
IMPACT OF ICT IN INFORMATION ACCESS PATTERN AMONG PROFESSIONAL AND NON-PROFESSIONAL STUDENTS IN CHENNAI : A CASE STUDY

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Abstract:

This study aims to highlight the use of Information Communication Technology by various types of students to learn and to teach during their course of study. This study also analyses the implications of their choices on user's outcomes, which are comprised of satisfaction with the process and performance. This paper makes an attempt to understand the concept of ICT and to explore its various applications in academic libraries. Academic libraries in the modern era are developing in every aspect of the information management processes with the help of increasing and innovative utility of modern technologies. The use of Information Communication Technology (ICT) in academic libraries helps both the Professional and Non-Professional Students in many ways in terms of accuracy, time, labor, space, and money to some extent. Generally, ICT deals with all the uses of digital technology, which already exist to help individuals, businesses and organizations for using information.

Keywords: Impact of ICT, Use and Access of ICT, Academic Libraries, Professional and Non-Professional Students, E-Resources, Digital Technology.

1.1 INTRODUCTION

The academic libraries strive to provide services to both Professional and Non-Professional Students in various ways. Keeping this in view, this paper discusses the use of ICT and its impact on academic libraries. The academic segment of students and researchers use library for collecting information related to curriculum of various courses, reference sources for enriching and updating knowledge, secondary data and literature review for research. ICT helps in performing various library operations such as collecting, processing, storing, retrieving and disseminating information using computer peripherals and internet facilities. ICT consists of all technical means used to handle information and aid communication, including computer and network hardware, communication middleware as well as necessary software. In other words,

ICT consists of IT as well as telephony, broadcast media, all types of audio and video processing and transmission, and network. The academic library users are able to be self-reliant in fulfilling their information need provided they are familiar with the required computer knowledge and skills and be oriented for library user education programme. The shift to digital libraries has greatly impacted the average person's use of physical libraries. The emergence and use of technology is the century's most significant development affecting scholarly communication. The application of computers to information processing has brought several products and services to the current scenario.

1.2 INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT)

Information and Communications Technology Development is therefore an attempt to improve on the various modules of the technology towards higher level of convergence, in order to respond more effectively to the need to communicate data or information. The improvement is more efficient if it involves both users and the industry. Users like librarians and their clients provide feedback to the industry on their products. The appropriateness of different ICTs in various cultural settings is also considered under ICT Development. For instance, whereas real-time online Internet access is affordable and normative in more developed societies, societies like Nigeria do not yet have sufficient national and private infrastructural support for this. The support includes human and material resources such as skilled manpower, electricity, and telecommunications services. The awareness of ICT technology and resources also varies from culture to culture. So, ignoring the 'digital divide' may only lead to frustration in ICT development. Information and Communications Technology (ICT) as a terminology has overtaken Information Technology (IT) because of its appropriateness, its utilitarianism. Whereas IT was used to describe the new technology in the mid-80s up to mid-90s, focusing on the computer, ICT since the beginning of this decade, is a new concept that emphasizes the use of technology for development. Information and Communications Technology emphasizes the uses of the computer and other technologies such as telephone to process, transport, and transfer voice and other data singularly or mixed with least interference or distortion of content.

Type of user	<ul style="list-style-type: none">❖ student, lecturer, other staff, researcher from outside the campus❖ gender of user❖ class/course level
Type of use	<ul style="list-style-type: none">❖ literature search❖ on-line lecture❖ assignment❖ email
Time of use	<ul style="list-style-type: none">❖ Time spent by user in minutes and hours
Cost	<ul style="list-style-type: none">❖ Amount paid for browsing

The data obtained provides an empirical basis for the development of ICT capacity within the library. Information and Communications Technology Development therefore encompasses both the human and material effects and counter effects of the deployment of ICT. It results in better adaptation and uses of the technology.

