ICT Based Resources and Services by Research Scholars in Arts and Science College Libraries in Coimbatore Dt

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Abstract

This paper highlights the Comparison of ICT based Resources and Services with print sources in Research Scholar of Arts and Science College Coimbatore Dt .ICT based resources and services are resources in which information is stored electronically and which are accessible through electronic systems and networks. ICT based resources and services is a very broad term that includes a variety of different publishing models, including OPACs, CD-ROMs, online database, e-journals, e-books, internet resource, print – on – demand (POD), e-mail publishing, wireless publishing, electronic link and web publishing etc.

Keywords

Information and communication Technology, e-resources, Arts and Science colleges.

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Electronic access

The journal is available at www.jalis.in

Journal of Advances in Library and Information Science
ISSN: 2277-2219 Vol. 5. No.3. 2016. pp.229-234

I. INTRODUCTION

In the recent years, libraries have witnessed a great metamorphosis both in the collection development and the service structure. A significant transformation has been noticed in collection development policies and practices due to availability of ICT based resources and services in plenty and had easy access to these resources. Print medium is increasingly giving way to the resources that are produced in electronic/ digital formats. The availability of CD-ROM, DVD-ROM, and other online resources of bibliographical and full – text databases is quite common in the majority of the university and college libraries. The libraries have an option to subscribe to these full – text databases as part of their digital collections. Most of the important publishers now offer web – enabled interfaces and full text of their journals. Some of the important full-text digital collections available on CD-ROM or online include Automatic Digital On-line Information System (ADONIS), IEEE/IEE Electronic Library (IEL), Computer Application Binary Interface Databases (ABI/ INFORM) and Library and General Periodicals, E-space worlds, US Patents, etc.ICT based resources and services are resources in which information is stored electronically and which are accessible through electronic systems and networks. In this context the term means “any electronic product that delivers collection of data be it in text, numerical, graphical, or time based, as a commercially available resource.

II. OBJECTIVES OF THE STUDY

The Objectives of the study are:

1. To identify the problems faced by the users of Arts and Science Colleges affiliated to Bharathiar University while accessing and using electronic resources.
2. To find out the extent of dependency on ICT based resources and services for teaching, learning and research among the users of Arts and Science Colleges affiliated to Bharathiar University.
3. To identify the method of acquiring IT skills by the users of Arts and Science Colleges
4. To find out the most preferred place for accessing ICT based resources and the users of Arts and Science Colleges affiliated to Bharathiar University.
5. To find out the level of expertise with computers among the users of Arts and Science Colleges.

6. To identify the experience in using ICT based resources by the users of Arts and Science Colleges.

III. SAMPLING

There are 72 Arts and Science colleges affiliated to Bharathiar University. Out of them, researcher has selected only 10 colleges, based on their year of establishment.

IV. METHODOLOGY

The survey method was used to collect primary data on this research investigation. The pertinent data has been collected from the PG students, Research scholars, and Faculty members, by administering the questionnaire method. The respondents were encouraged to give free and frank information. The respondents extended their full cooperation in the data collection.

V. DATA ANALYSIS

The collected data were classified and tabulated according to the objectives and hypothesis stated. For proper arrangement of the data, a master table was prepared by the author. The general data interpretation was made with the help of percentages and averages.

VI. RESULTS AND DISCUSSION

Table 1 Academic status wise Distribution of Respondent's Frequency of visit to the Library

Academic status	Daily	Twice in a week	Once in a week	Once in a month	Occasionally	Total
PG Students	407(53.13)	212(27.68)	68(8.88)	27(3.52)	52(6.79)	766
Research scholars	101(38.11)	72(27.17)	31(11.70)	25(9.43)	36(13.58)	265
Faculty Members	210(39.62)	121(22.83)	94(17.74)	59(11.13)	46(8.68)	530
Total	718(46.00)	405(25.94)	193(12.36)	111(7.11)	134(8.58)	1561

(Figures in Parentheses denote Percentage)

Data presented in table 1 indicates the academic status-wise distribution of respondent's frequency of visit to the library. It could be noted that out of the total 1561 respondents, 718(46.00%) respondents visited the library daily; 405 (25.94%) respondents visited the library twice in a week; 193(12.36%) respondents visited the library once in a week; 111(7.11%) respondents visited the library once in a month and 134(8.58%) respondents visited the library occasionally. Among 766 PG students, 53.13 percent respondents visited the library daily and 3.52 percent respondents visited the library monthly. With regard to 265 Research scholars, 38.11 percent of respondents visited the library daily and 9.43 percent of respondents visited the library monthly.

