International Journal of Next Generation Library and Technologies (ISSN 2395 – 5201)
February 2018, Volume 4, Issue 1

USE AND IMPACT OF E-RESOURCES AND SERVICES AMONG THE MANAGEMENT STUDENTS OF KOUSALI INSTITUTE OF MANAGEMENT STUDIES, KARNATAK UNIVERSITY DHARWAD: A PILOT STUDY

Miss. Shreya Malunavar*

Dr. B. D. Kumbar**

**Research Scholar, Email: shreyamalunavar@gmail.com*

***Professor, Email: bdkumbar@yahoo.com*

Dept. of Library and Information Science, Karnatak University, Dharwad

ABSTRACT:

In recent years, the Information and Communication Technology has emerged as the most important and powerful medium for the communication of Information which results in providing the universal access to information through diverse technological innovations. The academic community is one of the major beneficiaries of these advancements and online access. The students are now dependent on e-journals, online databases and other e-resources for enhancement of quality of their academic activities. The aim of the study is to examine and measure the usage and impact of e-resources and services among the Post-Graduate (PG) students of Kousali Institute of Management studies (KIMS), Karnatak University Dharwad. The findings of the study indicate that a vast majority of the respondents are aware about the e-resources and services offered by the library. The study also found that e-resources have made a positive impact on the academic activities of the respondents but the use pattern of e-resources varies among the respondents.

KEYWORDS: E-resources, Internet, PG students, Management education

INTRODUCTION: Today we are living in the age of information. The information is a dynamic and unending resource that affects all disciplines and walks of life. Over the last decade, the emergence of electronic resources has drastically revamped the status of all the libraries and information centres across the world. There has been a rapid urge of the user community to get more and more information online. Electronic resources (e-resources) have given us the power to get information timely and manage information more effectively and also the means to dissolve barriers and offer equity of access to knowledge and information. The development of the ICT devices, the rapid rise of

electronic databases, and modern ebook technologies have altogether changed the entire scenario of informatics.

In the present knowledge society, electronic information resources are gaining lot of momentum and these are the major source of information in almost all types of libraries. The e-resources are playing an important role in the area of higher education to provide better services and easy access. The range of electronic resources and services available in libraries today, is an effect of the changes in information delivery made possible through advances in both computer technologies, such as powerful personal desktop workstations, and information storage and delivery mechanisms, such as CD-ROMs and user-friendly graphical user interfaces (GUIs). These advances made the ongoing efforts to replace other traditional services and processes with electronic versions attractive and economically feasible for many libraries. Due to explosion of information and knowledge, the e-resources have become more powerful tools that allow users to search the information more effectively and efficiently.

REVIEW OF LITERATURE

Chinnasamy, et al. (2008) investigate the use of e-resources and services and their impact on students academic work and study. Majority of the students feel that e-resources have made an impact on their study. **Swain and Panda (2009)** examine to what extent Electronic Information Services (EIS) are offered to users of Business School libraries in the State of Orissa (India). The study highlight the different problems faced by the respondents in accessing e-resources. **Maharana, et al. (2010)** investigates the usage of Internet and E-resources by the students of master's in Business Administration, in Sambalpur University, Orissa. It was found that majority of the students are using Internet and E-resources & more than half of the students strongly feel that management study will be severely affected without the use of internet and e-resources. **Sampath Kumar & Kumar (2010)** aims to know the perception and use of e-resources and the internet by the engineering, medical and management academics in Bangalore City, India. The result shows that the students and faculty members are aware of electronic information sources but most of the students and faculty prefer print sources in addition to electronic information sources. **Mostofa (2011)** carried out a study on Internet access and use among business students of a private university of Bangladesh. The study showed that the majority of the students make use of internet for educational purposes and they opined that internet can play a vital role in the field of education. Slow access speed is the major problem faced by the respondents and majority of the respondents believed that internet has a positive impact on their academic efficiency. **Singh (2012)** evaluates the level of usage of electronic information resources (EIRs) and services in teaching and learning, as well as the impact of its usage by the faculty members and students of management colleges at NCR, India. The result shows that all the