1.3 TYPES AND CHARACTERISTICS OF ICTs

Categorized ICTs into the following:

- ❖ **Sensing** technologies: these equipments gather data and translate them into form that can be understood by the computer. These include sensors, scanners, keyboard, mouse, electronic pen, touch or digital boards, barcode sensors or readers, voice recognition system, etc.
- ❖ **Communication** technologies: These are equipment that enable information to be transferred from the source to user. It also tries to overcome natural barriers to information transfer like speed and distance some of these include: facsimile machines (fax), telecommunication system, telephone, electronic mail, teleconferencing, electronic bulletin boards, etc.
- ❖ **Display** Technologies: These are output devices that form the interface between sensing, communication and analyzing technologies and human user. They include: computer screen, printers, television, etc.
- ❖ **Analysis** technologies: These are the technologies that help in the investigation or query of data, analysis and indepth query for answers for simple to complex phenomena in research procedures. A complete set of a computer system could be a micro, mini, mainframe or super scamper.

- ❖ **Storage Technologies:** These technologies facilitate the efficient and effective storage of information in a form that can be easily accessed. They include: magnetic tapes, disks, optical disks cassettes, etc.

2.0 LITERATURE REVIEW

The review of literature helps the researcher to know other research studies and projects on a similar subject and to relate the present study in hand in the context of larger panorama. In order to understand and review the existing literature on the study in hand, the researcher consulted a number of sources of information such as articles, monographs, books, conference proceedings, and electronic sources from the Internet, etc. and had gone through the content to know the related studies. “Impact of Information Communication Technology (ICT) on information Use and Access pattern among Professional and Non-Professional Students of Chennai city: a Study”.

Doraswamy (2007) attempted to determine the present status of knowledge and use of digital resources by 160 faculty members through CD-ROM databases, online databases, online journals OPAC etc available in the engineering college libraries. It was observed that use of digital resources was still inadequate among the engineering faculty of the 'universities in entire developing countries.

Dhanavandan, Esmail and Mani (2008) attempted to identify the usage of CD ROM data bases and the INTERNET resources by the engineering students in Engineering Institutions in Cuddalore District. Responses of 190 users showed that the CDROM databases and the Internet resources were useful and very much required, whereas print resources were also required alongside, as they were found convenient to use.

Khan, Abdul Mannan and Ahmad, Naved (2009) have found out the level of awareness and use of e-journals by the researchers of the Aligarh Muslim University (AMU) and the Banaras Hindu University (BHU). The research scholars are aware of the availability of e-journals and largely use them for reference purposes in their research work. They fully agree that with the usage of e-journal the quality of research work improves with enrichment of appurtenant contents and materials leading to high-quality manuscript.

Natarajan, et al. (2010) conducted a survey of 117 teachers and research scholars at Annamalai University on the user perception of electronic resources. They found that the use of electronic resources was significant and felt the need to maximise the use of e- resources by training the teachers and publicising the e- resources within the user community.

Shuva and Akhter (2011) undertook a study to analyze the use of the Internet among the 461 students of the Faculty of Arts of the University of Dhaka. The present study demonstrated and elaborated the various aspects of the Internet use, such as frequency of internet use, most frequently used place for internet browsing, most frequently used search engines, purposes for which the internet is used, use of internet services, problems faced by the students and satisfaction level of students with the internet facilities provided.

Sivasubramanian and Sadik Batcha (2012) explained in their study that the uses of e-resources are very common among the faculty members of Pondicherry University as well as to the faculty members who are in affiliated colleges. It is also clear that majority of faculty members are dependent on e-resources to get desired and relevant information.

Saleem, A, et. al., (2013), The application of ICT tools are increasing in Academic Libraries especially in Engineering College and Arts & Science colleges due to the development of technologies. According to the respondent ranking Mobile phone is in 1st position due to easy access at any time anywhere. There is a Lack of LAN facility in most of the Academic Libraries so the usage of Internet is less. The Academic Libraries must increase the Video Conferencing facilities which enables the users to maximize the usage of ICT based activities and services.

Shabana Tabusum, S.Z., et. al., (2014), This paper discuss with the study of the usage of Digital resources in arts and science college students of Tiruvallur District students. Digital literacy is those capabilities that mean an individual is fit for living, learning and working in a digital society, It is about being able to make use of technologies to participate in and contribute to modern social, cultural, political and economic life. There is an unprecedented requirement for people of all ages to have digital literacy skills for a wide variety of reasons, including employability, to reach full potential.

3.0 OBJECTIVES OF THE STUDY

This study has been framed with the following objectives:

- ❖ To study the communication media choice among the Professional and Non-Professional students in Chennai
- ❖ To familiarize you with new skills of ICT, particularly with Web based environment.
- ❖ To understand how ICT tools can be applied to provide, Innovative services to the users.
- ❖ To examine the users pattern of Information and Communication Technology (ICT) by the respondents in the Post Graduate Students learning process.
- ❖ To investigate the effects of respondents, on their evaluation of a spectrum of media that is concurrently available.
- ❖ To offer suggestions for the effective management of emerging ICT tools in the learning process.