Table 2 Academic status wise Distribution of Respondent's types of CD-ROM resources used

Academic status	Reference Books CD	Indexing and Abstracting CD	Full text Journal CD	Electronic Book CD	Statistics like census report	Music and Film CD	Any Other	Total
PG Students	130 (16.97)	191 (24.93)	181 (23.63)	62 (8.09)	57 (7.44)	77 (10.05)	68 (8.88)	766
Research scholars	45 (16.98)	45 (16.98)	48 (18.11)	22 (8.30)	45 (16.98)	15 (5.66)	45 (16.98)	265
Faculty Members	121 (22.83)	97 (18.30)	107 (20.19)	110 (20.75)	57 (10.75)	21 (3.96)	17 (3.21)	530
Total	296 (18.96)	333 (21.33)	336 (21.52)	194 (12.43)	159 (10.19)	113 (7.24)	130 (8.33)	1561

Table 2 shows the academic status wise distribution of respondents' types of CD ROM resources used. In order to analyze the types of CD ROM resources used, the CD Rom resources were classified in the seven categories as shown in the table. Full text journal (21.52%) were the most used items followed by indexing and abstracting (21.33%), CD version of Statistics like census report (10.19%), CD of Reference Books (18.96%), Electronic Books in CD form (12.43%),Any other CD (8.33%), Music and Film CD (7.24%).Among 766 PG students, 24.93 percent of the respondents have used Indexing and Abstracting CDs and 7.44 percent of the respondents have used CD version of statistics like census report. With regard to 265 Research Scholars, 16.98 percent of the respondents have used Indexing and Abstracting CD; and 5.66 percent of the respondents have used Music and Films. Out of 530 Faculty members, 22.83 percent of the respondents have used CDs of reference books and 3.96 percent of the respondents have used Music and Film CDs.

Table 3 Academic Status wise Distribution of Respondent's Views on Search Engine Used

Academic status	Google	Excite	Info seek	Lycos	Alta Vista	MSN	Yahoo	Ask.com	Total
PG Students	340 (44.39)	30 (3.92)	12 (1.57)	21 (2.74)	36 (4.70)	39 (5.09)	208 (27.05)	80 (10.44)	766
Research scholars	90 (33.96)	15 (5.66)	11 (4.15)	19 (7.17)	26 (9.81)	29 (1.94)	52 (19.62)	23 (8.68)	265
Faculty Members	169 (31.89)	35 (6.60)	19 (3.58)	36 (6.79)	33 (6.23)	70 (13.21)	111 (20.94)	57 (10.75)	530
Total	599 (38.37)	80 (5.12)	42 (2.69)	76 (4.87)	95 (6.09)	138 (8.84)	371 (23.77)	160 (10.25)	1561

(Figures in Parentheses denote Percentage)

Table 3 shows the academic status-wise distribution of respondents' Views on search engine used. It could be noted that out of the total 1561 respondents, 599(38.37%) respondents have used Google Search Engine; 371(23.77%) respondents have used Yahoo Search Engine; 160(10.25%) respondents have used Ask.Com; 76(4.87%) respondents have used Lycos; 80(5.12%) respondents have used Excite; 42(2.69%) respondents have used Info seek; 138(8.84%) respondents have used MSN and 95(6.09%) respondents have used Alta Vista. With regard to 766 PG Students, 44.39 percent of them have used Google and 1.57 percent of them have used Info seek search engine. Among 265 Research Scholars, 33.96 percent of them have used Google search engines and 1.94 percent of them have used MSN search engine. Out of 530 Faculty Members, 31.89 percent of them have used Google search engine and 3.58 percent of them have used Info seek search engine

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Table 4 Academic status wise Distribution of Respondent's frequently used ICT based resources and services

Academic Status	E –journals	E – books	Online database	Online thesis	Online news	Online magazine	Website information	Library Catalogue	Others	Total
PG students	220 28.72)	35 4.56)	91 (11.88)	12 (1.57)	109 (14.23)	74 9.66)	105 (13.71)	18 (2.35)	102 (13.32)	766
Research scholars	91 34.34)	15 (5.66)	50 (18.87)	25 (9.43)	11 (4.15)	8 (3.02)	31 (11.70)	13 (4.91)	21 (7.92)	265
Faculty member	149 (28.11)	29 (5.47)	105 (19.81)	18 (3.40)	41 (7.74)	29 (5.47)	67 (12.64)	20 (3.77)	72 (13.58)	530
Total	460 (29.47)	79 (5.06)	246 (15.76)	55 (3.52)	161 (10.31)	111 (7.11)	203 (13.00)	51 (3.27)	95 (12.49)	1561