respondents have good knowledge about the EIRs and the level of awareness and usage of EIRs has increased. The study also revealed that respondents are satisfied with the use of EIRs. **Bellary (2012)** evaluates the level of dependency on digital resources of management students and faculty members in Chetana's R. K. Institute of Management and Research, Mumbai. The study shows that majority of the respondents are highly dependent on the digital resources because of the features. **Parvathamma and Pattar (2013)** focused on the digital literacy among students of management institutes in Davanagere district, Karnataka. The study has concluded that there is a need to create awareness among respondents to make use of web resources and services for their research and academic purposes and a model curriculum proposed to impart digital literacy skills to the students of MBA. **Ali (2014)** evaluates the use of e-resources made available in the selected engineering and management institutes of Western Uttar Pradesh. Majority of the users (93.88%) are aware about the E- resources available in the libraries and 76.11% of them felt e-resources are adequate. Most of the users (80.55%) admitted that E- resources can be good substitute for conventional resources. **Sevukan and Gomathy (2015)** studied digital literacy skills of post-graduate students from management institutions in Pondicherry. The study revealed that 72.6% of the respondents were aware of digital resources. The study observed that it is necessary to conduct awareness programmes to promote the use of digital information sources. **Prakashe and Tayade (2015)** conducted a study on e-resources in the libraries of 13 IIMs in India. The study found that e-journals, databases and CDs/DVDs with books were accessible in all the libraries and most of the e-resources are accessible through IP addresses, while some require log-in ID and Password. It also revealed that, only EBSCO database is subscribed in all the 13 studied libraries. **Patel & Modi (2016)** focus on the use of e-resources and its services used by mechanical engineering students of SAL engineering and technical institute, Ahmedabad. The study has indicated that majority of the users are aware and familiar with e- resources but majority of the respondents face problems while accessing and using e-resources.

NEED FOR THE STUDY

The present study was undertaken to pretest the questionnaire prepared on "Use and Impact of E-resources and Services among the Management Students of Kousali Institute of Management studies, Karnatak University Dharwad" before venturing into the actual research. Through the study the researcher tested the questionnaire for its reliability and validity and also to overcome ambiguities in the questionnaire.

OBJECTIVES: The objectives of the study are:

1. To know to what extent the respondents make use of library
2. To know the use pattern of internet among the respondents
3. To understand the respondents ability to make use of e-resources and services

4. To know the impact of e-resources and services on the academic activities of the respondents
5. To ascertain the level of satisfaction among the respondents with reference to the e-resources and services provided by the library
6. To suggest the ways and means to improve the usage of e-resources and services among the respondents.

SCOPE AND LIMITATIONS:

The present study covers Postgraduate Management Students of Kousali Institute of Management studies, Karnatak University Dharwad. The present study was undertaken during the period of 26-04-2017 to 28-05-2017.

METHODOLOGY:

Keeping in mind the objectives of the study a structured questionnaire dealing with various aspects of e-resources, services and their usage was designed to collect the data from the students. The study population consists of 104 Post Graduate students. Questionnaire was distributed to all the respondents, out of which 97 filled in questionnaires were returned with the response rate of 93.26%. For data analysis simple statistical methods and tools such as ANOVA test, Tukey HSD (post hoc test) and chi-square test have been adopted.

DATA ANALYSIS AND INTERPRETATION:

Gender & Age wise distribution of respondents: The majority of the respondents i.e. 57(58.76%) belong to male category while 40(41.23%) of them belong to female category. Further most of the respondents i.e. 95(97.93%) belong to the age group of 21-25 while only 02(2.06%) of respondents belong to the age group of 26-30.

Visit to library by the respondents: Majority of the respondents i.e. 88(90.72%) are affirmative that they visit the library whereas 09(9.27%) respondents responded negatively.

Frequency of library visit by the respondents: The frequency of visit to the library shows that to what extent the users are dependent on the library. The results indicate that 25(25.77%) respondents visit the university library occasionally while 18(18.55%) of them visit twice a week, 17(17.52%) of them visit once a week followed by daily 16(16.49%), once a month 09(9.27%), and only 03(3.09%) of them visit library once a fortnight. The data clearly indicates that the majority of the respondents for their study and other academic activities they are mainly depending upon the departmental library and the internet.

Purpose of visit to the library by the respondents:

H_0: All the respondents are visiting library for the same purposes.

H_1: Respondents visit library for different purposes.

Table-1: Purpose of visit to the library by the respondents

Purpose of library visit	No. of respondents	Percentage
To study	45	46.39
To read News Papers	39	40.20
To refer books	43	44.32
To borrow/ Return/ Renew Books	29	29.89
To refer journals/ magazines	17	17.52
To search online databases	06	6.18
To refer reference sources	09	9.27
To Search CD ROM databases	02	2.06
To refer Theses/ Dissertations	01	1.03
To browse Internet	08	8.24
To refer Reports/ Proceeding	05	5.15
To access e-Journals	06	6.18

The table-1 reveals that the different purposes of visit to the library by the respondents. It can be observed that majority of the respondents visit to the library to study 45(46.39 %), to refer books 43(44.32%) followed by to read news papers 39(40.20%). To know whether the results are significant ANOVA test is conducted. The results are presented in the table-1(a).

