

A STUDY ON THE USE OF E-JOURNALS AMONG THE STUDENTS OF K.S.RANGASAMY COLLEGE OF TECHNOLOGY, TIRUCHENGODE

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Introduction

Electronic Journals have been defined in different ways. The most common definition states, "a journal that is provided by any electronic means, e.g. Internet or CD-ROM, although not necessarily exclusive by electronic means." (Ashcroft, 1999 p.105) These journals are generally accessible through electronic communication devices or telephone lines. The same definitions can be used for electronic newsletters and periodicals in electronic format.

Evolution of E - Journals

- Electronic journals that existed before the Web were the ones that relied on dial-up services and proprietary networks. The drawback for this kind of journal is the lack of photographs, tables, charts and back file. At the beginning, maintenance costs and proprietary interface were major problems for libraries, but in the recent years most libraries have been able to solve these problems. This kind of journal, however, could not replace the printed format.
- Electronic journals can be produced in different formats, such as a CD-ROM, which is the first step towards electronic publishing. Late 1988 and early 1990 various journals were published on CD-ROM mostly because of the increased storage capacity. The first step in the process was conversion of the journal from paper to electronic format, and then indexing, and the creation of bibliographic citations and abstracts. The significant advantage for CD-ROM was storage capacity. There were problems with publishing journals on CD-ROM such as: updating information, distribution, packing, and mailing. In addition, there was the high cost and lengthy time to develop, support, and continue to enhance proprietary software used to access the electronic journal. The other issue was that each journal had different editions with different interfaces and different ways of browsing, retrieving and displaying

- documents. Consequently, one of the reasons that a library would withdraw from the migration from paper to electronic journal was the lack of interface uniformity (Barnes, 1997).
- However, there are now forms of electronic journals that have all of the print version features and can therefore replace print. These journals are available through the vendor sites or directly from the publisher's sites and most of them are in Acrobat format. The electronic version duplicates the print version. . The latest formats are the journals that do not have any print version and are published electronically. Specifically, in the academic and research libraries, the numbers of this type of journal is growing fast.
 - It should meet the bibliographic definition of journal according to AACR2 the definition of a journal is “A Public action in any medium issued in successive parts bearing numerical or chronological designations and indented to be continued indefinitely”. A journal should preferably have an ISSN number (See www.issn.org)
 - According to CONSER (The Cooperative Online SERIALS cataloging program)

A remote access electronic serial is a continuing resource that is accessed “via computer networks”. It is issued in a succession of discrete parts usually bearing numbering, and has no predetermined conclusion. This is in contrast to direct access electronic resource which is issued on a physical carrier such as CD-ROM or floppy disks (CONSER, 2004) <http://www.loc.gov/acq/conser/>

Various names such as

- Online journals
- Electronic serials or e-serials
- Electronic periodicals
- Zines or e-zines
- or webzines Digital serials or d-journals

Access to Electronic Journals:

The majority of electronic journals on-campus can be seamlessly accessed from a PC. However some titles may need an Athens or generic username and password, particularly if you are working off-campus.

E-Journals: advantages, disadvantages and criteria for selection

Azadeh Mirzadeh has written an excellent look at ePubs in the library:

- The Web, along with electronic publishing, has changed accessibility of serials and periodicals. In the past, scholars and researchers wrote their articles and published them in journals. Traditionally, library patrons and researchers came to the library to read or to make copies of these articles. To some extent publishers and vendors

competed to receive orders from libraries. The Web and on-line electronic publishing, however, have changed the way of accessing information for scholars and researchers. With the emergence of the Web and electronic publishing, scholars and researchers are able to publish articles on-line without going through a publisher or a vendor and users can access information without going to the library. Technology has brought an easier way of accessing information for librarians and researchers. Consequently, it has become very important issue for libraries regarding how and when to replace printed journals with electronic ones. One way that information has become accessible on the Internet is through electronic journals. The number of journals, magazines and newspapers that are available online has been grown rapidly in recent years. Tenopir (1999 p.138) reported " the number of titles in the ARL Directory has grown from only 26 in 1991 to nearly 2500 in 1997. The number of listings in full text sources on-line has grown from 4400 in 1993 to about 8900 as of May 1999." In the report regarding how quickly electronic journals are growing Aschroht (1999, p. 107) noted that "in the 18 months from September 1997 to March 1999 the number of electronic journals available increased by more than fifty percent... Not all these journals are scholarly in nature, but an increase can be seen across all genres."

