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UTILIZATION OF E-RESOURCES BY JNTUH FACULTY MEMBERS – A STUDY

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Abstract :

E-resources are playing vital role in providing information to users. Universities are the higher intellectual hubs to transmit knowledge and understanding of ideas and values to its users through intellectual means and library is an important organization in this aspect. Means of e-resource sharing through networking, one can get much information he/she needed with lesser cost instantly. Today E-resources became essence of every intellectual activity of higher education. Libraries are the heart of every educational institution as it supports every teaching and research activity. Libraries are now moved from traditional resources to more dynamic and flexible E-resources. The proposed study is mainly concerned to measure the impact of E-resources on the faculty of the Jawaharlal Nehru Technological University, Hyderabad, Telangana state and to suggest measures to further enhance the usage of E-resources.

KEYWORDS :

E-resources , providing information , Utilization , Jntuh Faculty Members.

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INTRODUCTION:

Knowledge shared though communication is called information. The Information Technology has changed the concept of library from traditional to digital. Libraries occupy an important place in the framework of the academic system. Libraries are expected to provide the required information to their users in adequate and timely manner. The electronic resources empower and enrich the academic system. For the purpose of measuring efficiency of the library, the periodic observation of its facilities and services is required. The main objective of the library is to render satisfactory and timely services to the user community. The libraries are constantly expanding their resources and developing new programmes and procedures to meet the various information requirements of the users. Today, the advent of information technology has resulted in reducing the size of libraries. In fact, these smaller modern libraries are rich potential of information. It has been possible due to the digitization of information. The electronic resources provide them quick and up-to-date information. With Internet facility, user can access these e-resources. The significance of e-resources is recognized in all libraries of academic and research centers to meet their users' demands for their academic pursuit.

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITIES

Jawaharlal Nehru Technological University, Hyderabad (JNTU Hyderabad) is a university, primarily focused on engineering, located in Hyderabad, India. Founded in 1965 as the Nagarjuna Sagar Engineering College, it was established as a university in 1972 by The Jawaharlal Nehru Technological University Act, 1972, also combining colleges in Kakinada and Anantapur. In 2008 the Jawaharlal Nehru Technological University Act, 2008 split the university back into four universities, Jawaharlal Nehru Architecture & Fine Arts University, Jawaharlal Nehru Technological University, Ananthapur, Jawaharlal Nehru Technological University, Hyderabad and Jawaharlal Nehru Technological University. Kakinada. First established as the Hyderabad Polytechnic Institute, the Jawaharlal Nehru Technological University (name changed in 1972) is located in focusing mainly on engineering. JNTU has university campuses (now autonomous) in Kakinada and Ananthapur of undivided Andhra Pradesh. The University was established with the objectives of strengthening and improving the standards

of technological education and making it relevant to the rural and industrial development of the country.

The college was established as Nagarjuna Sagar Engineering College in 1965 by the Government of Andhra Pradesh. The College was initially under the administrative control of the Department of Technical Education and affiliated to Osmania University, Hyderabad. With the formation of Jawaharlal Nehru Technological University in 1972, it became a constituent college of the University and was renamed as JNTU College of Engineering, Hyderabad.

REVIEW OF LITERATURE

Chetan and Harpal (2012) were conducted a study in Swami Devi Dyal Institute of Engineering and Technology (SDDIET). They identified e-resources are very much favorite of teachers, students and majority of respondents mostly prefer to use e-mail than e-journals. And the users are satisfied with existing IT infrastructure and e-resources. Study reveals that it is the time to accept the importance of e-resources in higher education system.

Dhanavandan and Nagarajan (2012) were made an attempt to understand in their study, the majority of the users (42%) indicated that they preferred print version of resources for their convenience. 36% of users from the computer science & Information technology. Only 12% of the respondents use e-resources rarely. A total of only 24 respondents indicated they have at least 2 years experience in using e-resources, an indicator that the concept of e-journals is still fairly new phenomenon. The problems encountered by the users are measured, 31% of the respondents rated that downloading is a major problem. Also 26% of the users said that lack of knowledge is another major problem. Majority (66%) of the respondents satisfied with the e-resources available in the library.