4.0 METHODOLOGY AND DATA ANALYSIS

The data for the study were collected through survey using a structured questionnaire. The questionnaires are collect directly. The information is also collected from other sources such as visiting the websites of the universities. In order to fulfill the above stated objectives, a questionnaire was administered to suit the stated objectives to collect data from the sample of students, research scholars and faculty members from the selected universities of Tamil Nadu, India. Data that was collected, was categorized, analyzed and presented in tables, percentages and correlation analysis as follows.

Research design: A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economic procedure. A research design is the logical and systematic planning and directing a piece of research.

Descriptive research: The research design used here is rigid using structured instrument. They involve prior knowledge about subject. It describes the characteristics of a particular individual or a group.

Sample Size: The respondents selected are professional and non professional students who are studying in an academic institution. The professional respondents include the students who are studying B.E., and M.B.A in Chennai city and non professional respondents include the students who are undergoing M.A., M.Sc., M.Com and related vocational studies. Total estimated sample size is 926 in total. Among them the professional respondents taken for analysis are 586 and non professional respondents are 340. The institutional wise details of the data selected are given in table 1.

Sampling Technique: The sampling technique used for the study is stratified random sampling. The data in each stratum is given below.

4.1 : Table 1 - Showing Sample selection from different Institution on the basis of types of respondents

Type of Institution	Total No of Professional respondents selected	Total No of non professional respondents selected	Sample Total
Universities	32	198	230
Arts and Science Colleges	18	142	160
Engineering Colleges	316	0	316
Management Colleges	220	0	220
Total	586	340	926

4.2 : Table 2 - Analysis of Usage of Conventional Resources by the Respondents

Resources	Professional Course Students				Non Professional Course Students				Grand Total
	H*	M*	L*	Total	H	M	L	Total	
Text Books	256 (43.69)	205 (34.98)	125 (21.33)	586	192 (56.47)	109 (32.06)	39 (11.47)	340	926
Reference Books	308 (52.56)	125 (21.33)	153 (26.10)	586	127 (37.35)	55 (16.18)	158 (4.47)	340	926
Printed Journals	186 (31.74)	126 (21.50)	274 (46.76)	586	145 (42.65)	106 (31.18)	89 (26.18)	340	926
General Magazines	155 (26.45)	197 (33.62)	234 (39.93)	586	182 (53.53)	81 (23.82)	77 (22.65)	340	926
News Papers	410 (69.96)	97 (16.55)	79 (13.48)	586	254 (74.71)	63 (18.53)	23 (6.76)	340	926
Conference Proceedings	389 (66.38)	76 (12.96)	121 (20.65)	586	96 (28.24)	35 (10.29)	209 (61.47)	340	926
Technical Reports	289 (49.32)	201 (34.30)	96 (16.38)	586	62 (18.24)	41 (12.06)	237 (69.70)	340	926
Projects and Theses	82 (13.99)	439 (74.91)	65 (11.09)	586	167 (49.12)	113 (33.24)	60 (17.65)	340	926

H*=High, M*=Moderate, L*=Low

Table 2 analyses the usage of conventional resources by the respondents of study colleges. The conventional resources analysed for the present study are Text Books, Reference Books, Printed Journals, General Magazines, Newspapers, Conference proceeding, Technical reports and Projects and Theses.

While analysing the above table, it is observed that the usage of Newspapers (69.96%), conference proceedings (66.38%) and reference books (52.56%) are found high in usage among the Professional Course students, whereas the Non Professional Course students highly use the conventional resources such as Newspapers (74.71%), Text Books (56.47%) and General Magazines (53.53%). The analysis of moderate used resources reveals the fact that the Professional Student categories moderately use projects and theses (74.91%), Text Books (34.98%), Technical Reports (34.30%), General Magazines (33.62%). The Non Professional Course Students using conventional resources at moderate level are Project and Theses (33.24%), Text Books (32.06%), General Magazines (33.75%) and Printed Journals (31.18%). The conventional resources that are scarcely used by some Professional Course Students are Printed Journals (46.76) and General Magazines (39.93%), whereas among the Non Professional Course Students are Technical reports (69.70%) and Conference Proceedings (61.47%). From the above analysis it is concluded that the Professional Course Students are highly benefited by newspapers and Conference Proceedings, whereas the Non Professional Course students are also highly benefited by Newspapers, Text books and general magazines. The least preferred conventional resources among the Professional Course Students are Printed Journals and Reference Books and among the Non Professional Course Students are technical reports and conference Proceedings.