Advantages

- There are four advantages for electronic documents: first, some documents are more useful in electronic form due to enhanced search ability, e.g. in allowing statistical calculations to be affected. Second, electronic format is sometimes the only alternative so it represents a net increase in the information base. Third, since the volume of printed materials is increasing at great speed and libraries can only offer a small part of it, it is important to provide electronic formats. The fourth advantage is economy of storage: the increase in cost for keeping printed material makes electronic forms more attractive from an economic viewpoint.
- Another benefit of electronic journals is availability for readers. Patrons can view journals when the library is not open if they have access to a network terminal. Also, invoicing and claiming will be on-line so, therefore, librarians will be having more time to improve their on-line skills and train users. It, also, offers speed of delivery, eliminates printing, and saves money in terms of postage costs for libraries.

Disadvantages

- Archiving and site licenses are the two major issues that most libraries have identified. Most of the electronic journals are not archived, therefore, libraries should be very careful about canceling printed subscriptions. Archiving becomes a critical issue for particular types of products, such as electronic journals and full-text databases. Also, libraries have learned that both storing large files of data and maintaining access to

them have additional costs in terms of staff, time, and other resources. Libraries are often hesitant to rely on electronic copies of titles for fear that archival access will not be maintained. (Davis, 1997)

- The lack of peer review of materials and slowness of the Internet and power outages are other disadvantages of electronic journals. Reading a large amount of data on the screen also can be very difficult and can cause health problems such as back pain or vision problems.

Criteria for selecting electronic journals

- License and copyright agreements are legal matters that should be considered by libraries when they subscribe to electronic journals. These agreements must be fair and practical for both the publisher and library.
- Electronic journals are available in different ways. They are available directly from the publisher's site and they have complete control over changes and pricing. The other way is that they are available through aggregators. Some publishers offer their electronic journals through an intermediary service, which aggregates the titles from many different publishers under one system or interface. In this way, publishers do not have to create or maintain their own separate system.
- Making student and faculty aware of electronic journals can accomplish in different ways. Cataloging is one way to show the public what is accessible and available in the library computer database collection. But some libraries are not cataloging their e-journals because such journals are not physically present in the library collection. Another way to inform the public about e-journals is to give details directly on the library's web site through an e-journal's section, preferably listing individual journals.
- Since new products become available every day and publishers are adding new features and new titles on a constant basis, it is impossible for librarians and libraries to have complete information about the new product.

STATEMENT OF PROBLEM:

To study on the use of E Journals among the students of K. S. Rangasamy College of Technology students in Tiruchengode. This study aims at analyzing the utilization of E Journals by the K.S.Rangasamy College of Technology.

Objectives

In order to pursue this study, the following objectives are framed, in accordance with the scope of this investigation:

- To analyze the commonly use e journals among the Engineering College students in K. S. Rangasamy College of Technology, Trichengode.
- To identify the reasons for using and the period of usage.

- To find out the type of information uploaded.
- To find out the level of usage of e journals
- To rank the usefulness of some of the e journals.

Hypotheses

The following hypotheses are formulated on the basis of content and coverage of framed objectives and they are tested by employing appropriate statistical tools:

- 1) There is a significant association between Gender and Nativity of access of E - Journals.
- 2) There is a significant association among Age and Level of Usage E - Journals.

SCOPE AND LIMITATION

This study of the research used questionnaire- based survey method. The data were well checked and analysed for data analysis. The scope of the paper is to the students of engineering education from among seven departments and the study was limited to students from KSR Educational Institutions (KSREI), in Tiruchengode. A total of number 100 well-structured questionnaire was distributed to the students of UG & PG out of which 80 were returned dully filled in by the user's community and the overall response rate was 80.00 percent. Percentage analysis was used to analyze the data which are obtained and descriptive analysis was used to interpret the results.