Egberongbe (2011) examined the use of e-resources are very common among the lecturers and research scholars of University of Lagos. It also showed that majority of teachers and research scholars are dependent on e-resources to get desired and relevant information. It was however, revealed that practical uses of e-resources are not up to the worth in comparison to investments made in acquiring these resources. Moreover, infrastructure and training, programmes are essential for better use of electronic resources campus-wide. It is evident from the analysis that the availability of e-resources on the campus is almost sufficient for all the existing disciplines but that the infrastructure to use the resources is not adequate and is actually hindering the ability to meet the requirements of users.

OBJECTIVES OF THE STUDY

1.To identify the use of electronic resources by the faculty members of JNTUH.
2.To assess the purpose of use of electronic resources by the faculty members.
3.To find out the amount of time spent for collecting electronic resources.
4.To study the experience in utilization of electronic resources.
5.To study the location of using electronic resources by the faculty members.
6.To find out the problems facing while accessing electronic resources.
7.To find out the level of satisfaction among the faculty members with the current state of electronic resources in their respective institutes.

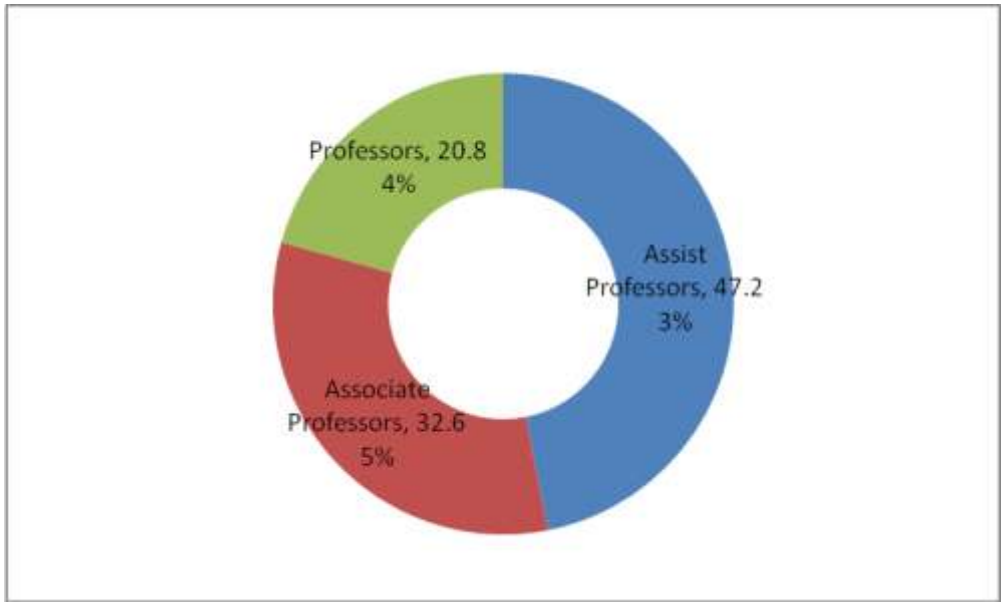
METHODOLOGY

The survey method was considered most appropriate for this study because it can measure teachers background, experience and what they know about electronic information, and it was well-suited to the research questions taken up for this study. The data has been obtained by using questionnaires; this data has been standardized for comparison. The questionnaire was designed, keeping in view the objectives of the study for collecting usage data from different users. The questionnaire was administered in class rooms, libraries, departments, computer centers, and other campus locations. In selection of sample of population, the random method has been used the present study is the survey of faculty members from JNTUH and its constituent colleges. It is found that under the JNTUH there are three constituent colleges i.e., JNTUH Jagithyal, JNTUH Manthani and JNTUH Sulthanpur. The researcher were selected these four institutions for study. The total population of the study consists of 432 faculty members (including Academic Assistants); a sample of 378 members was selected. Out of 378, 179 are Assistant professors, 119 Associate professors and 80 are Professors.

