internationally, competitive in several areas and can build its worldwide market share. A main factor in this will be the achievement of the technical education system in India.

With economic growth and spread of technology, the demand for engineering education has increased manifold. This has been matched by an increase in enrolments in engineering and rise in number of engineering institutions in India.

4. Engineering Education in Telangana State.

With a rapid rise in engineering colleges, Telangana is indeed contributing largely to the technical education in India. The engineering education is very essential to speedy growth and development of state like Telangana. It was formed on 2nd June 2014, after bifurcation of Andhra Pradesh. Hyderabad is the capital city of the state.

Telangana has also National Institute of Technology (NIT), at Warangal, Indian Institute of Technology (IIT), Medical colleges, Universities & many other top engineering colleges. The literacy rate of Telangana is 66.50%, as per the census, 2011.

Government Engineering Colleges in Telangana State.

1. Osmania College of Engineering, Hyderabad.
2. JNTU College of Engineering, Kukatpally, Hyderabad.
3. KU Engineering College, Warangal.
4. KU College of Engineering Kothagudam, Khammam.
5. JNTU College of Engineering –Jagityala, Karimnagar.
6. JNTU College of Engineering –Manthani, Karimnagar.
7. JNTU College of Engineering –Sultanpur, Medak.

5. Review of literature:

Babasaheb Sawai, Amol and Chavan, Subhash Pundalik Rao (2020) the findings show that a majority respondents had excellent knowledge of using e-resources. It can be also shows that majority of respondents used e-journals to get desired and relevant information for their research as well as for teaching purpose.

Lavanya, A and Thirnavukkarasu. A. (2020) found in their study that there is the need to ensure students possess information literacy skills to be thoroughly grounded in the use of electronic information resources.

Raja Suresh Kumar and others (2020) the findings show that majority of library users utilizing IEEE, Springer, SCOPUS, NPTEL services. The results found that users are highly satisfied with IEEE facility, DELNET facility, NPTEL Videos, and the study recommended that the users are not aware of about some e-resources, so the engineering college libraries will conduct information literacy programmes on electronic resources.

Mythili Rajyalaxmi, M.N. and Anjaiah, M. (2018) the findings show that a majority of the respondents were utilizing the e-resources for their project purpose and writing the assignments.

Hence, the researcher suggested the authorities to conduct information literacy training programmes to properly use more e-resources including open access resources.

Venkateswarlu and Raja Suresh Kumar (2018) conducted a study on e-resources by faculty and students on e-resources was performed. A questionnaire was distributed in this study to determine the usage of e-resources and to determine whether students and faculty members are satisfied with the services provided by libraries and how knowledge is collected, and to determine the level of satisfaction students obtain when searching for information and resolving the students opinion, suggestions while they are seeking information at Institutions libraries.

Raja Suresh Kumar and others (2018) the findings show that most of the faculty and students are using N-List e resources. Most of the users access N-list e resources once in a week. Faculty members using N-list for their research and teaching.

Arun Kumar, M. and Anjaiah, M. (2018) the study mainly focused on use pattern of e-resources by the faculty, research scholars and professional students. A large majority 90.90% of users expressed that they are using e-resources. Most of the faculty and students are using e-journals for their research purpose.

Arun Kumar, M. and Anjaiah, M. (2018) found in their study that ICT has brought modern changes in the performance of libraries and for a variety of applications in libraries. It helps libraries in creating database of their collections and formation them available for simple access to users within and outside the libraries through networks.

.Aravind, S (2017) the study found that a majority of respondents use the libraries for study purpose and majority of respondents access the electronic information resources regularly and once in a day.

Asifa Jan (2017) in his study revealed that the most of the users are aware of e-journals, e-articles and e-technical reports should be procured by the library which are most useful to all the users.

Archita Nanda (2017) indicated majority of the respondents access the e-resources from college library (59.57%) followed by depart library (20%) and home (19.13%). Better and more effective management of information would be more feasible through the availability of the latest equipment and modern infrastructure and services in library. The benefits of e-resources can only be reaped when a supporting and enabling environment is created for users.

Taphros, Madondo and et al. (2017) found in their study that users needed sufficient abilities required to recover data from sign up electronic information resources hence low usage. Also it can be suggested that the Library must make sure that there is sufficient information communication knowledge infrastructure and realistic information recover training for students to authorize them in successful electronic information use.

