

Full Length Research Paper

Electronic information sources: The effective use by the academic community

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Electronic information sources are becoming more and more popular since they provide multimedia information, full-text searching, reference linking and flexibility in searching and browsing. The purpose of this study is to determine how nursing students and faculty uses the electronic information sources for work-related purposes. A total of 210 survey returns indicate that students and faculty use the electronic information in support of their study and teaching. While majority of students and faculty generally feel that the electronic information sources provide faster and reliable information, still they prefer to use print as well as electronic information sources.

Key words: E-resources, user study, information sources, academics, nursing college libraries.

INTRODUCTION

The emergence of the internet, particularly the World Wide Web, as a new medium of information storage and delivery represents a revolution, which would have a lasting impact on the publishing and information delivery system in the 21st century. Information technology has thrown a new challenge to the libraries. The technology has shown a great impact on the services of the libraries. The access to information through Internet has changed the role of libraries. Libraries now have both printed document as well as electronic documents which can be stored, accessed, and delivered as and when required; therefore the services of the libraries are not confined within the four walls but are integrated into local, regional, national, and international networks. Academic libraries too are now becoming hybrid libraries.

Many significant authors (Gupta, 2004; Rajeswari, 2005; Kumbar et al., 2005; Leelavathi and Doraswamy,

2007; Kumar and Sampath, 2008; Sujatha and Mudhol, 2008; Sivaprasad, 2009) examined the literature in the fields of library and information science to gather some perspective on students' use and faculty expectations of electronic information sources. This situation has given rise to study how users utilize the electronic information sources as a whole and to know the opinion about the electronic information sources, their advantages and also the problem faced in the use of these sources by the students and faculty of Nursing Studies in Bangalore City.

METHODOLOGY

In order to collect comprehensive and relevant data for the study, a well- designed questionnaire is used for collecting the primary data. In order to know the usage of EIS by faculty and students of nursing college libraries, the questionnaire was designed keeping in view

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Table 1. Demographic characteristics of respondents.

Demography of respondents(n=210)		Counts	Percentage
Gender	Male	56	26.66
	Female	154	73.33
Age	<25	143	68.09
	26-3	37	17.61
	31-35	21	10
	36-40	04	1.9
	41-45	04	1.9
	<50	01	0.47
Colleges	MSRINER	50	23.80
	DCN	50	23.80
	KCN	40	19.04
	KIN	50	9.52
	ACCN	20	23.80
Designation	Faculty	105	50
	Students	105	50

Note: Number given in parenthesis represents the percentage. MSRINER-M.S. Ramaiah Institute of Nursing Education and Research; DCN- Diana College of Nursing; KCN-Karnataka College of Nursing; KIN-Kempegowda Institute of Nursing; ACCN-Ambigara Chowdaiah College of Nursing.

the objectives of the study. The questionnaire is divided into 2 sections: Section-1 focuses on general information of respondents, section-2 deals with the use of electronic information sources. The questions were simple, including number of options with assurance that the data collected will be kept in confidential and used only for study. Thus, all possible efforts were made to collect free and frank opinion from the students as well as faculty. The questionnaires, which were prepared, were distributed to selected students and faculty of nursing colleges. Total 250 questionnaires were distributed and out of which 210 questionnaires were received. The duly filled questionnaires were further used for data analysis and the analyzed data are presented in form of table and graphs.

Analysis and interpretation of data

Analysis of data was gathered through the questionnaire, which was designed to collect data from faculty and students of nursing colleges in Bangalore City. The data analysis is based on questionnaire responses of 210 faculty and students of nursing colleges. Questionnaire consisted of two sections: Section-1 focuses on general information of respondents, section-2 covers the use of electronic information sources, and the information thus collected is analyzed and presented in the form of tables and graphs.

Demographic characteristics of respondents

The data summarized in the Table 1 demonstrate the demographic characteristics of respondents. It shows that out of 210 respondents, 73.33% are male respondents

Table 2. Awareness of EIS.

Respondents	Awareness of EIS	
	Yes	No
Faculty (n=105)	105(100)	-
Students(n=105)	103(98.09)	02(1.90)
Total(n=210)	208(99.04)	02(0.95)

Note: Number given in parenthesis represents the percentage.

and 26.66% are females selected from five nursing college libraries. The respondents are selected randomly from MSRINER, DCN, KIN, KCN, and ACCN. 68.09% of the respondents are below 25 years, 10% are 26-30 years and 17.61% below 31-35 years. Equal numbers of (50% each) of the respondents are faculty members and students.