DATA ANALYSIS AND INTERPRETATION

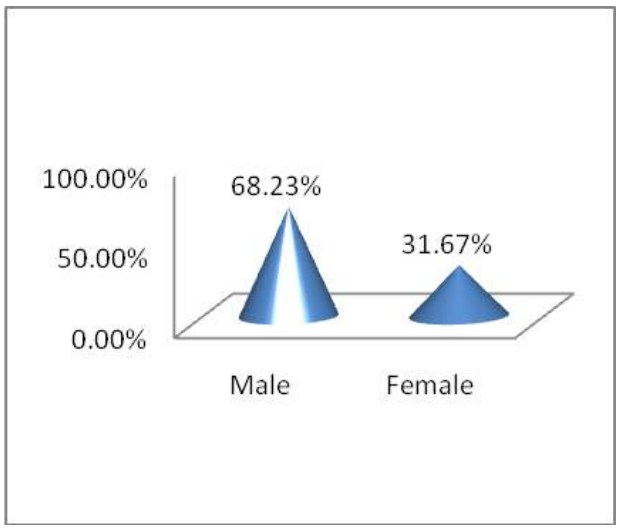
Analysis of data is the ultimate step in research process. It is the link between raw data and significant results leading to conclusions. This process of analysis has to be result oriented. The questionnaires were distributed and collected from the respondent which is presented in Diagram 1.

Diagram 1- Sample of the Faculty Members



The Diagram-1 shows that in the total population, 47.23 per cent are Assistant Professors, 32.65 per cent are Associate Professors and remaining 20.84 per cent are Professors in JNTUH.

Diagram 2-Respondents according to Gender



It is evident from the above diagram-2 that out of the total respondents 68.23per cent are male respondents and 31.67 per cent are female respondents.

BROWSING E-RESOURCES

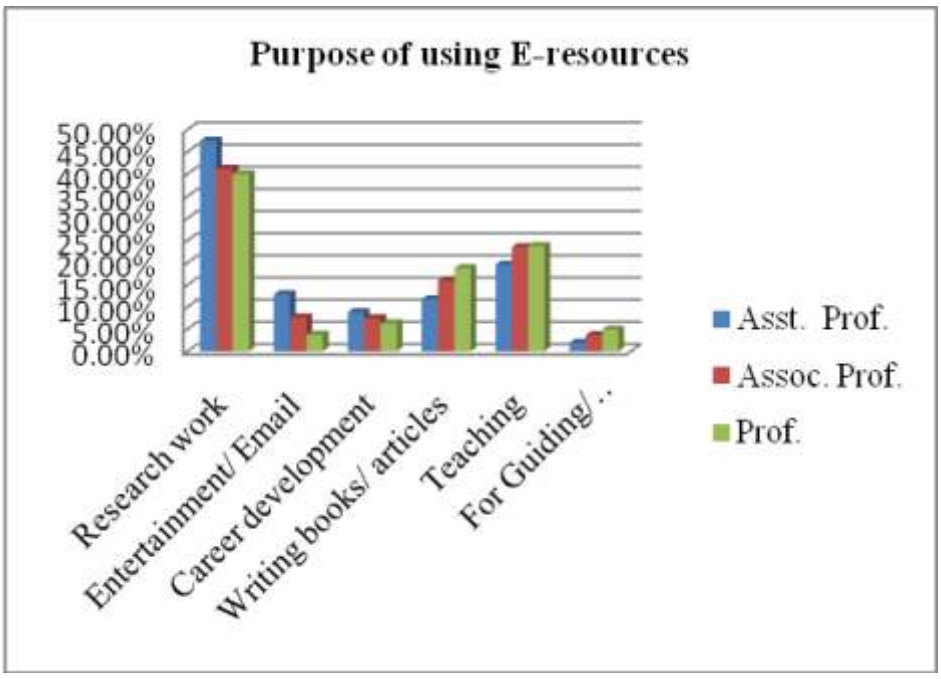
Information is published in several forms. By using internet, the user can improve their knowledge by viewing the information through Internet. The information can be downloaded which they need. A question has been asked to the respondents to know the use of E-resources. All the respondents are given positive response against browsing e-resources.