Methodology

This study attempts to examine the engineering college students attitude to E - Journals. The students of K.S.Rangasamy College of Technology have been chosen for the study. It is primarily a fact-finding venture. The identified facts are cross tabulated with the Gender, Department, Year of study, Age and Nativity of the respondents.

K.S.Rangasamy College of Technology Library

The College takes pride in having a Central Library housed in a three-storeyed block with a built up area of 1458 sq.m. The ground floor houses books stack area, circulation counter and online public access catalogue facility. The first floor houses Journal Section, Reference Section, Reprographic Section and Digital Library. The Library has more than 73,000 books and subscribing 367 journals which include national and international journals and magazines. In addition to books and journals, 13 e-journal packages are subscribed. Book Bank facility is also available for SC/ST students. All the back issues of journals are bound and kept for ready reference. There are separate library sections for MBA and MCA. All Departments have their own library to cater to the instant reference needs of faculty members. The Library has computerized all its housekeeping operations using in house development library software that is well maintained and updated regularly. NPTEL video

and web courses are also available. It uses the state-of -the-art technology in its function and services.

Books and Journals

E - Journals

LIBRARY

2013 – 2014

Books	Volumes	Titles
	88212	32590
Journals	National	International
	184	47
Magazines	67	2
CD ROM	5888	
NPTEL Video Course	92	
NPTEL Web Course	126	
Back Volumes	5054	
Project Reports	7409	
Question Bank	1091	
E-Journals	<ol style="list-style-type: none"> 1. IEEE 2. ASCE 3. ASME 4. Mc Graw Hill Engineering Library 5. ASTM Digital Library 6. Springer Link 7. J-Gate Engineering &Technology 8. Science Direct 9. Elsevier – Nano Technology 10. Elsevier –Bio Technology 11. J-Gate Management Sciences 12. ProQuest 13. Institute of Electronic Library (IEL) 14. Nature Publishing Group 15. CMIE –Prowess 	
Membership	<ol style="list-style-type: none"> 1. Delnet 2. ACM 3. IEEE 	

Sampling

K.S.Rangasamy College of Technology is selected for the purpose of the present study. The college has 6500 students. The researcher has selected 100 respondents as samples on the basis of stratified random sampling. 20 questionnaires were found invalid with incomplete data and thus 80 questionnaires are used for the present study. The rate of response is 80%.

Data Collection

The researcher has employed a well structured questionnaire for collecting the data from the respondents of K.S.Rangasamy College of Technology.

Data Analysis

The collected data are classified and tabulated according to the objectives and hypothesis stated. First, the data are recorded on data sheets and then fed into the computer personally.

In order to test the hypothesis, the chi-square test has been applied. In order to measure the respondents' frequency and relevance of using internet resources, the five point rating scale is applied.

DATA ANALYSIS AND RESULTS

The study has been conducted at KSR Educational Institutions (KSREI), in Tiruchengode during the period of 2014. This study was undertaken to investigate the a study on the use of electronic journals among the students of KSR Educational Institutions (KSREI), Tiruchengode.

Table 1:Gender-wise Respondents

Sl. No	Response	% of respondents
1.	Male	62
2.	Female	38
	Total	100

Fig. 1:Gender-wise Respondents

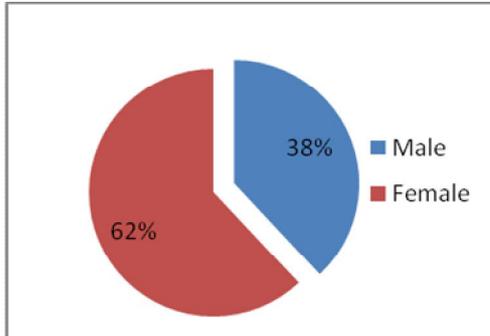


Table 2:Age-wise Respondents

Sl. No	Age in Years	% of respondents
1.	21 -25	71%
2.	26 – 30	19%
3.	31 – 35	10%
	Total	100