Awareness of EIS among respondents

Table 2 illustrates the awareness of EIS among students and faculty members. It is clear from the table that 99.04% of respondents are aware of EIS. Only 0.95% of respondents are not aware of EIS.

Place of use of EIS

Data regarding the place of use of EIS are presented in

Table 3. Place of use of EIS.

Respondents	Place of accessing of EIS			
	At home	At college/work place	Cybercafé/commercial center	
Faculty (n=105)	a	35(33.33)	71(67.61)	13(12.38)
	b	23(21.90)	84(80)	23(21.90)
	c	24(22.85)	96(91.42)	33(31.42)
	d	33(31.42)	86(81.90)	34(32.38)
Students(n=103)	a	34(33.00)	47(45.63)	15(14.56)
	b	17(16.50)	73(70.87)	20(19.41)
	c	21(20.38)	61(59.22)	29(28.15)
	d	22(21.35)	64(62.13)	51(49.51)
Total (n=208)	a	69(33.17)	118(56.73)	28(13.46)
	b	40(19.23)	157(75.48)	43(20.80)
	c	45(21.63)	157(75.48)	62(29.80)
	d	55(26.44)	150(72.11)	85(40.86)

Note: Number given in parenthesis represents the percentage. Total number is more than 100 percentage because of multiple choice questions. a-CD/DVD Database; c- Network Based services; b-Electronic Journals; d- Internet resources.

Table 3 and it clearly indicates that equal number of respondents (75.48% each) uses E-journals as well as Network Based Services in college/ workplace. 72.11% of respondents use the Internet resources in college/ workplace.

Frequency of use of EIS

The survey also queried the respondents about the use of electronic information sources and frequency of use. Table 4 lists the four specific electronic sources like CD/DVD Database, Electronic Journals, Network Based services and Internet resources.

Table 4 shows that 39.42% of respondents used the Internet sources once in a day. 41.82% of respondents used the CD/DVD database once in a week. Equal number of respondents (27.88% each) used Network Based Services as well as Internet sources once in a week.

Comparison of EIS with print sources

Data regarding comparison of Electronic Information Sources with Print Sources are presented in Table 5 and it clearly indicates that 53.36% of the respondents opined that information locating and identifying the EIS are easier and 37.5% of respondents opined that accessing EIS is slightly easier. 62.85% of faculty and 43.68% of student respondents opined that information locating and identifying are easier.

Methods of learning the use of EIS

The respondents were asked to indicate the modes by

which they learnt to use the EIS. Table 6 and Figure 1 show the frequencies of responses and respective percentages for the different EIS learning methods.

According to their responses, it was found that 61.05% of respondents learnt to use EIS with the help of friends and 49.51% of respondents learnt it by the guidance of library staff. About 47.11% of respondents learnt to use EIS through trial and error method. 35.09% of respondents learnt by attending courses/training offered by the college. 31.73% of respondents learnt by the guidance of teacher. 56.19% of faculty members stated that they learnt it with the guidance of library staff but 64.07% of student respondents learnt it with the advice of friends.

Benefits derived from use of EIS

Table 7 and Figure 2 summarized the percentage of respondents who perceives electronic information sources to be beneficial in their teaching, research, study and other academic activities. From the analysis it is evident that majority (68.26%) of respondents agreed that with the use of EIS they have better access to current up-to-date information. Again 62.5% of respondents stated that they have faster access to their relevant information by the use of EIS. 56.25% indicated that by using of EIS they have access to wider range of information and easier access to information. Improved academic performance as a result of access to quality information was reported by 52.40% of respondents. 74.28% of faculty respondents agreed to have the benefits of better access to current up-to-date information and also faster access to information, whereas 62.13% of student respondents reported to have access to current up-to-date information

Table 4. Frequency of use of EIS.

Respondents	Frequency of use of EIS					
	Rarely	Once in a week	Once in a month	Once in a day	Not responded	
Faculty (n=105)	a	24(22.85)	45(42.85)	05(4.76)	84(80)	18(17.14)
	b	19(18.09)	32(30.47)	26(24.76)	12(11.42)	16(15.23)
	c	04(3.80)	37(35.23)	11(10.47)	25(23.80)	11(10.47)
	d	01(0.95)	33(31.42)	08(7.61)	52(49.52)	28(26.66)
Students (n=103)	a	22(21.35)	42(40.77)	10(9.70)	11(10.67)	18(17.47)
	b	37(35.92)	11(10.67)	21(20.38)	01(0.97)	33(32.04)
	c	14(13.59)	21(20.38)	18(17.47)	12(11.65)	38(36.89)
	d	18(17.47)	25(24.27)	20(19.41)	30(29.12)	10(9.70)
Total (n=208)	a	46(22.11)	87(41.82)	15(7.21)	24(11.53)	36(17.30)
	b	58(26.92)	42(20.19)	48(22.59)	13(6.25)	44(21.15)
	c	18(8.65)	59(28.36)	30(13.94)	37(17.78)	56(26.92)
	d	19(9.13)	58(27.88)	28(13.46)	82(39.42)	28(13.46)

Note: Number given in parenthesis represents the percentage. a-CD/DVD Database; b-Electronic Journals; c-Network Based services; d-Internet resources.