Table 1: Purpose of using E-resources

Purpose	Asst. Prof.	Assoc. Prof.	Prof.	Total
Research work	85(47.48)	49(41.17)	32(40.0)	165(43.80)
Entertainment/ Email	23(12.84)	9(7.56)	3(3.75)	36(9.52)
Career development	13(7.26)	10(8.40)	7(8.83)	27(7.14)
Writing books/ articles	21(11.73)	19(15.95)	15(18.75)	56(14.81)
Teaching	35(19.55)	28(23.52)	17(23.77)	80(21.07)
For Guiding/ Supervising	3(1.91)	4(3.63)	6(4.91)	14(3.70)
Total	179(100)	119(100)	80(100)	378(100)

Table 1: Purpose of using E-resources				
Purpose	Chi-Square value	d.f.	Sig. value	Table value
Asst. Prof Vs Assoc. Prof.	4.9840	5	0.4178^{NS}	11.07
Asst. Prof Vs Prof.	12.3244	5	0.0306^{*}	11.07
Assoc. Prof. Vs Prof.	3.0307	5	0.6952^{NS}	11.07

Diagram 3- Purpose of using E-resources



It is evident from table 1 & diagram 3 that 43.80 per cent respondents are using e-resources for research work, it is also clear from that 21.07 per cent are using teaching purpose, followed by writing books/ articles 14.81 per cent, entertainment/ e-mail (9.52%), career development (7.14%) and the remaining 3.70 percent are using for guiding/ supervising purposes.

That there is no significant deference in frequency of using e-resources for different purposes between the respondents of Assistant professors and Associate Professors on one hand and Associate Professors and Professors on the other. These are evidenced by the Chi-square value which is not significant at 0.05 levels with five degrees of freedom.

However, there is significant difference in using e-resources for different purposes between Assistant professors and Professors as indicated by the Chi-square value, which is significant at 0.05 levels with five degrees of freedom. That means, Assistant professors are using more e-resources for different purposes when compared to the Professors.

Table 2: Users experience in using E-resources

Using e-resources	Asst. Prof.	Assoc. Prof.	Prof.	Total
< 4 years	0(0.00)	0(0.00)	0(0.00)	0(0.00)
5 – 6 years	39(21.78)	2(1.68)	6(7.50)	47(12.43)
> 6 years	140(78.21)	117(98.31)	74(92.50)	331(87.56)
Total	179(100)	119(100)	80(100)	378(100)

Table 2: Users experience in using E-resources				
Using e-resources JNTUH	Chi-Square value	d.f.	Sig. value	Table value
Asst. Prof. Vs Assoc. Prof.	17.7651	1	0.0000*	3.84
Asst. Prof. Vs Prof.	5.7131	1	0.0168*	3.84
Assoc. Prof. Vs Prof.	1.8944	1	0.1686^{NS}	3.84

It is evident from table 2 that (87.56%) respondents are using e-resources more than six years, and the remaining (12.43%) are using internet between 5 – 6 years.

It can also be seen from table 4 that there is significant deference in frequency of using e-resources between the respondents of Assistant professors and Associate Professors on one hand and Assistant Professors and Professors on the other. These are evidenced by the Chi-square value which is significant at 0.05 levels with one degree of freedom. That means most of the Professors are using e-resources more than six years when compared to the Assistant and Professors.

However, there is no significant difference in using e-resources between Associate professors and Professors as indicated by the Chi-square value, which is not significant at 0.05 levels with one degree of freedom.