Saket, Kumar (2017) attempted to examine the issues identified with access and utilization of electronic information resources. the users are attentive of EIR and majority of respondents use e-journals. The examination also find that most of respondents believe that additional electronic information resources need to be subscribed.

Raja Suresh Kumar and Doraswamy Naick (2016) most of the faculty members seek information for academic purpose and majority of faculty members highly satisfied about library information sources of Institutional library. The study explain that information seeking behavior surveys on library will help the library professionals providing better sources and services to the library user community.

Rosy Malarvizhi, S and Sarangapani, R. (2016) evaluated the usage of electronic information resources by the faculty members of Karunya University, Coimbatore. It described the problem faced by faculty while using the electronic information resources and find out the level of satisfaction about the electronic information resources and services.

Prabakaran, M. (2016) indicated majority of the respondents accessing e-resources daily which is good sign for academics and also identify the non-users of electronic resources and proper steps should be taken to convert them into potential users of the resources.

Anjaiah, M and Nageshwara Rao. P. (2015) found in their study that there is urgent need to provide e-resources to faculty to enrich knowledge which is need to development. The e-resources such as e-books, e-journals, e-articles and e-technical reports should be procured by the library.

Puttaswamy, R.M and Krishnamurthy, M. (2014) emphasized that e-resources are useful for engineering college teachers and scholars for their academic and research activities.

Jagdish (2013) indicated Comparative usage statistics of both the consortia was analysed by measuring T test and by normalizing the usage statistics by number of member and number of journals accessible to member institutes. Both the analyses revealed that the usage of e-resources by member institutes of INDEST-AICTE Consortium is higher than the usage of e-resources by members of the UGC-INFONET Digital Library Consortium.

Eqbal and Kahan (2007) found that the use of electronic journals by the research scholars of Faculty of Science and Engineering revealed high extent of use. Majority (67.64%) of research scholars of faculty of science and (69.23%) of faculty of engineering use e-journals for research work. The frequent use of the electronic resources is however attributed to the speed and ease at

which information needed is being retrieved and the availability of current and up-to date information online.

6. Statement of the Research Problem

The problem under investigation is “Use of electronic information resources in government engineering college libraries: A Study”. The study will assess the use and impact of electronic information resources of the government engineering college libraries in Telangana State.

7. Objectives of the Study

. The study focuses on the following objectives.

- To Know the gender wise use of electronic information resources
- To know the use of different types of electronic information resources.
- To know the purpose of using electronic information resources.
- To know the difficulties faced while access electronic information resources.

8. Research Methodology

Present study consisted of a quantitative survey method. The quantitative research involved the distribution of questionnaires to faculty to gain information about aspects of their use and value of library’s electronic information resources.

9. Data Analysis and Interpretation

For the present study, a questionnaire is prepared and survey has taken government engineering college libraries in Telangana and there are about 180 responses were received. The collected data have been analyzed with using following variables, such as gender wise respondents, designation, use of electronic information resources in the library, purpose of using electronic information resources and difficulties faced while access electronic information resources etc.

10.1 Gender Wise Responses

It can be observed from table no. 1 shows that gender wise distribution of the respondents highest numbers of 106 (58.89%) were male and 74 (41.11%) were female. It is conclude that majority of the respondents participated for the study are male.

Table No.1 Gender Wise Responses

Sl. No	Gender	No. of Respondents	%
1	Male	106	58.89%
2	Female	74	41.11%
Total		180	100%

10.2. Designation Wise Responses

Table no. 2 shows that designation wise distribution of the respondents. It shows that 92 (51.11%) were Assistant Professors 63 (35%) were Associate Professors and 25 (13.88%) were Professors. It is conclude that majority of the respondents were Assistant Professors.

Table No.2 Designation Wise Responses

Sl. No	Designation	No. of Respondents	%
1	Professors	25	13.88%
2	Associate Professors	63	35.00%
3	Assistant Professors	92	51.11%
Total		180	100%

10.3. Visit to Library

The table no. 3 shows that the majority of respondents 89 (49.44%) were visit to library every day following by 58 (32.22%) were visit to library Once in 2 Days, 23 (12.77%) were Once in 3 days and 10 (5.55%) of the respondents were visit to library Once in week respectively.