4.3 : Table 3 - Analysis of Respondents' Satisfaction on Library Information Services

Library Information Science	Level of satisfaction					Total
	Very good	Good	Fair	Poor	Very Poor	
Circulation Services	431 (46.54)	328 (35.42)	32 (3.46)	74 (7.99)	61 (6.59)	926 (100%)
Book Reservation	146 (15.77)	482 (52.05)	171 (18.47)	53 (5.72)	74 (7.99)	926 (100%)
Reference Service	199 (21.49)	446 (48.16)	139 (15.01)	88 (9.50)	54 (5.83)	926 (100%)
Current Awareness Service	175 (18.90)	366 (39.52)	235 (25.38)	96 (10.37)	54 (5.83)	926 (100%)
Referral Service	135 (14.58)	376 (40.60)	251 (27.11)	101 (10.91)	63 (6.80)	926 (100%)
OPAC Service	199 (21.49)	393 (42.44)	171 (18.47)	71 (7.67)	92 (9.94)	926 (100%)
Internet Service	208 (22.46)	228 (24.62)	172 (18.57)	152 (16.41)	66 (7.13)	926 (100%)

Reprography Service	199 (21.49)	295 (31.86)	244 (26.35)	75 (8.10)	113 (12.20)	926 (100%)
Inter Library Loan Service	143 (15.44)	224 (24.19)	297 (32.07)	149 (16.09)	113 (12.20)	926 (100%)
ICT Based Service	223 (24.08)	365 (39.42)	193 (20.84)	61 (6.59)	84 (9.07)	926 (100%)
News Paper Clipping Service	317 (34.23)	260 (28.07)	117 (12.63)	185 (19.98)	47 (5.07)	926 (100%)

Chi-square	Df	P-Value
X² = 159.75	15	0.001 Significant

Table 3 presents the different library information services rendered by the four types of studied libraries of Chennai city. The services have been analyzed with 5 point scale of Very good, Good, Fair, Poor, and very poor. While analyzing the circulation services, the majority of the users are found with the satisfaction scale of Very good followed by the second ranking scale of good. The service of circulation is observed with the satisfaction of very good with the percentages of 46.54 Percentages and the second ranking scale noted is good at 35.42 Percentages. On the contrary 7.99 Percentages of the users have been found unsatisfied saying this service is poor. In addition to that 6.59 Percentages of users have given their opinion as it is very poor.

Book Reservation service is the prime most service in any academic library. The study reveals that the users are supporting this fact with their opinion of good at 52.05 Percentages and very good at 15.77 Percentages. Still 5.72 Percentages of users have said that it is poor, for which the reason may be inadequate staff members to extend the service.

The Reference service is noted with the satisfaction of good with the percentages of 48.16 Percentages and some 21.49 Percentage of users rank this service as very good. Yet 9.50 Percentages of the users have been found not that much satisfied and so said that this service is poor. In addition to that 5.83 Percentages of users have given their opinion as it is very poor.

Current Awareness Service in academic libraries of studied institutions in Chennai city reveals that it is neither good nor bad as the opinion of users represents good with 39.52 Percentages and fair with 25.38 Percentages. According to the opinion of the respondents, the Referral Service in studied libraries is good, it is calculated 40.60 percentages. Yet some 27.11 percentages of users have said it is fair. Online Public Access Catalogue (OPAC) in the libraries of Chennai city is ranked by the respondents Good and Very Good. It is statistically calculated 42.44 Percentages and 21.49 Percentages respectively. Nevertheless 9.94 Percentages of

respondents have opinioned as very poor. It may be the reason of lack of adequate number of computers provided to the respondents.

From the above analysis it is deduced that the Circulation Service, Book Reservation Service, Reference Service, Current Awareness Service, The Reprography Service, ICT based service and News Paper Clipping Service are ranked with the first top most scales of Good and Very Good. OPAC, Internet and Referral Services are ranked with the moderate scales of Fair. The Inter Library Loan service is ranked by the respondents to the scales of Poor and Very Poor.