Fig. 2:Age-wise Respondents

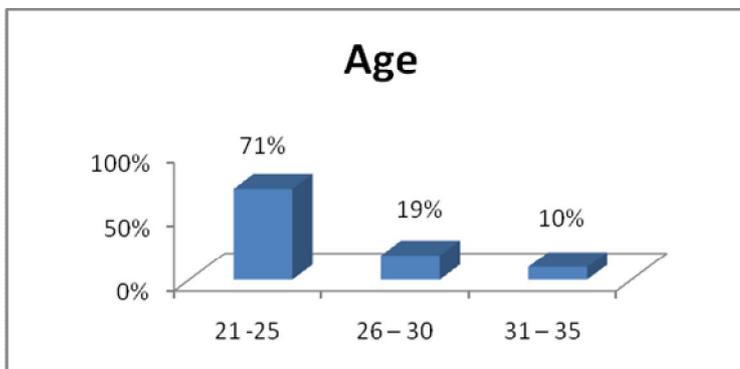
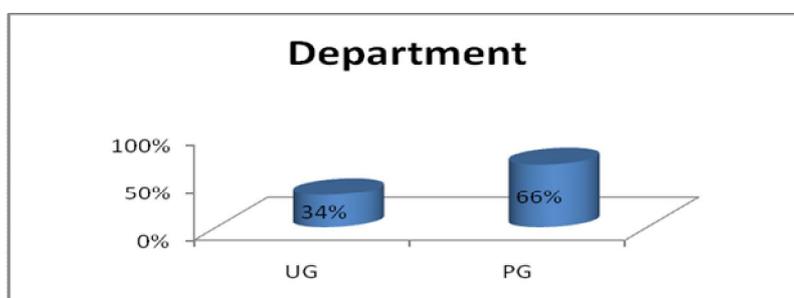


Table 3:Department-wise Respondents

Sl. No	Department	% of respondents
1.	UG	34%
2.	PG	66%
	Total	100

Fig. 3:Department-wise Respondents**Table 4:Discipline-wise Respondents**

Sl. No	Discipline	% of respondents
1.	BE Mech	22%
2.	BE EEE	32%
3.	BE ECE	29%
4.	BE EIE	17%
	Total	100

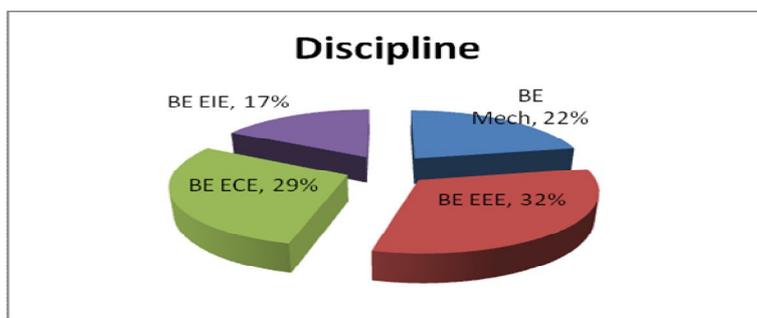
Fig. 4:Discipline-wise Respondents

Table 5:Nativity-wise Respondents

Sl. No	Discipline	% of respondents
1.	Urban	59%
2.	Semi Urban	35%
3.	Rural	16%
4.	Total	100