On the basis of the respondent's designation, 44.0% professors visit library everyday, 50.79% Associate Professors and 50.0%) Assistant Professors.

Table No.3 Visit to Library

Sl. No	Designation	No. of Respondents			Total	Chi-Square Test	Degree of Freedom	Method of Significance (P-Value)
		Professors	Associate Professors	Assistant Professors				
1	Every day	11 (44.00) (6.11)	32 (50.79) (17.78)	46 (50.00) (25.56)	89 (49.44) (49.44)	6.640	6	0.355 Not Significant
2	Once in 2 days	7 (28.00) (3.89)	20 (31.75) (11.11)	31 (33.70) (17.22)	58 (32.22) (32.22)			
3	Once in 3 days	5 (20.00) (2.78)	5(7.94) (2.78)	13 (14.13) (7.22)	23 (12.77) (12.77)			
4	Once in a week	2 (8.00) (1.11)	6 (9.52) (3.33)	2 (2.17) (1.11)	10 (5.55) (5.55)			
	Total	25 (100) (13.89)	63 (100) (35.50)	92 (100) (51.11)	180 (100) (100)			

(Figures in parenthesis indicate percentages).

It is evident from above table that there is a no significant difference in the Visit to Library and designation of users. Which is evident from the greater than p value at 0.05 level.

10.4 Use of Electronic Information Resources in the Library

Table no. 4 shows that use of electronic information resources in the library. Highest numbers of 165 (91.66%) respondents were used E-Journals followed by E-Database 155 (86.11%), E-Books 141 (78.33%), E-News Papers 76 (42.22%), CD/DVDs 63 (35%), OPAC 54 (30%) and other E-Resources 27 (15%).

The study found that majority of the respondents use e-journals and further it is also found that the Professors (84.0%), Associate Professors (92.06%) and Assistant Professors (93.48%) independently used e-journals.

Table No.4 Use of Electronic Information Resources in the Library

Sl. No	Use of E-Resources in the Library	No. of Respondents			Total	Chi-Square Test	Degree of Freedom	Method of Significance (P-Value)
		Professor	Associate Professor	Assistant Professor				
1	E-Journals	21 (84.00) (11.67)	58 (92.06) (32.22)	86 (93.48) (47.78)	165 (91.66) (91.66)	0.137	12	1.00 Not Significant
2	E-Books	19 (76.00) (10.56)	49 (77.78) (27.22)	73 (79.35) (40.56)	141 (78.33) (78.33)			
3	CD/DVDs	8 (32.00) (4.44)	22 (34.92) (12.22)	33 (35.87) (18.33)	63 (35.00) (35.00)			
4	E-Databases	20 (80.00) (11.11)	54 (85.71) (30.00)	81 (88.04) (45.00)	155 (86.11) (86.11)			
5	OPAC	7 (28.00) (3.89)	19 (30.16) (10.56)	28 (30.43) (15.56)	54 (30.00) (30.00)			
6	E-News Papers	10 (40.00) (5.56)	27 (42.86) (15.00)	40 (43.48) (22.22)	76 (42.22) (42.22)			
7	Others	4 (16.00) (2.22)	9 (14.29) (5.00)	14 (15.22) (7.78)	27 (15.00) (15.00)			
	Total	25 (100) (13.89)	63 (100) (35.50)	92 (100) (51.11)	180 (100) (100)			

(Figures in parenthesis indicate percentages).

It is evident from above table that there is a no significant difference in the Use of Electronic Information Resources in the Library and designation of users. Which is evident from the greater than p value at 0.05 level.

10.5 Knowledge of Using Electronic Information Resources

It can be noted from table no. 5 shows knowledge of using electronic information resources. Majority of 107 (59.44%) of respondents have good knowledge of using electronic information resources followed by 63 (35.00%) of respondents have excellent knowledge of

using electronic information resources and 10 (5.55%) of respondents have average knowledge of using electronic information Resources.

On the basis of the respondent's designation, majority 56% Professors stated as good knowledge of using electronic information. In the same way 58.73% Associate Professors stated as good knowledge of using electronic information and majority 59.44% faculty stated as good knowledge of using electronic information.

