

User Awareness and Use of E-Journals among Education Faculty Members in Chennai: A Survey

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Abstract

The developments in information technology have made drastic changes the way information is collected, stored, retrieved, and distributed. Electronic journal is one of the products of information and communication technologies. The advancement of e-journal during recent years has given librarians a powerful new resource to support learning and research. This study reports the result of a survey conducted at education faculty members in Chennai to determine the extent to which user are aware and make use of e-journals. The study also examines the search pattern of e-journals. A questionnaire was distributed among the faculty members to collect desired data. A total of 300 questionnaires were distributed to the selected sample of Library users; 278 valid samples were collected. The studies found that majority (92.30%) of the male users were aware about the e- journals where as only 83.33 % of female respondents were aware about the availability of e-journals. The analysis reveals that most of the respondents 71.22% use e-journals for writing papers.

Keywords: *Education, E-Journals, Library website, Search Engines, File Format, User study*

Introduction

The growth rate in usage of electronic information resources is sufficiently high and if this trend continues for few more years, a time may come when the print versions will get 'totally eclipsed'. The coming of the World Wide Web has propelled this vigorous growth of the electronic forms of communication, which simply do not fit into the traditional

publishing format. With the coming of the age of the e-journals, the way scholarly communication is disseminated throughout the world has totally altered. Internet is now a huge source of academic, research and general information. Internet facilitates the sharing of information by millions of people and institutions all over the world. It is like a global library that everyone can access at time. It is a global

venue where everyone can present their knowledge and information. Earlier library served information in traditional media whereas computers like the information in digital media. In this way Internet is a library that transcends space and media. Internet has become one of the most effective media for selection, collection, storage, management and dissemination of information in the gamut of knowledge. It works round the clock and connects every nook and corner of the globe. It is one of the important services of the information storage and retrieval process, which has reached millions of people. In the 1960s and 1970s, librarians were using electronic databases as a part of library services. In the 1980s, libraries started using CD-ROM versions of electronic databases. In 1990s and from 2000 onwards, Internet access and consortia approach of journals subscriptions diversified the availability of electronic information. Presently many libraries in India have provisions to access the same electronic information in multiple ways.

The emergence of the Internet, particularly the World Wide Web, as a new medium of information storage and delivery represents a revolution which will have a last impact on the publishing and information delivery system in the 21st century. As electronic information and its

access has grown, selection of information sources has become complex. When alternatives were limited, selection was primarily based on the access and cost factors. As CD-ROM and tape-loaded with electronic information became available, local area networks (LANs) and interfaces became important issues in their selection. Now with multiple sources of information, human, demographic, and technological factors have become important in their selection process. In addition to these, factors like training standards, password protection mechanism, links-to-holdings, and full-text availability are the parameters used by the users for the selection process. Because of the dynamic nature of electronic information, traditional selection criteria are not effective, so new criteria must be developed or adopted.

Presently we are living in knowledge society where information is the key item progress in this age depends largely on front line knowledge / information gained by the society. In this era of information, Internet has made tremendous impact on the academic activities of the faculty members, researchers, and the students. After the advent of Internet, a significant transition is seen in users' approach and the way they seek information and the methods they use in research and learning activities. This has become possible as Internet

provides a wealth of new course materials and acts as a powerful supplement to the traditional ways of studying and learning. Internet is now facilitating electronic communication, exchange of ideas, and collaboration in research globally. Internet can be accessed for the latest developments in one's area of research at an amazing speed. It also plays a significant role in distance education and conferencing and thus transforming the academicians as facilitators in providing guidance, drawing students, and steering observations. The Internet, therefore, creates an excellent academic environment where the academic community can perform their activities in a rejuvenated manner. (Surendra Babu, Saradha and Ramaiah, 2010)¹

E-Journals

Journals in a library play vital role in distributing nascent facts and primary information to users. They publish articles and papers on recent research and development, particularly in the ever changing fields of management, science, and technology. Advent of electronic journals (e-journals) during recent years has given librarians a powerful new resource to support learning and research. Lot of journals, in all fields, both printed as well as electronic, are currently available electronically via web. Availability ranges from table of contents

to the full text. Some journals only exist in their online format and others have both printed as well as electronic versions². The impact of e-journals on library collection, services, and administration is complex. Electronic version of journals changes the publication system entirely. They provide easy access to a journal and thereby save time. Keyword search ability, accessibility at the time of publication, etc., are some of the features of e-journals. Despite various advantages and popularity, e-journals have failed to replace or displace printed journals and act more as supplement to printed journals. Today most of the e-journals appear as parallel version of their print counterparts³.