Fig. 5:Nativity-wise Respondents

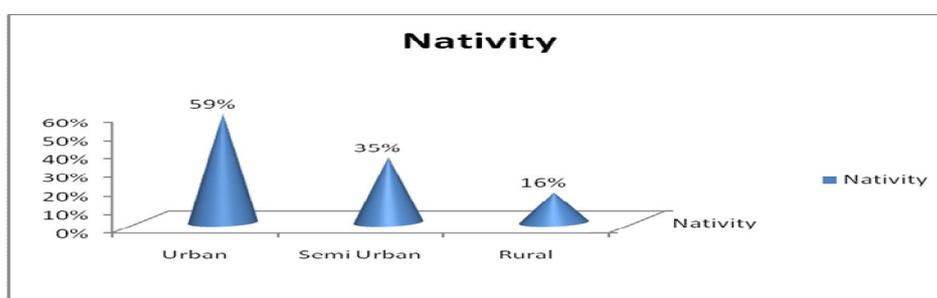


Table 6: E – Journals used-wise Respondents

Sl. No	E-Journals	Regular	Often	Occasionally
1.	IEEE	73	22	5
2.	ASCE	70	19	11
3.	ASME	65	27	8
4.	Mc Graw Hill Engineering Library	63	22	15
5.	ASTM Digital Library	58	26	16
6.	Springer Link	62	18	20
7.	J-Gate Engg & Tech	70	18	12
8.	Science Direct	38	47	15
9.	Elsevier – Nano Technology	52	20	28
10.	Elsevier –Bio Technology	61	21	18
11.	J-Gate Management Sciences	21	51	28
12.	ProQuest	24	31	45
13.	Institute of Electronic Library (IEL)	30	22	48
14.	Nature Publishing Group	14	15	71
15.	CMIE –Prowess	14	19	67

Fig. 6: E – Journals used-wise Respondents

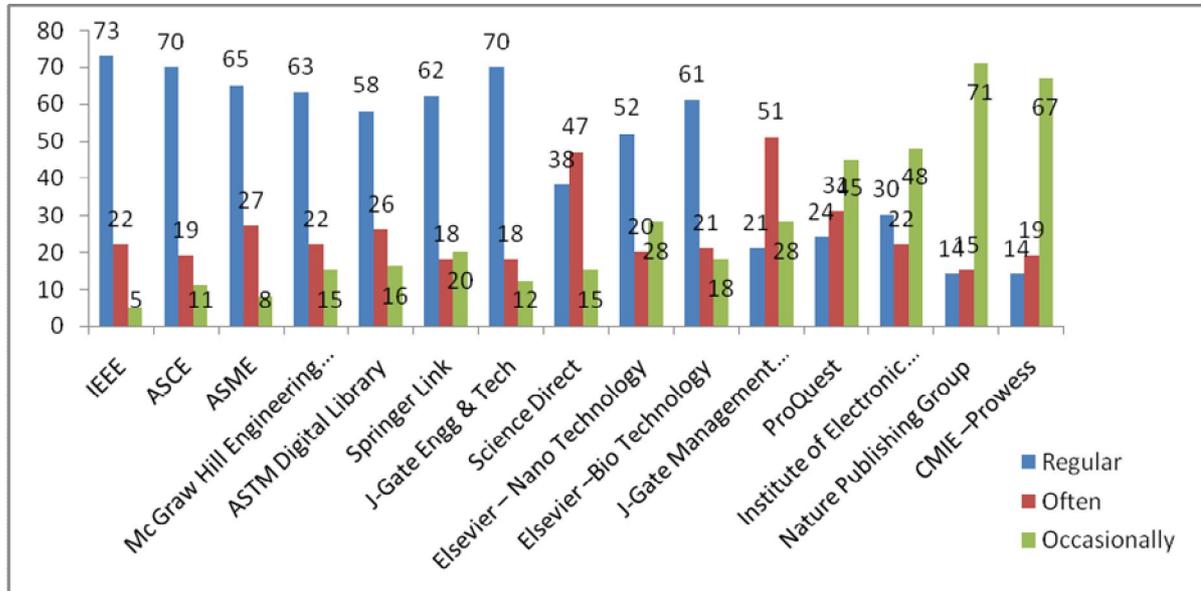


Table 7: Purpose of Using-wise Respondents

Sl. No	Discipline	% of respondents
1.	Information	16%
2.	Project	38%
3.	Research	29%
4.	Reference	17%
5.	Total	100