4.4 : Table 4 - Analysis of Respondents' Preference on the Process of Issue and Return of books on the basis of gender

Circulation Process	Professional Course Students		Non-Professional Course Students		Overall		Total
	Male	Female	Male	Female	Male	Female	
Manual Process	25 (6.22)	21 (11.47)	13 (5.08)	03 (3.53)	38 (5.78)	24 (8.96)	62 (6.70)
Barcode Scanner Process	278 (69.15)	73 (39.89)	156 (60.94)	43 (50.59)	434 (65.95)	116 (43.28)	550 (59.40)
In house Computer Process	11 (2.74)	59 (32.24)	23 (8.98)	06 (7.06)	34 (5.17)	65 (24.25)	99 (10.69)
RFID Technology	88 (21.89)	30 (16.39)	64 (25.00)	33 (38.82)	152 (23.10)	63 (23.51)	215 (23.21)
Total	402 (43.41)	183 (19.77)	256 (27.65)	85 (9.17)	658 (71.06)	268 (28.94)	926 (100.0)

Chi-square	Df	P-Value
$\chi^2 = 18.55$	9	0.0293 Significant

Table 4 shows the preference of respondents on the process of issuing and returning of books in four types of studied libraries. There have been Manual Process, Barcode Scanner Process, In-House computerization process and RFID Technology usually followed while issuing and returning of books in libraries. The respondents were asked to present their preference on the above process. The collected data reveals the fact that the majority (59.40%) of the respondents prefer Barcode Scanner Process since it is familiar among Professional Course students and also Non Professional Course students.

There have been 23.21 percentages of users not preferring any other process, but to RFID Technology that is being followed in libraries at present. Some 10.69 percentages of users prefer

In-House Computerization process and 6.70 percentages of respondents only prefer Manual Process for issuing and returning books. Their preference ratio towards Manual Process is observed very less than other preferences. It is through statistical analysis it can be seen that P value is < 0.0293 which is significant. It clearly says that respondents differ on the process of issuing and returning of books. From the above the analysis it is found that Barcode Scanner Process is ranked to the top most preferred process among the users followed by RFID Technology. The analysis of gender in this case also reveals the same fact.

4.5 : Table 5 - Gender Wise Analysis of Respondents' Opinion on issuing Library Borrowers' Card

Factors	Professional Course Students		Non Professional Course Students		Overall		Total
	Male	Female	Male	Female	Male	Female	
Sufficient	218 (54.23)	96 (52.45)	171 (66.80)	44 (51.76)	389 (59.12)	140 (52.23)	529 (57.13)
Insufficient	157 (39.05)	72 (39.34)	43 (16.80)	31 (36.47)	200 (30.40)	103 (38.43)	193 (20.84)
May be increased	27 (6.71)	15 (8.20)	42 (16.40)	10 (11.76)	69 (10.48)	25 (9.34)	142 (15.33)
Total	402 (43.41)	183 (19.77)	256 (27.65)	85 (9.17)	658 (71.06)	268 (28.94)	926 (100.0)

Chi-square	Df	P-Value
X² = 11.54	6	0.0731 Not Significant

The above table attempts to find out the fact whether the number of library cards issued to the respondents are sufficient or insufficient or to be increased. Out of 926 respondents 529 library users have said that the number of library cards issued them is sufficient. It is about 57.13 percentages of over all data. Yet 193 (20.84%) users felt that the number of library cards issued to them is insufficient. Whereas 142 (15.33%) users expect that the number of library cards has to be increased. The table also presents the opinion on par with category of users as well as gender of users. The Professional Course students both male and female gender feel the library cards issued to them is sufficient yet they may feel better if it is increased. Among the Non Professional Course Students, the female gender are observed unsatisfied with the number of cards issued to them so as they represent that higher level of data supporting the fact insufficient. It is noted to be 36.47 percentages in addition to that some 16.40 percentages of male and 11.76 percentages of female gender reflect their response demanding the number of cards is to be increased. The statistical analysis explains that the P value is > 0.001 which is not significant. It is evidently shown that Respondents differ in their opinion on issuing number of

borrower card issued in study libraries. Going through the above table it is deduced that the number of library card issued to the respondents is found to be sufficient. Even though both the categories of users say it is sufficient, Non Professional course Students expect the borrower cards be increased.