Literature Review

Kannappanavar and Rajanikanta's (2008)⁴ paper highlights the use of e-learning resources in medical colleges. The study has found that Medical education popularized only after the independence of the country. It is found that majority of the colleges under the study area have e-information resources, e-databases. Almost all colleges under study are also becoming members of a consortium. As far as the infrastructure facilities are concerned, almost all colleges under study have provided very good infrastructure facilities to their libraries to serve their clients effectively.

Tenopir and King⁵, opine that until the late 17th century, communication amongst scholars depended heavily upon personal contact and by attending meetings organised by the learned societies (e.g. The Royal Society). As the membership of the learned society grew, and as many could not attend the meetings, so the proceedings became a place to publish papers that could not be presented in the meetings eventually evolved into scholarly journals. The initial peer-reviewed journals were the *Philosophical Transactions of the Royal Society* and *Journal deScavans* both published in 1665. The coming of the 19th century saw an explosion in the number of journals produced, due to increased specialisation and diversification of academic research, and also evolution of the means of mass publishing (using cheap wood pulp-based paper). Elsevier Scientific Publishing began publishing engineering journals way back in 1884. After the World War II, Robert Maxwell set up the Pergamon Press which pioneered move towards mass commercial publishing. By 1960, commercial publishers had occupied a major part of the market. Although, the first prototype e-journal was in 1976, the booming time for the e-journals was during 1990 to 1995, mainly dominated by non-profit making groups who exploited the technology for their own sake. If Gutenberg's invention of

the printing press in the 15th century was a great leap towards information dissemination, then invention of the World Wide Web is equally a great leap towards electronic scholarly communication, Harnad⁶, has rightly opined that 'the arrival of the electronic communication is the fourth revolution in the means of production of knowledge' after spoken language, written language, and the printing press. Electronic journals are full text or abstracts of journal articles available electronically on the Internet or CD-ROMs⁷. Another definition says, E-Journals are nothing but, "Electronic versions of printed journals that can be viewed online via any PC connected to the Internet"⁸.

Valauskas⁹, defines an "electronic journal" as a digital periodical dedicated to publishing on the Internet, articles, essays, and analyses that have been read and commented upon initially by a select group of editors and reviewers, to meet a certain standard of excellence for a given discipline addressed by the journal itself". Medium distinguishes between electronic and print journals. Very nature of electronic journals implies ample opportunities for experimentation: fonts, format, layout, design.

Objectives of the Study

The main objectives of the present study are as follows:

1. To find out the awareness of users' about available e-journals.
2. To study the purpose and utilization of e-journals.
3. To find out the frequency of using e-journals.
4. To find out the hindrances and problems faced by the users while accessing and using e-journals.
5. To study the level of satisfaction of users about availability and coverage of e-journals.
6. To study the preferred format for using e-journals.
7. To study the satisfaction level of users about infrastructure to support the access of e-journals.
8. To suggest suitable recommendations to improve facilities and services related to the use of e-journals.

Methodology

Keeping in view of the above objectives in mind, a structured questionnaire was prepared to collect data from the users of e-journals among Education Faculty Members in Chennai. Questionnaire contains various questions pertaining to the awareness and use of e-journals. For this purpose a total of 300 questionnaires were distributed among education faculty members in and around Chennai. Out of 300 questionnaires distributed, 278 valid questionnaires were collected this constitutes 92.66% (278/300) of the total response. The collected data were analysed, tabulated, interpreted and presented in form of this paper.

Data Analysis

Analysis of data is the ultimate step in research process. It is the link between raw data and significant results leading to conclusions. This process of analysis has to be result oriented.

Population Study

Table.1 Sex wise distribution of Respondents

Gender	No. of Respondents	Percentage
Male	182	65.46
Female	96	34.54
Total	278	100.00

Personal detail section of the questionnaire provides information regarding the sex and different qualifications as can be seen from Table-1. It is shown in table-1, 65.46% of

population studied was males and only 34.54% of total were females, who can use e-journals available through library for different purposes.

Table.2 Category wise distribution of Respondents

Academic Status	No. of Respondents	Percentage
Professors	54	19.42
Associate Professors	86	30.94
Assistant Professors	138	49.64
Total	278	100.00

Table-2 shows that 49.64% of the respondents were Assistant Professors, 30.94% Associate Professors and only 19.42% were Professors.