Table-1(a): Results of ANOVA and Tukey's Post Hoc Test

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	26.731	11	2.430	21.497	.000
Within Groups	130.227	1152	.113		
Total	156.958	1163			

Homogenous Subsets (Tukey HSD)				
		Subset for alpha = 0.05		
Factors	**N**	**1**	**2**	**3**
To refer Theses/ Dissertations	97	.0103		
To Search CD ROM databases	97	.0206		
To refer Reports/ Proceeding	97	.0515		

To search online databases	97	.0619		
To access e-Journals	97	.0619		
To browse Internet	97	.0825		
To refer reference sources	97	.0928		
To read News Papers	97		.1649	
To refer journals/ magazines	97		.1753	
To borrow/ Return/ Renew Books	97		.2990	
To refer books	97			.4433
To study	97			.4639
Sig.		.062	.192	1.000

table-1(a) shows the results of one way analysis of variance (ANOVA) to know whether there is a statistically significant difference between groups of means. It is observed that the significance value is 0.000 (i.e., $p = 0.000$), which is less than 0.05, so that there is statistically high significant difference in the mean of purposes of visiting library. To examine which specific groups are differed significantly Tukey post hoc test is conducted, which gives the Multiple Comparisons and the 'p' values of each pair and homogeneous groups. It is observed from the results of the Tukey post hoc test that there are three homogeneous subsets. The analysis reveals that there is significant difference between the subsets and respondents are visiting the library for different purposes. Therefore H_0 "All the respondents are visiting library for the same purposes." is rejected.

Frequency of use of different information sources by the respondents: The majority of the respondents i.e. 57(58.76%) use books frequently from the library and 37(38.1%) and 31(31.95%) of the respondents use news papers/magazines frequently and most frequently respectively. The other sources of information such as journals, thesis/dissertations, reports, conference proceedings and government publications are used less frequently by the respondents and very less number of respondents are making use of these sources of information most frequently and frequently.

Use of internet: Internet is playing an important role in the way of creation, storage, access and dissemination of information now-a-days. Hence it is necessary to be aware of and make use of internet for students as internet hosts plenty of databases, subject gateways, institutional re

positories, search engines etc. It is significant to note that all the respondents i.e. 97(100%) are making use of internet.

Level of internet skills among the respondents: A question was raised to know the level of internet skills among the respondents. The majority i.e. 49(50.51%) of respondents rated their internet skills are very good while 45(46.39%) of them rated as fair followed by only 02(2.06%) of them rated as very poor.

Place of internet access: The majority of the respondents i.e. 43(44.32%) make use of internet at department while 35(36.08%) respondents make use of internet at their residence or hostels. Followed by 16(16.49%) of them make use of internet facility in the campus browsing centre. The remaining places such as computer lab, cyber cafe and library are less preferred by the respondents.

Frequency of use of internet: A whopping majority of the respondents i.e. 92(94.84%) are making use of internet daily. The advantage of mobile internet could be the main reason for this positive result and it indicates that the respondents are more tech savvy.

Purpose of use of internet:

H_0: The purpose of use of Internet is same among all the respondents.

H_1: The purpose of use of Internet differs among the respondents.

Table-2: Purpose of use of Internet by the respondents

Purpose of internet use	No. of respondents	Percentage
For Communication/Chatting	58	59.79
Using E-Mail	52	53.60
Surfing the INTERNET	53	54.63
Accessing E-Journals/books	29	29.89
Using Online Databases	20	20.61
Using ETD's (Theses & Dissertations)	07	7.21
To download audio-video	38	39.17
To seek job opportunities	34	35.05

Table-2 depicts that majority of the respondents i.e. 58(59.79%) are making use of internet for communication/ chatting purpose while 53(54.63%) respondents are making use of internet for surfing the internet followed by 52(53.60%) of them are making use of internet for E-mail purpose. Moderate number of respondents i.e. 38(39.17%) and 34(35.05%) are making use of internet for downloading audio-video and to seek job opportunities respectively. To know whether the results are statistically

significant one way ANOVA was conducted. The results of ANOVA analysis are presented in the table-2(a).

Table-2(a): Results of ANOVA and Tukey's Post Hoc Test

`	**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**
Between Groups	22.494	7	3.213	15.484	.000
Within Groups	159.381	768	.208		
Total	181.875	775			
Homogenous Subsets Tukey HSD					
Factors	**N**	**Subset for alpha = 0.05**			
		1	**2**	**3**	
Using Theses & Dissertations	97	.0722			
Using Online Databases	97	.2062			
Accessing E-Journals/books	97		.2990		
To seek job opportunities	97		.3505		
To download audio-video	97		.3918		
Using E-Mail	97				
Surfing the INTERNET	97				
For Communication/Chatting	97				
Sig.		.450	.088	.5361 .5464 .5979 .981	

The table-2(a) shows that the one way analysis of variance, it is found that there is highly significant difference among the respondents at 5% level of significance. The results of the Tukeys post hoc test exhibit that there are three subsets of variables so that it can be inferred that the respondents are using internet for different purposes. Hence, H_0 "The purpose of use of Internet is same among all the respondents." is rejected.