4.6 : Table 6 - Gender Wise Analysis of Respondents on the Preferences of Circulation Service Timings

Factors	Professional Course Students		Non Professional Course Students		Overall		Total
	Male	Female	Male	Female	Male	Female	
Appropriate	80 (20.00%)	95 (51.92%)	108 (42.19%)	26 (30.59%)	188 (28.57%)	121 (45.14%)	309 (33.37%)
Inappropriate	153 (38.18%)	22 (12.02%)	61 (23.83%)	16 (18.72%)	214 (32.52%)	38 (14.18%)	252 (27.21%)
To be Flexible	169 (42.04%)	66 (36.06%)	87 (33.98%)	43 (50.59%)	256 (38.91%)	109 (40.67%)	365 (39.42%)
Total	402 (43.41%)	183 (19.77%)	256 (27.65%)	85 (9.17%)	658 (71.06%)	268 (28.94%)	926 (100%)

Chi-square	Df	P-Value
X² = 13.99	6	0.0297 Significant

The above table 6 discusses the respondents' opinion about circulation service timings followed at present in the four types of institutional libraries taken for analysis. It is analyzed whether the circulation service timing is appropriate or inappropriate or to be made flexible.

By analyzing the data it is brought out clearly that the timing followed at present is not found convenient. There are about 39.42 percentages of library users who expects the present time need to be extended flexibly. Whereas equally 38.22 percentages of users' opinion reveals that the timing is appropriate. It may be the reason that the users' of particular academic library may feel appropriate and others may not feel so.

The analysis of category of users and gender explain that Out of 402 male professional course students, 169 (42.04%) respondents and 66 (36.06%) female respondents express their views that the timing of circulation should be flexible. It may be due to the reason that they have to access the library resources whenever they feel free after completion of their class work. Whereas the Non professional course students in particular male gender represent the timing is appropriate showing 42.19 percentages out of 256 in total. But the female gender of this category viewed that the timings want to be flexible reflecting 38.91 percentages and said inappropriate at 32.52 percentages out of 658 in total.

The Chi Square test results that the P value is < 0.001 which is found significant shows that Respondents of different categories differ in their opinion on circulation timings in the study libraries.

From the above discussion it is found that the circulation service timings followed by the academic libraries of Chennai city need to be moderately changed according to the expectation of users. The category of respondents and gender wise analysis also support the above fact with considerable data.

4.7 : Table 7 - Gender wise Analysis of Respondents' Intention on Book Reservation Service

Issue of Reserved books	Professional Course Students		Non Professional Course Students		Overall		Total
	Male	Female	Male	Female	Male	Female	
Users will be intimated on seniority basis	256 (63.68%)	51 (28.87%)	62 (24.22%)	12 (14.12%)	318 (48.33%)	63 (23.51%)	381 (41.14%)
On first come first basis	58 (14.43%)	44 (24.04%)	99 (38.67%)	22 (25.88%)	157 (23.86%)	66 (24.63%)	223 (24.08%)
On privileged grounds	51 (12.69%)	7 (3.83%)	44 (17.19%)	24 (28.24%)	95 (14.44%)	31 (11.57%)	126 (13.61%)
Information alone given on its arrival	37 (9.20%)	81 (44.26%)	51 (19.92%)	27 (31.76%)	88 (13.37%)	108 (40.29%)	196 (21.17%)
Total	402 (43.41%)	183 (19.77%)	256 (27.65%)	85 (9.17%)	658 (71.06%)	268 (28.94%)	926 (100%)

Chi-square	Df	P-Value
X² = 29.48	9	0.0005 Significant

Table 7 attempts to find out the respondents' intention on the procedures ought to be followed in the libraries while issuing the reserved books. The analysis has been made whether the respondents wish to get their reserved books on seniority basis, or on first come first basis or on privileged grounds, otherwise intimation alone given on the arrival of reserved book.

Out of 926 users, about 381 (41.14%) respondents wish to get intimation to them on seniority basis. Next to that around 223 (24.08%) respondents expect the reserved books have to be issued only on first come first service. On the contrary, some 196 (21.17%) respondents have shown their opinion that the information alone will be given on its arrival irrespective of seniority on booking and found them with less intention of borrowing the reserved books. They only expect to be informed on its arrival. Some 126 (13.61%) users expect the reserved books should be issued on privileged grounds.