Table 3: Frequency of use of E-resources (per week)

Time	Asst. Prof.	Assoc. Prof.	Prof.	Total
<10 hrs	110(61.45)	99(83.19)	74(92.50)	283(74.86)
10 - 15	56(31.28)	16(13.44)	5(6.25)	77(20.37)
> 16 hrs	13(7.26)	4(3.63)	1(1.25)	18(4.76)
Total	179(100)	119(100)	80(100)	378(100)

Table 3: Frequency of use of E-resources (per week)				
Time	Chi-Square value	d.f.	Sig. value	Table value
Asst. Prof. Vs Assoc. Prof.	28.0927	2	0.0002*	5.99
Asst. Prof. Vs Prof.	46.2781	2	0.0000*	5.99
Assoc. Prof. Vs Prof.	6.5619	2	0.0375*	5.99

It is evident from table 3 that majority of the respondents (74.86%) replied that they are spending time to access the e-resources less than 10 hours. It is also clear from that 20.37per cent access between 10-15 hours and the remaining 4.76per cent are using above 16 hours per week.

It reveals in the table that there is significant deference in spending time to access e-resources between the respondents of Assistant professors and Associate Professors as indicated by the Chi-square value which is significant at 0.05 levels with two degrees of freedom. That means most of Assistant Professors spending time to access the e-resources less than 10 hours when compared to Associate Professors.

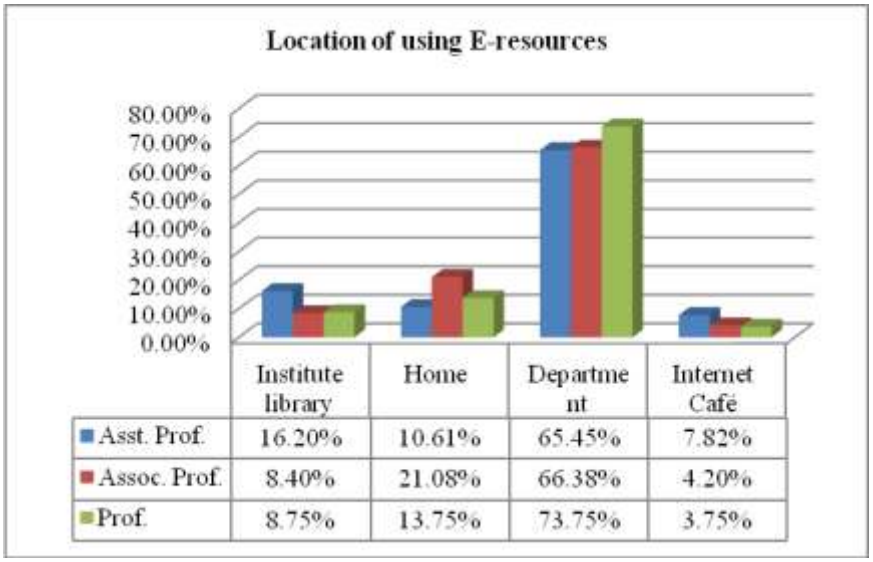
There is significant deference in the opinion that spending time to access the e-resources between the respondents of Assistant professors and Professors as indicated by the Chi-square value which is significant at 0.05 levels with two degrees of freedom. That means most of the Professors spending time to access the e-resources less than 10 hours when compared to Assistant Professors.

It is concluding that there is significant deference in the opinion that spending time to access the e-resources between the respondents of Associate Professors and Professors as indicated by the Chi-square value which is significant at 0.05 levels with two degrees of freedom. That means most of the Professors spending time to access the e-resources less than 10 hours when compared to Associate Professors.