Table 5. Comparison of EIS with print sources.

Respondents	Easier	Slightly easier	Slightly difficult	Most difficult	Not Responded	
Faculty (n=105)	a	66(62.85)	27(25.71)	02(1.90)	0	10(9.52)
	b	56(53.33)	39(37.14)	07(6.66)	0	03(2.85)
	c	54(51.42)	35(33.33)	05(4.76)	02(1.90)	07(6.66)
Students (n=103)	a	45(43.68)	35(33.98)	11(10.67)	01(0.97)	11(10.67)
	b	43(41.74)	39(37.86)	09(8.73)	01(0.97)	11(10.67)
	c	43(41.74)	40(38.83)	05(4.85)	02(1.94)	13(12.62)
Total (n=208)	a	111(53.36)	62(29.80)	13(6.25)	01(0.48)	21(10.09)
	b	99(47.59)	78(37.5)	16(7.69)	01(0.48)	14(6.73)
	c	97(46.63)	75(36.05)	10(1.92)	04(1.92)	20(9.61)

Note: Number given in parenthesis represents the percentage. a-Locating and identifying information is b- Accessing information is c- Using information is.

Table 6. Methods of learning to use of EIS.

Methods	Yes		
	Faculty (n=105)	Students (n=103)	Total (n=208)
Guidance from library staff	59(56.19)	44(42.71)	103(49.51)
Guidance from teacher	29(27.61)	37(35.92)	66(31.73)
By the advice of friends	61(58.09)	66(64.07)	127(61.05)
By trial and error	55(52.38)	43(41.74)	98(47.11)
By attending courses / Training offered by the college	33(31.42)	40(38.83)	73(35.09)

Note: Number given in parenthesis represents the percentage. Total number is more than 100 percentage because of multiple choice questions.

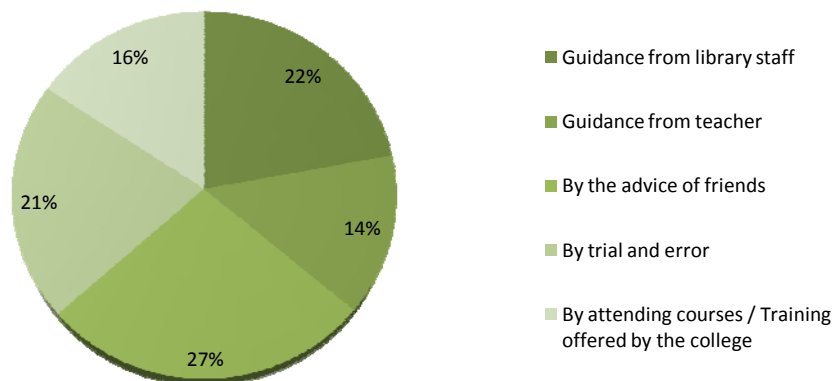


Figure 1. Methods of learning to use of EIS.

Table 7. Benefits derived from the use of EIS.

Benefits	Yes		
	Faculty (n=105)	Students (n=103)	Total (n=208)
Access to wider range of information	68(64.76)	49(47.57)	117(56.25)
Faster access to information	78(74.28)	52(50.48)	130(62.5)
Access to current up-to-date information	78(74.28)	64(62.13)	142(68.26)
Easier access to information	61(58.09)	56(54.36)	117(56.25)
Improved academic performance as a result of access to quality information	63(60)	46(44.66)	109(52.40)

Note: Number given in parenthesis represents the percentage. Total number is more than 100 percentage because of multiple choice questions.