Use of E-resources: A question was raised whether the respondents are making use of electronic resources or not. From the study it is significant to note that a vast majority of the respondents i.e. 95(97.93%) responded affirmatively as they are making use of e-resources while only 02(2.06%) of them are responded negatively.

Cross tabulation between Awareness and Frequency of use of e-resources:

H_0: Awareness of e-resources and Frequency of use of e-resources are independent.

H_1: Awareness of e-resources and Frequency of use of e-resources are dependent.

Table 3(a) Cross tabulation between Awareness and Frequency of use of e-resources

Frequency of use of e-resources	Awareness of e-resources						Total
	No response	Very Good	Fair	Uncertain	Poor	Very Poor	
No response	2	0	0	0	0	0	2
Daily	0	**12**	**22**	2	0	1	**37**
Twice a week	0	3	16	2	0	0	21
Once a week	0	0	15	1	1	0	17
Once a fortnight	0	0	1	0	0	0	1
Once a month	0	1	3	0	0	0	4
Occasionally	0	4	10	0	1	0	15
Total	2	20	67	5	2	1	97

.

The above cross tabulation Table-3(a) of awareness of e-resources and frequency of use of e-resources shows that those who use e-resources daily are having very good and fair knowledge about the e-resources but very few respondents said that their knowledge about e-resources is poor. The overall analysis reflects that approximately 95% of respondents are aware of e-resources.

Table 3(b) Chi-Square Test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	113.087[a]	30	.000
Likelihood Ratio	40.336	30	.099
Linear-by-Linear Association	1.088	1	.297
N of Valid Cases	97		

From the table-3(b) Chi-square test, it is found that there is significant difference between the variables at 5% level of significance. Hence, Null hypothesis H_0 "Awareness of e-resources and Frequency of use of e-resources are independent." is rejected, as those respondents who are having good knowledge about e-resources are using them frequently. This shows that the level of awareness of e-resources and frequency of use of e-resources are highly correlated.

Digital devices used to access and make use of e-resources: Recent advances in the field of Technology are mainly responsible for the production of new digital gadgets available to access and make use of e-resources like downloading and reading e-resources. The majority of the respondents i.e. 57(58.76%) make use of Laptop and an equal number of respondents make use of Smartphone. Less number of respondents are making use of other digital devices such as Desktop 16(16.49%), E-book reader 08(8.24%), and Tablet 03(3.09%) to access and make use of e-resources.

Initiation to make use of e-resources: A question was raised to the respondents to know how they learnt to make use of e-resources. A majority of the respondents i.e. 55(56.70%) learnt to make use of e-resources by trial and error method while 47(48.45%) of them took guidance from their friends followed by 24(24.74%) of them took guidance from teachers. It is pathetic to note that the contribution of library staff 09(9.27%) and library training programme are very poor.

Purposes of use of e-resources:

H_0: All are using E-resources for the same purposes.

H_1: The purpose of use of e-resources differs from user to user.

Table-4: Purpose of use of E-resources by the respondents

Purpose of using e-resources	No. of respondents	Percentage
For Study/ Assignments	72	74.22
For project works	52	53.60
keeping update in subject trends	23	23.71
For Seminar/Workshop etc	33	34.02
Career Development	28	28.86
Information gathering	35	36.08
As an additional source	13	13.40

The table-4 depicts that the purpose of using e-resources by the respondents varies. Majority of the respondents using e-resources for study/assignments 72(74.22%) and for project works 52(53.60%). A moderate number of respondents use e-resources for gathering required information 35(36.08%) and for preparing seminars and workshops 33(34.02%) followed by less number of respondents make use of e-resources for the purpose of career development 28(28.86%), to keep update with the subject trends 23(23.71%). To know significance of the results ANOVA test is conducted. The results of the ANOVA is presented in the table-4(a).

Table-4(a): Results of ANOVA and Tukey's Post Hoc Test

	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	23.935	6	3.989	19.777	.000
Within Groups	135.546	672	.202		
Total	159.482	678			
Tukey HSD (Post Hoc Tests Homogeneous Subsets)					
	N	**Subset for alpha = 0.05**			
		1	**2**	**3**	**4**
As an additional source	97	.1340			
keeping update in subject trends	97		.2371		
Career Development	97		.2887		
For Seminar/Workshop	97		.3402		
Information gathering	97		.3608		
For project works	97			.5361	
For Study/ Assignments	97				.7423
Sig.		.201	.469	.095	1.000

The table-4(a) shows the analysis of variance of an equality of means, it is found to be significant at 5% level of significance. To observe specific homogeneous groups, it is tested by using the Tukey's post hoc test. From this test it is found that there are four homogeneous subsets. The analysis shows that respondents are using e-resources for different purposes; therefore, the null hypothesis H_0 "All are using E-resources for the same purposes." is rejected.