Table 4: Users location of using E-resources

Access point	Asst. Prof.	Assoc. Prof.	Prof.	Total
Institute library	29(16.20)	10(8.40)	7(8.75)	46(12.16)
Home	19(10.61)	25(21.08)	11(13.75)	55(14.55)
Department	117(65.45)	79(66.38)	59(73.75)	255(67.46)
Internet Café	14(7.82)	5(4.20)	3(3.75)	22(5.82)
Total	179(100)	119(100)	80(100)	378(100)

Diagram 4- Location of using E-resources



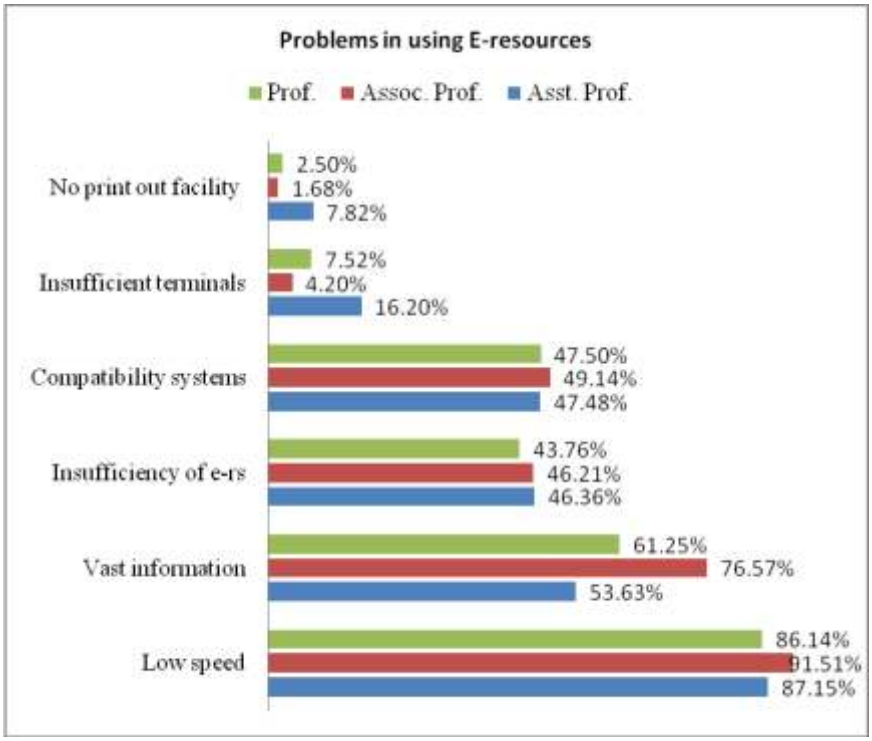
It is evident from table 4 and diagram 4 that majority of the respondents (67.46%) get access to the e-resources at department, followed by 14.55 per cent at home, 12.16 per cent at institute library, and remaining 5.82 per cent use at commercial browsing centre.

Table 5: Problems while accessing E-resources in Institution

Problems	Asst. Prof.	Assoc. Prof.	Prof.	Total
Low speed	156 (87.15)	109 (91.51)	69 (86.14)	334 (88.35)
Vast information	96 (53.63)	91 (76.57)	49 (61.25)	236 (62.43)
Insufficiency of e-rs.	83 (46.36)	55 (46.21)	35 (43.76)	173 (45.76)
Compatibility systems	85 (47.48)	59 (49.14)	38 (47.50)	182 (48.63)
Insufficient terminals	29 (16.20)	5 (4.20)	6 (7.52)	40 (10.58)
No print out facility	14 (7.82)	2 (1.68)	2 (2.50)	18 (4.76)

(Note: Users are permitted to tick more than one option)

Diagram 5- Problems in using E-resources



It is evident from table 5 that majority of the respondents (88.35%) are facing difficulties while accessing E-resources in institution with low speed. It is also clear from that 62.43per cent are facing difficulty with vast information, 48.63per cent are facing difficulty with compatibility systems, 45.76 per cent facing difficulty with insufficiency of e-resources, 10.58 per cent facing difficulty with insufficient terminals and the remaining 4.76 per cent are facing difficulty with not availability of print out facility (Diagram 5).