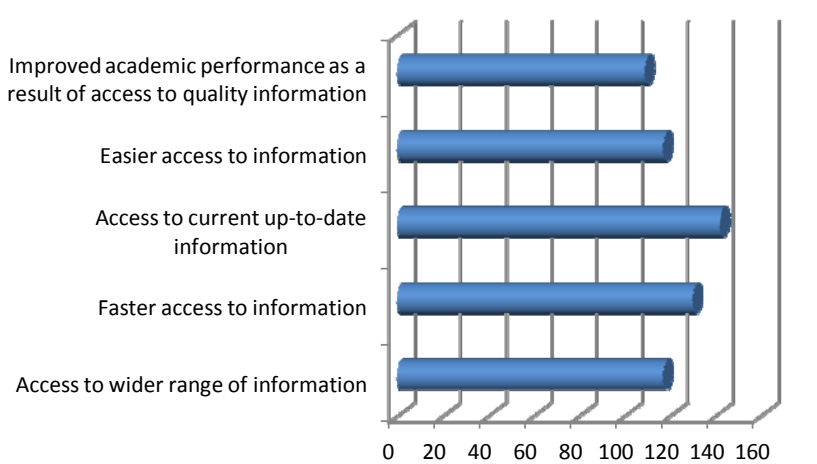


Figure 2. Benefits derived from use of EIS.

due to the use of EIS.

Suggested ways to improve the utilization of E-resources

Respondents suggested several ways to improve the

utilization of E-resources (Table 8). 54.32% of respondents indicated that librarians should be trained to know how to work with students. Respondents also suggested that College Libraries should create awareness campaign of resources (46.15%) and lecturers should insist on students using e-resources for coursework (44.71%). 42.30% of respondents stated that more computers

Table 8. Suggested ways to improve the utilization of E-resources.

Suggested ways	Yes		Total (n=208)
	Faculty (n=105)	Students (n=103)	
Lecturers should insist on students using e-resources for coursework	53(50.47)	40(38.83)	93(44.71)
Librarians should be trained to know how to work with students	65(61.90)	48(46.60)	113(54.32)
More networked computers should be purchased by the college	53(50.47)	35(33.98)	88(42.30)
College Libraries should improve on awareness campaign of resources	56(53.33)	40(38.83)	96(46.15)
Phone short text message services should be integrated into library	20(19.04)	15(14.56)	35(16.82)
e-resources services provision			
The college should introduce e-resources fee to be paid by students	20(19.04)	20(19.41)	40(19.23)

Note: Number given in parenthesis represents the percentage. Total number is more than 100 percentage because of multiple choice questions.

should be purchased by the university/ college. Majority of faculty (61.90%) and of students (46.60%) respondents suggested that librarians should be trained to know how to work with students,

Conclusion

From the above discussion it is very clear that the use of electronic information sources is expected to increase in future. The students and faculty members who participated in this survey are aware of electronic information sources and majority of them used these sources in support of their study and teaching and they are adept at using these sources. Even though majority of academic community use electronic information sources, most of the students and faculty members prefer print sources as well as electronic information sources. This shows that the traditional resources will continue to be necessary components of the academic community. Many of the students and faculty members learnt about the electronic information sources either by trial and error methods or by the advice of friends. So it is necessary that the academic library professionals should be proactive in working with academic community to develop training program aimed at enabling them to use electronic information sources more effectively.

RECOMMENDATIONS

Findings of the present study present some significant recommendations for academic and research libraries planning and also in initiating new or reconfigured

services, systems and organizational structures in a networked information environment. Some of the recommendations are as follows.

1. It is also observed from the study that good numbers of respondents are aware of electronic information sources. Also it clearly shows that the users rely more on electronic information sources. In this regard library must take initiative to create awareness about the electronic information sources and library should acquire more number of electronic information sources, which are very useful to the users.
2. Regarding the comparison between the electronic information and print sources the majority of users opined that electronic information sources are easier to locate, identify and accessing information as compared printed sources. So more priority should be given to acquire EIS.
3. Most of the respondents learnt about the electronic information sources from their friends or by the guidance of library staff. So library should conduct some orientation programmes to the users to create awareness about the electronic information sources.
4. Level of satisfaction about the electronic information sources among the respondents significantly varies from one discipline to another. Hence college library professionals should be protective in work with students and faculty to develop need based training aimed at enabling them to find electronic information sources effectively. By taking the initiative in these issues, librarian can offer required assistance to students and faculty. By offering assistance and guidance to users at various stages, he can improve the relationship with the users and it helps to maintain a healthy environment in the library.

5. Although respondents in this survey have become increasingly aware of using electronic information sources, they are not yet quite familiar in using them. They are also facing numerous problems in accessing electronic information sources. The problem related to accessing suitable personnel computer with accessing suitable of software is lack of information about how to use electronic information sources. Thus the management authority should provide good infrastructure facility to the library and library users to access the electronic information sources.

6. Librarians may follow the findings of the present study and may implement these recommendations for the better use of library sources as well as electronic information sources.

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