The category wise analysis explains that both the genders among Professional Course Students relatively feel that they would be informed on seniority basis of reserved. It is calculated to be 63.68 and 28.87 percentages respectively. Whereas the majority of Male gender among Non Professional Course students represents that the reserved book should be issued on first come first basis. It is calculated to 38.67 percentages. But the female gender of this category expects that they would be just informed on its arrival reflecting 31.76 percentages. Having analyzed the above table the Chi Square test reveals that the P value is < 0.001 which is significant. It strongly supports that there is an association between the category of users and their intention on the issue of reserved books. From the above analysis it is deduced that the reserved books according to respondents' opinion it has to be supplied on the first come first serve basis. Yet they also support the role of library in informing the respondents on reserved seniority basis.

4.8 Table 8 - Gender Wise Analysis of Respondents' Access Pattern of Inter Library Loan Service

Access through	Professional Course Students		Non Professional Course Students		Overall		Total
	Male	Female	Male	Female	Male	Female	
Web Union catalogue	103 (25.62%)	30 (16.39%)	75 (29.30%)	44 (51.76%)	178 (27.05%)	74 (27.61%)	252 (27.21%)
CD ROM	44 (10.95%)	29 (15.85%)	64 (25.00%)	15 (17.65%)	108 (16.41%)	44 (16.42%)	152 (16.42%)
Web OPAC	88 (21.89%)	58 (31.69%)	79 (30.86%)	17 (20.00%)	167 (25.38%)	75 (27.99%)	242 (26.13%)
Printed Union catalogue	167 (41.54%)	66 (36.06%)	38 (14.84%)	09 (10.59%)	205 (31.16%)	75 (27.99%)	280 (30.24%)
Total	402 (43.41%)	183 (19.77%)	256 (27.65%)	85 (9.17%)	658 (71.06%)	268 (28.94%)	926 (100%)

Chi-square	Df	P-Value
$X^2 = 45.67$	9	0.001 Significant

Table 8 analyses the access pattern of Inter Library loan Service by the respondents. The Inter Library Loan Service has been accessed through four different ways in academic libraries. They are Web Union Catalogue, CD-ROM Databases, Web OPAC, and through Printed Union Catalogue. While analyzing the respondents' access pattern, the majority of users have been found using Printed Union Catalogue for the access of Inter Library Loan Services. It is calculated to 280 (30.24%). Next to that, Web Union Catalogue is highly used by 252 respondents, which is accounted to 27.21percentages of total population.

The third preferred access of Inter Library Loan Services is Web OPAC. They are accounted to 242 respondents reflecting the percentage of 26.13. A less number of 152 respondents (16.42%) make use of the CD ROM for Inter Library Loan purpose. The table also analyzes the category of users and gender wise. It is noted to be 41.54 and 36.06 percentages respectively.

Whereas among the Non Professional Course Students Printed union catalogue is found be less in usage. It is calculated to 14.84 percentages by male gender and 10.59 percentages by female gender. Still Web OPAC and Web union catalogue are also used by this category. The Chi Square test explains that P value is < 0.001 and it is significant, which shows that there is an association between the category of respondents and their access pattern of Inter Library Loan Service. From the above analysis it is concluded that the printed Union Catalogue and web Union Catalogue are found to be the prime access pattern among the users of Inter Library Loan Service in the present study. This finding is also supported by Professional Course students but Non Professional Course students both the genders highly make use of Web OPAC in the case of inter library loan service.

5.0 CONCLUSION

The users who are using information communication technology with maximum extent are considered for the present study. The data collection period of study is the year of 2014. Information needs have high effect on education, communication, and student's future life. Any student who goes to college, see environment and culture different from her/his life and in this new environment, for doing assignment, research, studying, and scientific communication with others, applies to learn Information seeking behavior suitable methods and has to increase his/her Information Literacy level, otherwise not only student would not be successful, but also he/she would have problem in his/her academic life specially postgraduate education. Hence, there is need to train them in basic and cognitive digital literacy skills outlined in the model curriculum, so that they can use online information resources such as online databases, digital libraries, open access e-books, e-journals and electronictheses and

dissertation, institutional repositories, and web portals more efficiently in their higher learning and research.

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