Awareness about E-Journals

Table.3 Awareness about E-Journals

Gender	Aware	Not Aware
Male	168 (92.30%)	14 (7.70%)
Female	80 (83.33%)	16 (16.66%)
Total	248 (89.20%)	30 (10.80%)

Table-3 shows the awareness of e-journals among the respondents available through the library. 92.30 % of the male users were aware about the e-journals whereas

only 83.33% of female respondents were aware about the availability of e-journals. It can be seen that male respondents are more aware about e-journals than females.

Preference Level of Using E-Journals

Table.4 Preference level of using E-Journals

Type	Number	Percentage
Electronic Version	152	54.67
Print Version	74	26.62
Both	52	18.71
Total	278	100.00

The result reveals that 54.67% of respondents want to access only electronic version of journals whereas only 26.62%

users want to read the printed journals but 18.71% respondents want to use both electronic and printed journals.

Internet Access

Table. 5 Respondents' Frequency of Access to Internet

Gender	Less than 2 hours	2-3 hours	3-4 hours	4- 5 hours	Above 5 hours	Total
Male	59 (32.41)	35 (19.24)	34 (18.68)	10 (5.49)	44 (24.18)	182
Female	21 (21.87)	31 (32.29)	19 (19.79)	17 (17.71)	8 (8.34)	96
Total	80 (28.78)	66 (23.74)	53 (19.06)	27 (9.72)	52 (18.70)	278

Source Computed Figures in parentheses denote percentages.

Data presented in table-5 indicate the gender wise respondents' frequency of access to internet. It could be noted that majority of the male respondents (32.41%) have less than 2 hours of access to internet, whereas, majority of the female

respondents (32.29%) have 2-3 hours of access to internet. It could be seen clearly from the above discussion that majority of the male respondents have above 5 hours of access to internet.

Frequency of Using E-Journals

Table.6 Respondents' Frequency of using E-Journals

Gender	Daily	Thrice a Week	Twice a Week	Once in a Week	Once in a Fortnight	As and When Required	Total
Male	63 (34.61)	14 (7.69)	10 (5.49)	35 (19.24)	34 (18.68)	6 (3.29)	182
Female	13 (13.54)	31 (32.29)	19 (19.79)	17 (17.70)	8 (8.34)	8 (8.34)	96
Total	76 (27.33)	45 (16.18)	29 (10.44)	52 (18.70)	42 (15.11)	14 (5.04)	278

Source Computed Figures in parentheses denote percentages.

Data presented in table-6 indicate the gender wise respondents' frequency of using e-journals. It could be noted that majority of the male respondents (34.61%)

using e-journals daily, a considerable number of female respondents (32.29%) is using e-journals thrice a week.

Purpose of Using E-Journals

Table.7 Purpose of using E-Journals

Purpose	Number	Percentage
For studying course work	182	65.46
For update subject knowledge	126	45.32
For teaching	137	49.28
For research work	98	35.25
For writing papers	198	71.22
Any other works	54	19.42

Note: Total sample exceeds the required size since the questions are multiple choices

From the table-7, it is clear that most of the respondents 71.22% use e-journals for writing papers. 65.46 % of respondents use e-journals for studying their course work. 49.28% of respondents use e-journals for teaching and 45.32% respondents use for

update subject knowledge. 35.25 % of users using e-journals for research work and only 19.42% respondents' use e-journals for other works like entertainment etc.

Location for accessing E-Journals

Table.8 Location for accessing E-Journals

Location	Number	Percentage
Central Library	193	69.42
Department Library	128	46.04
Computer Center	96	34.53
Other Places	32	11.51

Note: Total sample exceeds the required size since the questions are multiple choices

When respondents were asked to indicate the preferred location to access e-journals, It is observed from the study of table-8

shows that 69.42 % of the respondents chose the central library, about 46.04 % accessed at the department library, 34.53 % accessed at the computer center and

11.51% accessed from other place where

they got facility to access e-journals.

Linking Pattern of E-Journals

Table.9 Linking Pattern of e-Journals

Linking	Number	Percentage
Links through library website	223	80.21
Links through publisher's website	68	24.46
Links through Search Engines	164	58.99
Links through e-Journals website	94	33.81

Note: Total sample exceeds the required size since the questions are multiple choices.

through linking facility available on the library website followed by 58.99 % search engines. 33.81 % of respondents search e-journals through e-journal website. Only 24.46 % of them search e-journals through publisher website.