Fig. 7: Purpose of Using-wise Respondents

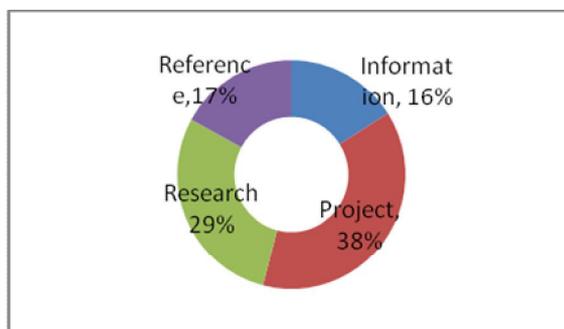
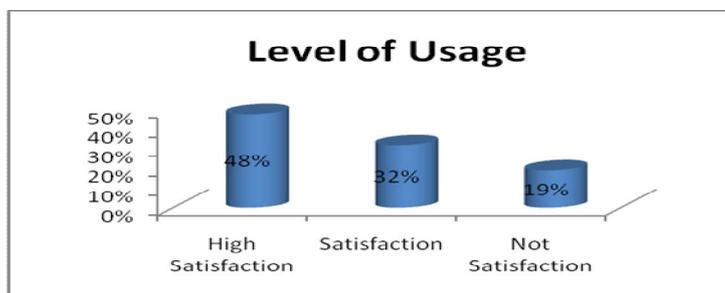
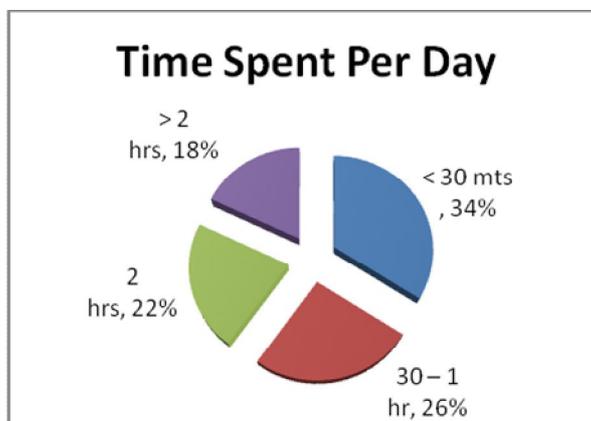


Table 8: Level of Usage wise Respondents

Sl. No	Discipline	% of respondents
1.	High Satisfaction	49%
2.	Satisfaction	32%
3.	Not Satisfaction	19%
4.	Total	100

Fig. 8: Level of Usage wise Respondents**Table 9: Time spent per day wise Respondents**

Sl. No	Discipline	% of respondents
1.	< 30 mts	34%
2.	30 – 1 hr	26%
3.	2 hrs	22%
4.	> 2 hrs	18%
5.	Total	100

Fig. 9: Time spent per day wise Respondents

FINDINGS, SUGGESTIONS AND CONCLUSION

As expected a wide variety of data was collected from the sample population, but the main findings suggested that although all respondents do use some SNS, only a limited number of SNS were being used frequently in order to determine whether the degree of choice influences on attitudes towards SNS Based on the analysis the following findings are listed below.

FINDINGS

1. More than half of the respondents (62%) are female and the remaining 38% of respondents are male.
2. Majority 71% of the respondents are from the age group of 21 - 25 years followed by 19% of the respondents belonging to 26 - 30 age groups.
3. 66% of the respondents have the PG department followed by 34% of the respondents belonging to the UG department.
4. 32% of the respondents are from the BE EEE, 29% of the respondents are from BE ECE, 22% of the respondents are from BE Mech and 17% of the respondents are from BE EIE.
5. More than half of the respondents (59%) are from the urban areas 35% of respondents are from semi urban area and 16% of them are from rural area.
6. Purpose for using E – Journals that 38% of the respondents belonged to the project. 29% belonged to the research. 17% are from the reference. 16% are from the belong to information circle.
7. 34% use it for less than 30mts, 26% of the respondents spent more than 30 minutes to one hour per day.
8. Regarding the level of usage of the e journals by the respondents: 49% voted as high satisfaction, 32% as satisfaction and 19% of the respondents have expressed it as not satisfaction.
9. The E Journals used frequently of different items was rated as regular, often and occasionally. 73% as regular, 22% as often and 5% as occasionally as far as *Institute of Electrical and Electronics Engineers (IEEE)* is concerned, 70% rated it as regular, 19% as often, 11% as occasionally as far as *American Society of Civil Engineers (ASCE)* , 65% as regular and mere 15% as occasionally used *American Society of Mechanical Engineers(ASME)*. Regarding McGraw Hill Access Engineering Library 63% rated it as regular, 22% as often, 15% as occasionally, 58% as regular and 26% as often for *American Society for Testing and Materials Digital Library (ASTM)* 62% have rated it as regular, 18% as often, 20% as Springer Link. For *J-Gate Engineering & Technology* 70% rated it as regular 18% as often. Regarding Science Direct 38% rated it as regular, 47% as often and 15% as occasionally.