Frequency of use of different e-resources:

H_0: All the e-resources are preferred equally by the respondents.

H_1: Only some e-resources are preferred most by the respondents.

Table-5: Frequency of use of different e-resources by the respondents

E-resources	**Most Frequently**	**Frequently**	**Uncertain**	**Less Frequently**	**Don't use**	**No response**
E-books	28(28.86)	41(42.26)	15(15.46)	07(7.21)	04(4.12)	02(2.06)
E-journals	10(10.30)	28(28.86)	31(31.95)	18(18.55)	07(7.21)	03(3.09)

E-databases	13(13.40)	38(39.17)	31(31.95)	05(5.15)	07(7.21)	03(3.09)
E-articles/e-reprints	11(11.34)	39(40.20)	24(24.74)	15(15.46)	05(5.15)	03(3.09)
E-news papers/Magazines	26(26.80)	33(34.02)	26(26.80)	03(3.09)	04(4.12)	05(5.15)
E-Theses/dissertations	04(4.12)	16(16.49)	29(29.89)	27(27.83)	17(17.52)	04(4.12)

The table-5 shows that the frequency of use of different e-resources by the respondents. The moderate number of respondents makes use of all the sources frequently except E-theses and Dissertations. Some of the respondents make use of E-books, E-news papers and Magazines most frequently. To know whether the results are significant or non significant ANOVA test is conducted.

Table-5(a): Results of ANOVA and Tukey's Post Hoc Test

	Sum of Squares	**Df**	**Mean Square**	**F**	**Sig.**
Between Groups	94.521	5	18.904	14.147	.000
Within Groups	768.367	575	1.336		
Total	862.888	580			
Tukey HSD(Homogeneous Subsets)					
Factors	**N**	**Subset for alpha = 0.05**			
		1	**2**	**3**	
E-news papers/Magazine	97	2.0825			
E-books	97	2.0928			
E-databases	97		2.4375		
E-articles/e-reprints	97		2.5361		
E-journals	97		2.7423		
E-Theses/dissertations	97			3.2577	
Sig.		.071	.444	1.000	

The table-5(a) reveals that the analysis of variance of an equality of means, it is found to be significant at 5% level of significance. The results of the Tukey's post hoc test found that there are three homogeneous subsets. Therefore, the null hypothesis H_0: "All the e-resources are preferred equally by the respondents" is rejected.

Problems faced by the respondents while accessing e-resources: A question was raised to know the problems faced by the respondents while accessing e-resources. There are various problems associated with the access of e-resources by the respondents. Majority i.e. 41(42.26%) of the respondents opined that the poor network connectivity and lack of computer terminals 26(26.80%) are the major problems faced by the respondents while accessing e-resources.

Impact of E-resources on academic activities of respondents:

H_0: Respondents opinion about impact of E-resources is same for all statements.

H_1: Respondents opinion differs for some statements.

Table- 6 Impact of E-resources on academic activities of respondents

Statements	Strongly Agree	Agree	Unaware	Disagree	Strongly Disagree	No response
E-resources provide access to unlimited information	35(36.08)	36(37.11)	06(6.18)	03(3.09)	03(3.09)	14(14.43)
Electronic resources satisfy my information needs	27(27.83)	41(42.26)	10(10.30)	04(4.12)	01(1.03)	14(14.43)
Use of e-resources have reduced the cost of information	23(23.71)	37(38.14)	18(18.55)	01(1.03)	03(3.09)	15(15.46)
E-resources have improved academic competence	22(22.68)	39(40.20)	17(17.52)	04(4.12)	01(1.03)	14(14.43)
Dependency on internet is increased	29(29.89)	28(28.86)	18(18.55)	04(4.12)	03(3.09)	15(15.46)
Use of conventional documents has decreased	21(21.64)	33(34.02)	20(20.61)	07(7.21)	02(2.06)	14(14.43)
E-resources have improved my reading habit	19(19.58)	33(34.02)	17(17.52)	10(10.30)	02(2.06)	16(16.49)
E-resources have expanded my reading possibility	24(24.74)	29(29.89)	23(23.71)	06(6.18)	01(1.03)	14(14.43)

E-resources reduced the theft, tearing and hiding of documents	21(21.64)	26(26.80)	26(26.80)	08(8.24)	02(2.06)	14(14.43)
Dependency on libraries has been decreased	28(28.86)	27(27.83)	16(16.49)	10(10.30)	02(2.06)	14(14.43)

It is observed from the table-6 that E-resources have made an impact on the academic activities of the respondents as majority of the respondents are either strongly agree or agree to all the statements. To know whether the respondent's opinion is significant or non significant ANOVA test is conducted.