Table No.5 Knowledge of Using Electronic Information Resources

Sl. No	Knowledge of Using Electronic Information Resources	No. of Respondents			Total	Chi-Square Test	Degree of Freedom	Method of Significance (P-Value)
		Professors	Associate Professors	Assistant Professors				
1	Excellent	8 (32.00) (4.44)	22 (34.92) (12.22)	33 (35.87) (18.33)	63 (35.00) (35.00)	2.983	4	0.561 Not Significant
2	Good	14 (56.00) (7.78)	37 (58.73) (20.56)	56 (60.87) (31.11)	107 (59.44) (59.44)			
3	Average	3 (12.00) (1.67)	4 (6.35) (2.22)	3 (3.26) (1.67)	10 (5.55) (5.55)			
4	Poor	0 (0.00) (0.00)	0 (0.00) (0.00)	0 (0.00) (0.00)	0 (0.00) (0.00)			
	Total	25 (100) (13.89)	63 (100) (35.50)	92 (100) (51.11)	180 (100) (100)			

(Figures in parenthesis indicate percentages).

It is evident from above table that there is a no significant difference in the Knowledge of Using Electronic Information Resources and designation of users. Which is evident from the greater than p value at 0.05 level.

10.6 Purpose of Using Electronic Information Resources

It can be noted from the table no. 6 that a purpose of using electronic information resources. Majority of 125 (35.81%) respondents using electronic information resources for research purpose followed by teaching purpose 91 (26.07%), for publication 71 (20.34%), for subject knowledge 47 (13.46%) and others 15 (4.29%).

The table also reveals that the 56% Professors have good knowledge of using electronic information. 58.73% Associate Professors have good knowledge of using electronic information and 59.44% faculty have good knowledge of using electronic information.

Table No.6 Purpose of Using Electronic Information Resources

Sl. No	Purpose of Using Electronic Information Resources	No. of Respondents			Total	Chi-Square Test	Degree of Freedom	Method of Significance (P-Value)
		Professors	Associate Professors	Assistant Professors				
1	Research Purpose	16 (64.00) (8.89)	44 (69.84) (24.44)	65 (70.65) (36.11)	125 (35.81) (35.81)	0.058	8	1.000 Not Significant
2	For Publication	9 (36.00) (5.00)	25 (39.68) (13.89)	37 (40.22) (20.56)	71 (20.34) (20.34)			
3	For Subject Knowledge	6 (24.00) (3.33)	16 (25.40) (8.89)	25 (27.17) (13.89)	47 (13.46) (13.46)			
4	Teaching Purpose	12 (48.00) (6.67)	32 (50.79) (17.78)	47 (51.09) (26.11)	91 (26.07) (26.07)			
5	Other	2 (8.00) (1.11)	5 (7.94) (2.78)	8 (8.70) (4.44)	15 (4.29) (4.29)			
	Total	25 (100) (13.89)	63 (100) (35.50)	92 (100) (51.11)	180 (100) (100)			

(Figures in parenthesis indicate percentages).

It is evident from above table that there is a no significant difference in the Purpose of Using Electronic Information Resources and designation of users. Which is evident from the greater than p value at 0.05 level.

10.7 Impact of Electronic Information Resources on Working Environment

The table no.7 shows opinion about impact that the electronic information resources make on your working environment. It shows that the majority of 104 (57.77%) were using electronic information resources help them very favorable and 76 (42.22%) of the users feels it's favorable.

In this regard, it is also found that majority of Professors (60.0%), Associate Professors (57.14%) and Assistant Professors (58.70%) are very favourable. It can be concluded, on the whole, there is a favourable impact of electronic information resources on Working Environment.

Table No.7 Impact of Electronic Information Resources on Working Environment

Sl. No	Impact of Electronic Resources on Working Environment	No. of Respondents			Total	Chi-Square Test	Degree of Freedom	Method of Significance (P-Value)
		Professors	Associate Professors	Assistant Professors				
1	Very favorable	15 (60.00) (8.33)	36 (57.14) (20.00)	54 (58.70) (30.0)	104 (57.77) (57.77)	0.070	2	0.965 Not Significant
2	Favorable	10 (40.0) (5.56)	27 (42.86) (15.00)	38 (41.30) (21.11)	76 (42.22) (42.22)			
3	No impact	0 (0.00) (0.00)	0 (0.00) (0.00)	0 (0.00) (0.00)	0 (0.00) (0.00)			
4	Unfavorable	0 (0.00) (0.00)	0 (0.00) (0.00)	0 (0.00) (0.00)	0 (0.00) (0.00)			
	Total	25 (100) (13.89)	63 (100) (35.50)	92 (100) (51.11)	180 (100) (100)			

(Figures in parenthesis indicate percentages).