Table-9 shows how respondents search e-journals. It is clear that most of the respondents 80.21 % search e-journals

Use Pattern of E-Journals

Table.10 Use Pattern of E-Journals

Use Pattern	Number	Percentage
On computer screen	93	33.45
Download in storage devices	162	58.27
Take Printout	194	69.78

Note: Total sample exceeds the required size since the questions are multiple choices

Respondents were asked to indicate how they use the content of e-journals? It was observed from analysis that the majority 69.78% of respondents take printout form

e-journals. 58.27% download the content in storage devices and 33.45% of respondents use on the computer screen.

Formats of E-Journals

Table.11 File Formats of E-Journals

File Formats	Number	Percentage
HTML	88	31.66
PDF	186	66.90
No Preference	4	1.44
Total	278	100.00

E-Journals are available in two major formats PDF and HTML. It was observed from the analysis that 66.90 % of respondents preferred PDF format for

using e-journals, whereas 31.66 % of respondents preferred HTML format; and 1.44% have no preference.

Difficulties of Accessing E-Journals

Table.12 Difficulties of Accessing E-Journals

Reasons	Number	Percentage
Not many e-journals available in my subject	134	48.20
Coverage on e-journals is not suited to my research area	107	38.48
No assistance provided by the information professionals	82	29.49
Lack of training	48	17.26
Time consuming	63	22.66

Note: Total sample exceeds the required size since the questions are multiple choices

Though e-journals have become a common source among the academic and research communities, the majority of users stated that they have difficulties to use e-journals. The specific problems faced by the users are given in table-12. It was observed that

majority of respondents are not satisfied with availability of enough journals in their respective subject followed by coverage of e-journals is not suited to my research area, time consuming and lack of training.

Satisfaction of Accessing E-Journals

Table.13 Satisfaction of Accessing E-Journals

Level	Number	Percentage
Highly satisfied	176	63.30
Satisfied	62	22.30
Average	27	9.72
Not satisfied	13	4.68
Total	220	100.00

A question was asked to know the satisfaction level of infrastructure among the users for accessing e-journals. It was observed that majority 63.30% of respondents are highly satisfied with the

Recommendations

- Based on the various observations and considering users opinion regarding the improvement in e-journal facility, the following suggestions are made.
- Awareness should be created to use e-journals and electronic databases to fulfill information needs.
- Workshops and seminars should be conducted and popular lectures should be arranged in every department.
- Different levels of user education programmes should be arranged for faculty.

Conclusion

Electronic journals opened up many exciting opportunities and potentials for academic libraries. E-journals have both advantages and disadvantages. Librarians need to be able to identify and balance the

infrastructure provided by the library for accessing e-journals at different levels whereas only 4.68 of respondents are not satisfied with the same.

- To increase the interest among users regarding the journals, content pages should be distributed to users through e-mail.
- Library homepage should give users access to the individual journal's homepages by hyperlinks, which will help them in avoiding the hassle of remembering the password or the URL.
- The library staff should cooperate with the users and help them in overcoming the technical difficulties faced while using e-journals.

factor that would make e-journals a success in their libraries. Looking at the present situation of information explosion and competency in acquiring it, it is on the part of the library staff to create more awareness about the e-journal availability among the users and provide them a

friendly environment so that they can make a better use of the facility. The staff in the library requires training in handling the e-journals and users need an orientation for using them. Library staff should be provided proper training, which will help them acquiring more sophisticated searching and retrieval skills. The librarians' role has to be redefined in view of technological developments keeping in mind the best interest of users and retrieval efficiency. Study shows that most of the users choose to use the journal in both formats, print journals are still as popular as e-journals. Therefore, even in this digitization era, e-journal may not completely replace the existing print version but both will compliment each other to meet the needs of the users. From the above study it is observed that e-journals have become the vital part of information for various needs. E-journals are the most important for the faculty members. It is proceed that e-journals saves time of the users. Lack of training among users and proper infrastructure in the library is a major de-motivating factor in the use of e-journals. This study helps the librarian to know the importance of e-journals and it helps them to improve the services related to e-journals.

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Manuscript Received: 28th Feb. 2011

Manuscript Revised: 20th April

Manuscript Accepted: 24th May 2011