Table-6(a): Results of ANOVA test

	Sum of Squares	**Df**	**Mean Square**	**F**	**Sig.**
Between Groups	14.511	9	1.612	1.145	.328
Within Groups	1351.485	960	1.408		
Total	1365.996	969			

The table- 6(a) depicts that the results of the one way analysis of variance, which indicate that it is non-significant at 5% level of significance, therefore 'H_0' "Respondents opinion about impact of E-resources is same for all statements" is accepted as the mean opinion for all the statements is same from majority of the respondents.

Satisfaction with Library E-resources and Services:

H_0: The level of satisfaction about the availability of e-resources is the same for all kind of e-resources.

H_1: The level of satisfaction about the availability of e-resources differs from one source to another.

Table-7 Satisfaction with Library E-resources and Services

E-resources	**Highly Satisfied**	**Satisfied**	**Neutral**	**Dissatisfied**	**Highly Dissatisfied**	**No response**
E-books	28(28.86)	31(31.95)	27(27.83)	07(7.21)	02(2.06)	02(2.06)
E-Journals	06(6.18)	41(42.26)	38(39.17)	06(6.18)	04(4.12)	02(2.06)
E- Databases	12(12.37)	27(27.83)	40(41.23)	14(14.43)	02(2.06)	02(2.06)
E-Theses/Dissertations	02(2.06)	25(25.77)	44(45.36)	17(17.52)	06(6.18)	03(3.09)
E-Reports	15(15.46)	29(29.89)	31(31.95)	14(14.43)	04(4.12)	04(4.12)
E-Newspapers	19(19.58)	39(40.20)	16(16.49)	15(15.46)	02(2.06)	06(6.18)

E-Magazines	16(16.49)	37(38.14)	23(23.71)	12(12.37)	05(5.15)	04(4.12)
E-Question papers	14(14.43)	37(38.14)	17(17.52)	22(22.68)	03(3.09)	04(4.12)
CD-ROM's	05(5.15)	30(30.92)	30(30.92)	23(23.71)	05(5.15)	04(4.12)
Audio-Visuals	15(15.46)	26(26.80)	23(23.71)	19(19.58)	11(11.34)	03(3.09)

The table-7 shows that moderate number of respondents expressed their opinion to the range of satisfied and highly satisfied with the availability of different e-resources while some of them remained neutral as they could not be able to adjudge. Further, some of the respondents expressed their dissatisfaction with the availability of the different e-resources in the library. To know whether the results are statistically significant or non significant, ANOVA test is conducted.

Table-7(a): Results of ANOVA and Tukey's Post Hoc Test

	Sum of Squares	**Df**	**Mean Square**	**F**	**Sig.**
Between Groups	51.618	9	5.735	4.514	.000
Within Groups	1219.691	960	1.271		
Total	1271.308	969			
Tukey HSD(Homogeneous Subsets)					
Factor	**N**	**Subset for alpha = 0.05**			
		1	**2**		
E-books	97	2.1546			
E-newspapers	97	2.2165			
E-magzines	97	2.3918			
E-reports	97	2.4948			
E-question papers	97	2.4948			
E-journals	97	2.5361			
E-databases	97	2.5979			
Audio-Visuals	97		2.7526		
CD-ROM's	97		2.8041		
E-thesis/dissertations	97		2.9072		
Sig.		.160	.245		

The table-7(a) shows the analysis of variance of an equality of means, it is found to be significant at 5% level of significance. The result of Tukey's post hoc test shows that there are two homogeneous subsets. Therefore, H_0 "The level of satisfaction about the availability of e-resources is the same for all kind of e-resources" is rejected as the level of satisfaction about Audio Visuals, CD-ROMs and E-theses/Dissertations provided by library is different from other sources.

Need for training: A question was raised to know whether the respondents need training to make use of e-resources effectively. The majority of the respondents i.e. 62(63.94%) said that they need training/orientation while 35(36.08%) of them said they don't need training/orientation.

Mode of training preferred by the respondents:

H_0: Preferred mode of training is same for all the Respondents.

H_1: Respondents preferred mode of training is different from one to other.