It is evident from above table that there is a no significant difference in the Impact of Electronic Information Resources on Working Environment and designation of users. Which is evident from the greater than p value at 0.05 level.

10.8 Difficulties Faced While Access Electronic Information Resources

The table no. 8 shows that majority of 149 (32.32%) respondents encountered the problem while accessing electronic information resources is low speed of internet followed by 113 (24.51%) feels that providing very limited time to access is the difficulty, 102 (22.12%) feel downloading problem, 79 (17.13%) feel providing Lack of infrastructure and 18 (3.90%) feel other problem to access the resources respectively.

It can be inferred from the analysis that the main difficulty while accessing electronic information resources is low speed of internet. The study also found that there is a difficulty on the basis of their designation Professors (80.0%), Associate Professors (82.54%) and Assistant Professors (83.70%).

Table No.8 Difficulties Faced While Access Electronic Information Resources

Sl. No	Difficulties Faced While Access Electronic Information Resources	No. of Respondents			Total	Chi-Square Test	Degree of Freedom	Method of Significance (P-Value)
		Professors	Associate Professors	Assistant Professors				
1	Low speed of internet	20 (80.00) (11.11)	52 (82.54) (28.89)	77 (83.70) (42.78)	149 (32.32) (32.32)	0.165	8	1.000 Not Significant
2	Downloading problem	13 (52.0) (7.22)	36 (57.14) (20.0)	53 (57.61) (29.44)	102 (22.12) (22.12)			
3	Very limited time to access	15 (60.00) (8.33)	39 (61.90) (21.67)	59 (64.13) (32.78)	113 (24.51) (24.51)			
4	Lack of infrastructure	10 (40.00) (5.56)	28 (44.44) (15.56)	41 (44.57) (22.78)	79 (17.13) (17.13)			
5	other	2 (8.00) (1.11)	6 (9.52) (3.33)	10 (10.87) (5.56)	18 (3.90) (3.90)			
	Total	25 (100) (13.89)	63 (100) (35.50)	92 (100) (51.11)	180 (100) (100)			

(Figures in parenthesis indicate percentages).

It is evident from above table that there is a no significant difference in the Difficulties Faced While Access Electronic Information Resources and designation of users. Which is evident from the greater than p value at 0.05 level.

11. Conclusion

A library plays a important role in spreading knowledge in all the fields of technical education because it is primarily linked up with the electronic information resources of its users. The study investigated use of electronic information resources by the faculty of government engineering college libraries. The usage of electronic information resources in engineering college libraries is

very common and it's so important to know latest development and innovations in the field of engineering and technology. Majority of the respondents were visit to the library every day. It can be also shows that majority of respondents used e-journals to get desired and relevant information for their research as well as for teaching purpose. While doing this study it has been observed that most users have a good knowledge of using e-resources. The study also shows that there are difficulties in accessing electronic information resources. Low speed of internet is main difficulty in accessing electronic information resources.

12. Suggestions

Based on the present study, the following suggestions were made to improve the electronic information resources in government engineering college libraries.

1. There is need to improve ICT Infrastructure in the library to provide better library services to users.
2. There is need to conduct the orientation programmes for the user community to create awareness about e-resources.
3. To avoid downloading problems, the needed mechanism should be arranged.
4. All the problems raised by the faculty should be solved as early as possible.

REFERENCES

1. Babasaheb Sawai, Amol and Chavan, Subhash Pundalik Rao (2020). Awareness and use of e-resources in college libraries: a survey. *Library philosophy and practice*, (e-journal).3629.
2. Lavanya, A and Thirnavukkarasu. A. (2020). Information literacy skills in the use of electronic resources among research scholars of Alagappa University Karaikudi: a study. *Library philosophy and practice*, (e-journal).3691.
3. Pitla, Raja Suresh Kumar, Kona, Ramakrishna, and Gowridevi, Rudraksha (2020). Use of Electronic Information Resources in Engineering College Libraries. *Library Philosophy and Practice* (e-journal). Paper 4088.
4. Mythili Rajyalaxmi, M.N. and Anjaiah, M. (2018). Usage Pattern of Electronic Information Resoruces by the Engineering Students: A Case Study of Madanapalle