The details of the various types of ICT based resources used are presented in table 4. It is observed from the table that, 460(29.47%) respondents used e-journals; 79(5.06%) respondents used e-books; 246(15.76%) respondents used online database; 55(3.52%) respondents used on line thesis; 161(10.31%) respondents used online newspapers; 111(7.11%) respondents used online Magazines; 203(13.00%) respondents used Website information, 51(3.27%) respondents used library catalogue and the remaining 51(3.27%) respondents used others. Hence it can be concluded that 460(29.47%) respondents used e-journals. From the total 766 PG students, 28.72 percent of them used e-journals and 1.57 percent of them used on line thesis. Among 265 Research scholars, 34.34 percent of them used e-journals and 3.02 percent of them used on line magazine. Out of 530 faculty members, 28.11 percent of them used e-journals and 3.40 percent of them used on line thesis. Hence it can be concluded that most of the respondents used e-journals.

Table 5 Academic status wise distribution of respondents' Methods used for Reading Full Text ICT based resources

Academic status	Computer Screen	Print out	Down Loading	Any other	Total
PG students	384(50.13)	164(21.41)	128(16.71)	90(11.75)	766
Research scholars	108(40.75)	70(26.42)	66(24.91)	21(7.92)	265
Faculty members	281(53.02)	135(26.47)	73(13.77)	41(7.74)	530
Total	773(49.52)	369(23.64)	267(17.10)	152(9.74)	1561

Table 5 displays the academic status wise distribution of respondents methods used for reading full text e-resources. Out of 1561 sample respondents, 773(49.52%) respondents have used computer screen; 369(23.64%) respondents have used print out; 267(17.10%) respondents have used down loading and 152(9.74%) respondents have used other methods for reading full text ICT based resources and services. With regard to 766 PG students, 50.13 percent of them used computer screen and 11.75 percent of them used other methods for reading full text ICT based resources. Out of 265 Research scholars, 40.75 percent of them used computer screen and 7.92 percent of them used other methods. In case of 530 Faculty members, 53.02 percent of them used computer screen and 7.74 percent of them used other methods for reading full text ICT based resource and services .It could be seen clearly from the above discussion that, 53.02 percent of the faculty members have used computer screen for reading full text ICT based resources and services.

Table 6. Gender-wise Distribution of Respondents' Methods used for Reading Full text ICT based resources

Gender	Computer Screen	Print out	Down Loading	Any other	Total
Male	627(57.21)	171(15.60)	181(16.51)	117(10.68)	1096
Female	146(31.40)	198(42.58)	86(18.49)	35(7.53)	465
Total	773(49.52)	369(23.64)	267(17.10)	152(9.74)	1561

A study of data in table 6 indicates the gender-wise distribution of the respondents methods used for reading full text ICT based resources and services. It could be noted that out of the total, 1096 male and 465 female respondents, 57.21 percent of the male and 31.40 percent of the female respondents used Computer screen for reading full text ICT based resources; 15.60 percent of the male and 42.58 percent of the female respondents used printout; 16.51 percent of the male and 18.49 percent of the female respondents used down loading and 10.68 percent of the male and 7.53 percent of the female respondents used other methods for reading full text ICT based resources and services. It could be seen clearly from the above discussion that 57.21 percent of the male respondents used computer screen and 42.58 percent of the female respondents used print out method for reading full text ICT based resources and services.