Table- 8: Mode of training preferred by the respondents

Mode of training	No. of respondents	Percentage
Workshop with hands-on experience	40	41.23
Online tutorial	25	25.77
Self-help guide/handout	27	27.83
One-on-one demonstrations	08	8.24
Provision of list of resources & how to use	08	8.24
Library staff support when needed	18	18.55
Library Orientation/ training programmes	11	11.34

A question was raised to the respondents to know which mode of training they prefer to make use of e-resources at the optimum level. The table-8 shows that 40(41.23%) of them preferred workshop with hands on experience followed by 27(27.83%) of them preferred self-help guide/handout. Online tutorials preferred by 25(25.77%) respondents while 18(18.55%) of them preferred to get the library staff support when needed. Other mode of training programmes are less preferred by the respondents as reflected in the table.

Table-8(a): Results of ANOVA and Tukey's Post Hoc Test

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	8.719	6	1.453	9.703	.000
Within Groups	100.639	672	.150		
Total	109.358	678			
Tukey HSD(Homogeneous Subsets)					

Factor	N	Subset for alpha = 0.05	
		1	2
One-on-one demonstrations	97	.0825	
Provision of list of resources & how to use	97	.0825	
Library Orientation/ training programmes	97	.1134	
Library staff support when needed	97	.1856	
Online tutorial	97		.2577
Self-help guide/handouts	97		.2784
Workshop with hands-on experience	97		.4124
Sig.		.511	.081

The table-8(a) shows the results of analysis of variance of an equality of means, it is found to be significant at 5%. To examine for which variables the respondents opinion differs, Tukey's post hoc test was conducted. The results exhibit that there are two homogeneous subsets. Therefore, 'H_0' "Preferred mode of training is same for all the Respondents." is rejected.

FINDINGS OF THE STUDY

1. From the survey it has been found that very less number of respondents, i.e. 25 (25.77%) visit library occasionally followed by 18(18.55%) of them visit twice a week and 17(17.52%) of them visit once a week.
2. It can be observed from the study that the majority of the respondents i.e. 45(46.39%) visit the library to study followed by 43(44.32%) of them visit to refer books and 39(40.20%) of the respondents visit to read news papers followed by 29(29.89%) visit to borrow/return books. While the less number of respondents i.e. 17(17.52%) visit the library to refer journals/magazines.
3. It can be observed from the data that the majority of the respondents i.e. 57(58.76%) use books frequently from the library and 37(38.1%) and 31(31.95%) of the respondents use newspapers/magazines frequently and most frequently respectively.
4. The data reveals that all the respondents i.e. 97 (100%) use internet.
5. It can be observed that out of 97 respondents, 95(97.93%) of them are aware of electronic resources.
6. Majority of the respondents i.e. 72(74.22%) use e-resources for study/assignments followed by 52(53.60%) for project work. And very less number of respondents i.e. 13 (13.40%) of them use e-resources as an additional sources of information.

7. It can be observed from the data that a majority of the respondents i.e. 41(42.26%) use e-books frequently and 28(28.86%) of them use e-books most frequently. 31(31.95%) of the respondents are uncertain with the frequency of use of e-journals while 28(28.86%) of them use e-journals frequently.
8. Majority of the respondents i.e. 83 (85.56%) opined that e-resources have made a positive impact on their academic activities while very less number of respondents i.e.14 (14.43%) of them responded negatively.
9. It can be observed from the study that, average number of respondents i.e. 41(42.26%) are satisfied with the availability of different e-resources while some of them remained neutral with the availability of collection of e-resources in the library.
10. Majority of the respondents i.e. 62(63.94%) feel that they need training/orientation and about 35(36.08%) respondents are of the opinion that no training/orientation is needed to access and use e-resources.

SUGGESTIONS: Based on the findings and the opinion given by the respondents the following suggestions are made.

1. The collection development policy of the university library should focus on the procurement of e-resources than print resources as the respondents feel e-resources are more convenient and helpful to use than print resources.
2. It is evident from the study that, average number of respondents are satisfied with the availability of e-resources on the university library. Hence, there is a need to improve the collection of e-resources in the university library.
3. It is evident from the study that the respondents are facing the problems in accessing and making use of e-resources. Among many problems, the major problems are lack of computer terminals and poor network connectivity in the university library. Hence, it is suggested to the authorities of the university library to improve the necessary infrastructure for the effective use of e-resources by the users.
4. The library staff should identify the non-users of electronic resources and proper steps should be taken to convert them into potential users of the e-resources
5. The majority of the respondents opined that they need training/orientation programs on how to make use of e-resources; hence university library authorities need to conduct training programs on regularly basis.

CONCLUSION: Libraries and information centres play a prominent role in satisfying the varied information needs of the user community. In this changing electronic environment libraries need to give more emphasis on the collection development policies. The advancements in the ICT devices and

their application in the libraries have changed the entire scenario of informatics. The proliferation of e-resources has had a significant impact on the way the academic community uses and manage the information. The study shows that e-resources have radical impact on the academic activities of the PG students of Kousali Institute of Management studies, Karnatak University Dharwad.