For Elsevier – Nano Technology 52% have rated it as regular, 28% as occasionally. As far as Elsevier – Bio Technology is concerned majority of 61% rated it as regular, 21% as often. J-Gate – Management Sciences majority of 51% rated it as often, 28% as occasionally. The

reaming ProQuest is concerned 45% rated it as occasionally, 31% as often. The next one is Institute of Electronic Library (IEL) wherein 48% have rated it as occasionally, 30% as regular. For Nature Publishing Group majority of 71% have rated it as occasionally, 15% as often. The final one is CMIE –Prowess the majority of 67% rated it as occasionally and 19% rated it as often.

TESTING OF HYPOTHESIS

1. On the basis of the data, it is calculated that the null hypothesis (H_0) is accepted because the calculated value of $\chi^2_{0.05} = 11.07$ between gender and nativity and the uses of E -Journals is less than (4.03), table value (11.07) at 5% level of significance. The related relationship is positive.
2. There is a negative relationship between age of the respondents and the period of used satisfaction of the respondents using of E -Journals.

It is calculated from the variable namely the age of respondents and the level of usage by the respondents showed a negative relationship = **-0.78**.

SUGGESTIONS

A few suggestions are framed to fasten the SNS activities in the college.

- The timings of the internet service should be increased and if possible, the service should be made available round the clock so that the users can make maximum use of the internet (E -Journals) facility.
- There is a need for E -Journals with the latest specifications and versions. So that the users can use E -Journals telephony, video – conferencing, chatting and other useful services of the E –Journals.
- There should be complete campus networking with the internet (E -Journals) browsing facility connecting the teachers` rooms as well as hostels.
- The problem of slow connectivity should be overcome by increasing the bandwidth.
- Sites providing only entertainment should be locked so that the staff would not unnecessarily use E -Journals.
- Printing facility should be provided in the internet section of the colleges so that the users can get printouts of their study material and other important documents at nominal rates.
- Some orientation training programme may be organized by the colleges at regular intervals so that the maximum users can improve their excellence or proficiency in the E -Journals for academic purposes.
- All the academic news should be provided at the college website and it should be regularly updated. Information regarding the popular and the latest websites with their addresses should be displayed on the notice board in the computer centre.

- Capacity of servers should be increased and firewalls should be installed for protection from viruses.

Some of the major electronic journal publishers are:

- Academic Press IDEAL (International Digital Electronic Access Library) <<http://www.apnet.com>>
- Blackwell's Electronic Journal Navigator. <<http://navigator.blackwell.co.uk/>>
- Dialog@CARL <<http://Dialog.CARL.org>>
- EBSCO <<http://www.EBSCO.com>>
- Lexis/Nexis. <<http://www.lexis-nexis.com>>
- OCLC <<http://www.OCLC.org/OCLC/menu/eco.html>>
- Project Muse/ Johns Hopkins University Press <<http://muse.jhu.edu>>

CONCLUSION

In the, world of knowledge economy, the guest of knowledge has the capability to takes one to unparalleled heights. When libraries with their bound volumes of books have been catering to this need, they are supplemented by the soft copies of materials. It is no doubt that the e-journals will play a key role in the acquisition of knowledge by the needy in the future.

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