Table 7 Academic status wise Distribution of respondents' who preferred to download the articles in different formats

Academic status	PDF	HTML	Word Format	Others	Total
PG students	382(49.87)	130(16.97)	220(28.72)	34(4.44)	766
Research scholars	130(49.06)	48(18.11)	70(26.42)	17(6.42)	265
Faculty members	290(54.72)	70(13.21)	150(28.30)	20(3.77)	530
Total	802(51.38)	248(15.89)	440(28.19)	71(4.55)	1561

Table 7 shows the academic status wise distribution of respondents format preferred to download articles. Out of 1561 respondents from the 10 Arts and Science colleges, 802(51.38%) respondents preferred the PDF format for downloading articles; 248(15.89%) respondents preferred HTML format; 440(28.19%) respondents preferred word format and 71(4.55%) respondents preferred other format for downloading articles. It could be seen clearly from the above discussion that more than 51.38 percent of the respondents preferred PDF format for downloading articles. Out of 766 PG students, 382(49.87%) respondents preferred PDF format for downloading articles; 130(16.97%) respondents preferred HTML format; 220(28.72%) respondents preferred word format and 34(4.44%) respondents preferred other format for downloading articles .Among 265 Research scholars' respondents, 130(49.06%) respondents preferred PDF format; 48(18.11%) respondents preferred HTML format; 70(26.42%) respondents preferred word format and 17(6.42%) respondents preferred other format for downloading articles. Out of 530 Faculty members' respondents, 290(54.72%) respondents preferred PDF format; 70(13.21%) respondents preferred HTML format; 150(28.30%) respondents preferred word format and 20(3.77%) respondents preferred other format for downloading articles. It could be seen clearly from the above discussion that most of the respondents from the entire three categories preferred PDF format for downloading articles.

Table 8 Gender wise Distribution of Respondents' who preferred to download the articles in different formats

Gender	PDF	HTML	WordFormat	Others	Total
Male	610(55.66)	167(15.23)	276(25.18)	43(3.92)	1096
Female	192(41.29)	81(17.42)	164(35.27)	28(6.02)	465
Total	802(51.38)	248(15.89)	440(28.19)	71(4.55)	1561

Table 8 shows the gender wise distribution of respondents format preferred to download articles. It could be noted that out of 1096 male respondents, 610(55.66%) respondents preferred PDF format, 167(15.23%) respondents preferred HTML format, 276(25.18%) respondents preferred word format and 43(3.92%) respondents preferred other format for downloading articles. Among the total 465 female respondents, 192(41.29%) respondents preferred PDF format; 81(17.42%) respondents preferred HTML format; 164(35.27%) respondents preferred word format and 28(6.02%) respondents preferred other format for downloading articles. It could be seen clearly from the above discussion that 610(55.66%) male and 192(41.29%) female respondents preferred PDF format for downloading articles.

Table 9 Academic status wise Distribution Respondent's regarding the usefulness of E- resources and services

Academic status	Very Useful	Useful	Average	Not useful	Total
P G Students	258(33.68)	322(42.04)	181(23.63)	5(0.65)	766
Research Scholars	105(39.62)	127(47.92)	31(11.70)	2(0.75)	265
Faculty members	297(56.04)	179(33.77)	53(10.00)	1(0.19)	530
Total	660(42.28)	628(40.23)	265(16.98)	8(0.48)	1561

Table 9 shows the academic status wise distribution of respondent's usefulness of e-resources and services. It is clear that out of 1561 respondents, 660(42.28%) respondents felt that it is very useful;

628(40.23%) respondents felt that it is useful; 265(16.98%) respondents felt that it is average and 8(0.48%) respondent were felt that not useful.

FINDINGS AND CONCLUSION

It is observed that, format preferred to download articles reveal the fact that, 702(51.38%) respondents preferred PDF format; 248(15.89%) respondents preferred HTML; 440(28.19%) respondents preferred word format and 71(4.55%) respondents preferred other format for downloading articles. The findings of the academic status-wise distribution of respondents format preferred to download articles reveal the fact that, 382(49.87%) PG students respondents; 130(49.06%) Research scholar's respondents and 290(54.72%) Faculty members Respondents preferred PDF format for downloading articles. The findings of the gender-wise distribution of respondent's format preferred to download articles reveal the fact that, 610(55.66%) male respondents and 192(41.29%) female respondent's preferred PDF format for downloading articles.

The findings of the distribution of respondents' comparison of ICT based resources and services print sources reveal the fact that, 753(48.24%) respondents believed that information locating and identifying is slightly easier. The findings of the academic-status wise distribution of respondents' comparison of ICT based resources and services with print sources reveal that, 62.92 percent of PG students believed that information locating and identifying is slightly easier; 35.85 percent of Research scholars believed that information locating and identifying is most easier and 35.09 percent of Faculty members also believed that information locating and identifying is most easier. The findings of the gender-wise distribution of respondents' comparison of ICT based resources and services with print sources reveal the fact that, 555(50.64%) and 198(42.58%) female respondents opined that information locating and identifying is slightly easier

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