Table 6: User satisfaction with E-Resources

Level	Asst. Prof.	Assoc. Prof.	Prof.	Total
Very satisfied	27 (15.08)	10 (8.40)	6 (7.50)	43 (11.37)
Satisfied	118 (65.92)	102 (85.71)	71 (88.75)	291 (76.98)
Somewhat satisfied	34 (18.99)	7 (5.88)	3 (3.75)	44 (11.64)
Not satisfied	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
Total	179 (100)	119 (100)	80 (100)	378 (100)

Table 6: User satisfaction with E-Resources				
Level JNTUH	Chi-Square value	d.f.	Sig. value	Table value
Asst. Prof. Vs Assoc. Prof.	15.2944	2	0.0014*	5.99
Asst. Prof. Vs Prof.	15.4383	2	0.0004*	5.99
Assoc. Prof. Vs Prof.	0.5321	2	0.7663^{NS}	5.99

It is evident from table 6 that (76.98%) respondents are satisfied with e-resources provided by the institution, followed by 11.64 per cent are somewhat satisfied and the remaining 11.37 per cent are very satisfied.

However, there is significant difference in user satisfaction between Assistant professors and Associate Professors on one hand and Assistant Professors and Professors on other of JNTUH as indicated by the Chi-square value, which is significant at 0.05 levels with two degrees of freedom. That means Assistant professors satisfied with e-resources provided by the institution when compared to the Professors.

It can also be seen from table that there is no significant deference in user satisfaction between the respondents of Associate Professors and Professors. These are evidenced by the Chi-square value which is not significant at 0.05 levels with

two degrees of freedom.

FINDINGS OF THE STUDY

After careful observation of the present study, the researcher has observed and presented some of the following findings below. They are:

1.A large Majority of respondents (68.23%) are male and (31.67%) are female respondents.
2.Considerable number (43.80%) of the respondents says that the purpose of visiting the library to use the e- resources for research, teaching & writing books.
3.A large majority of (87.56%) respondents are using internet more than six years, and the remaining (12.43%) are using internet between 5 – 6 years.
4.Majority of the respondents (74.86%)) is spending time to access the e-resources less than 10 hours (per week).
5.Majority of the respondents (67.46%) get access to the e-resources at department and least (5.82%) at commercial browsing centre.
6.Most of the respondents (88.35%) are facing difficulties while accessing e-resources in JNTUH institution with low speed, vast information, compatibility of systems and insufficiency of e-resources.
7.Majority (76.98%) of the respondents are satisfied, with the e-resources.

CONCLUSION

This study shows the use of e-resources is very common among the teachers of JNTUH Institution and majority of the teachers are dependent on e-resources to get the desired and relevant information. But practical use of e-resources is not up-to the worth in comparison to investments made in acquiring these resources; secondly the facilities should also be strengthening as per requirements. It is observed that the availability of e-resources at the Institutes is almost sufficient but the infrastructure to use these resources is not adequate and can hinder the ability to meet the requirements of users.

SUGGESTIONS

Based on the present study, some of the constructive suggestions were made for usage of e-resources by the faculty members of JNTUH.

1.Awareness is important to explore the information and it should be given to all the academic departments of the university on regular basis with aim to address the issues like how to use, download and explore the e-resources for needed information.
2.LAN facility should be provided to libraries for proper utilization of the e-resources.
3.The JNTU Institutions libraries should be strengthen by providing more computer terminals and increase the Bandwidth to overcome slow access.
4.Library staff should be trained enough to make library users from literate to information literate by providing training about how to search and downloads the needed information from e-resources.
5.For getting the awareness on proper usage of e-resources, there is need to training programmes.
6.Printing facility should be provided by collecting the nominal charges.
7.Being a monitoring and execution agency INFLIBNET should have to take care about the problems and information needs of the university. Regular updating of the usage report can be maintained and by evaluating the usage, low used resources can be tracked to take necessary actions to improve usage of resource well in time.

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