- Institute of Technology and Science (MITS), Madanapalle, Chittoor District, Andhra Pradesh. *International Journal of Library and Information Studies*, 7(3), 287-294.
5. Venkateswarlu, Y.Ch. and Raja Suresh Kumar, P. (2018). Use of Electronic Information Resources by faculty and students of Malla Reddy Group of Institutions, Hyderabad, Telangana: A study. *Journal of Advances in Library and Information Science*, 7(4), 269-274.
 6. Raja Suresh Kumar, P., Venkateswarlu, Y.Ch. and Doraswamy Naick, B.R. (2018). Use of N-List E Resources by Faculty and Students of MRITS and MRCE Engineering College Libraries, Hyderabad, Telangana- A Case Study. *Journal of Advances in Library and Information Science*, 7(4), 304-308.
 7. Arun Kumar, M. and Anjaiah, M. (2018). Use Patterns of E-Resources by the Faculty, Research Scholars and Professional Students of University College of Engineering, Osmania University, Hyderabad Telangana State—A Case Study. *International Journal of Library and Information Studies*, 8(2), 167-173.
 8. Arun Kumar, M. and Anjaiah, M. (2018). Effective use of e-resources by the students of Jawaharlal Nehru Technological University Hyderabad College of Engineering, Jagithyala- A case study. *Review of Research*, 7(9), 1-7.
 9. Aravind, S. (2017). Use of Electronic Resources in Engineering College Libraries: User Study. *Journal of Advances in Library and Information Science*, 6(1), 85-89.
 10. Asifa Jan. (2017). Use of E-Resources by users of Temperate College Fisheries (J&K): A case study. *International Journal of Library and Information Studies*, 7(4), 176-184.
 11. Archita Nanda. (2017). Use and Awareness of E-journals by the Faculty and Research Scholars of Veer Surendra Sai University of Technology. *DESIDOC Journal of Library & Information Technology*, 37(4), 274-280.
 12. Taphros Madondo, Nevermore Sithole and Collence Takainganhemo Chisita. (2017). Use of Electronic Information Resources by Undergraduate Students in the Faculty of Management and Administration at Africa University, Mutare, Zimbabwe. *Asian Research Journal of Arts & Social Sciences*, 2(2), 1-12.
 13. Saket Kumar. (2017). Use of Electronic Information Resources By Research Scholars And Faculty Members of National University of Study And Research In Law, Ranchi: A Study. *International Journal of Knowledge Management and Practices*, 5(1), 8-12.

14. Raja Suresh Kumar, P. and Doraswamy Naick, B.R. (2018). Information needs and information seeking behavior of faculty members in selected engineering Institutes, Medchal Region, Telangana- A study. *International Journal of Information Sources and Services*, 3(5), 1-19.
15. Rosy Malarvizhi S. and Sarangapani R. (2016). Usage of Electronic Information Resources in Research and Engineering Environment: A Case Study. *Asian Journal of Information Science and Technology*, 6(2), 32-36.
16. Prabakaran, M. (2016). Awareness and Utilization of E-Resources by Faculty Members with Special Reference to an Engineering Colleges, Virudhunagar District, Tamilnadu - A Case Study. *International Journal of Library Science and Research*, 6(3), 55-60.
17. Anjaiah, M. and Nageshwara Rao, P. (2015). Use of scholarly electronic information resources by faculty members of NBA accredited engineering college libraries: a survey. *International Journal of Innovation Sciences and Research*, Vol.4(11), 524-31.
18. Puttaswamy, R.M. and Krishnamurthy, M. (2014). Exploring the Usefulness of e-Resources for Engineering College Teachers and Scholars for their Academic and Research Activities - A Study. *Journal of Information Science Theory and Practice*, Vol.2(1), 62-70.
19. Arora, Jagdish, Trivedi, Kruti J, & Kembhavi, Ajit. (2013). Impact of access to e-resources through the UGC-INFONET Digital Library Consortium on research output of member Universities. *Current Science*, 104(3), 307-315.
20. Eqbal, M., & Khan, A. S. (2007). Use of Electronic Journals by the Research Scholars of Faculty of Science and Faculty of Engineering. Proceedings of National Convention on Knowledge, Library and Information Networking. New Delhi, 309- 319.