The study reveals that though the majority of the respondents are aware of e-resources, on the contrary they are not making use of them to the greater extent. The major purposes of use of e-resources are for study/assignments and for project work only. There is a need to create awareness among the respondents to make use of e-resources for other purposes also such as writing papers for seminars, workshops etc. Further, only an average number of respondents are making use of e-resources frequently but majority of them are making use of e-resources less frequently. The university library is investing heavy amount from the library budget to acquire e-resources, but on the contrary usage is very poor. Though the respondent's opinion towards e-resources and the impact of e-resources on the academic activities found to be positive, there is much need to be done for the effective and efficient utilization of e-resources in the university library. The only remedy to increase the use of e-resources by the users is possible when the library staff will conduct regular training programmes to create awareness and improve the access skills and techniques.

REFERENCES:

1. Chinnasamy, K. et al. (2008). E-Resource usage by Management Institute Students: A Study. *Pearl,* 2(1), pp. 35-41.
2. Dillip K. Swain K.C. Panda, (2009),"Use of electronic resources in business school libraries of an Indian state", *The Electronic Library*, Vol. 27, No. 1, pp. 74 – 85.
3. Mostofa, Mamun S.K. (2011) Internet access and used among business students of a private university of Bangladesh: a survey. *Annals of Library and Information Studies*, 58, PP. 79-86.
4. Bellary, R.N. (2012). Dependency on digital resources of management students and faculty members in Chetana's R. K. Institute of Management & Research, Mumbai. *International Journal of Information Dissemination and Technology*, 2(4), pp.249-253.
5. Parvathamma, N. and Pattar, Danappa (2013). Digital Literacy among Students Community in Management Institutes in Davanagere District, Karnataka State, India. *Annals of Library and Information Studies*, 60, pp. 159-166.
6. Elavazhagan, K. and Udayakumar, M.S. (2013). Use of E-Resources in the BITS, Pilani – Hyderabad Campus: A Study. *International Research: Journal of Library & Information Science.* 3(3), pp. 470-479.

7. Jotwani, Daulat (2014). Trends in Acquisition and Usage of E-resources at Indian Institute of Technology Libraries. *Annals of Library and Information Studies*, Vol. 61, 33-40.
8. Prakashe, A.Veena and Tayade, Sapana (2015) Study of E-resources of Indian Institute of Management (IIM) Libraries in India. *DESIDOC Journal of Library & Information Technology*, 35(3), pp. 217-222.
9. Gupta, S. K. & Sharma, S. (2015). Use of Digital Information Resources and Services by the Students of IIT Mumbai Central Library: A Study. *International Journal of Information Dissemination and Technology*, 5(1), pp.1-11.
10. Sevukan, R. and Gomathy, V. (2015). Digital Literacy of Postgraduate Students in Management Institutions of Puducherry: A Survey. *PEARL - A Journal of Library and Information Science*, 9(1), pp. 66-74.
11. Patel, M. B. & Modi, A. M. (2016). An in depth study of use of e-resources by the students of Mechanical Engineering Department of SAL Engineering and Technical Institute, Ahmedabad. *International Journal of Information Dissemination and Technology*, 6(4), pp. 237-241.
12. Satpathy, S. K. and Rout, B. (2010). Use of E-Resources by the Faculty Members with Special Reference to CVRCE, Bhubaneswar. *DESIDOC Journal of Library & Information Technology*, 30(4), pp. 11-16
13. Natarajan, M. (2011). Exploring the E-resources for Educational Use. *International Journal of Information Dissemination and Technology*, 1(4), pp. 193-196
14. Deng, Hepu (2010). Emerging patterns and trends in utilizing electronic resources in a higher education environment. *New Library World*, 111(3/4), pp. 87 – 103
15. Rashid Ali (2015) Use of E-Resources in Selected Engineering and Management Institutes of Western Uttar Pradesh: A Survey. *International Journal of Library and Information Studies* 5(4), 147-155
16. Maharana, Bulu ; Sethi, Bipin Bihari and Behera, Subedita (2010). Use of internet and e-resources by the students of business management: A survey of P. G. students of business administration, Sambalpur University, India. *International Journal of Library and Information Science.* 2(3), 45-53.
17. Singh, K.K. (2012). Measuring awareness and utilization of essential electronic information resources in management: A survey of management colleges in NCR, India. *International Journal of Information Dissemination and Technology*, 2(4), pp. 254-261.
18. B.T. Sampath Kumar G.T. Kumar, (2010),"Perception and usage of e-resources and the internet by Indian academics", *The Electronic Library*, Vol. 28(1). pp. 137 – 156