INTERNET SEARCHING AND USAGE BY UNDERGRADUATE STUDENTS: A USER'S STUDY OF NTR UNIVERSITY OF HEALTH SCIENCES, ANDHRA PRADESH

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ABSTRACT

This study was carried out in order to determine Internet searching and usage by the undergraduate students of Dr.NTR University of Health Sciences, Andhra Pradesh, and a review of literature was done on information and communication technologies (ICTs) and its importance in education. A description of Internet and its actual use by lecturers as well as students were also reviewed. Data was obtained from 235 undergraduate students of the institution with the use of a questionnaire. Information collected showed that majority of the respective colleges and University Campus, Vijayawada. Students accessed the Internet from their colleges, cyber cafés, and own arrangements. It also revealed that majority of the respondents were Internet literate with 48.50% of the respondents browsing the Internet daily; 25.75% weekly, 11% fortnightly and 14.750% monthly. It further revealed that the most used Internet facilities are the e-mails, WebPages, search engines, and chatting facilities for communication (with friends, families, lovers, colleagues and lecturers), academic activities and for sourcing of information and knowledge. The benefits of Internet use and the various problems encountered from its use were also revealed. Suggestions and recommendations were proffered based on the findings of the study.

Key words: Internet usage, Internet access, Search strategy, Digital library

INTRODUCTION

Information and Communication Technology (ICT) is the scientific, Technological and Engineering Medical, discipline and the management technologies used in the handling of information, processing and application related to computers. ICT is also defined as the term used to describe the tools and processes to access, retrieve, store, organize, manipulate, produce, present and exchange information by electronic and other automated means. These include hardware's, software and telecommunications in the form of personal computers, scanners, digital cameras, handheld/ PDAs, phones, faxes, modems, CD and DVD players and recorders,

digitalized video, radio and TV and programs like database systems and multimedia applications (Gwary, 1988). Of these, there are the traditional and modern technologies of disseminating information. The traditional ICT products are the printed page, radio, television, films and so on while the modern Technologies include the Internet, e-mail, voicemail, facsimile technology, electronic bulletin board, cellular telephones, CD-ROMS among others. These different tools are now able to work together, and combine to form-networked world.

LITERATURE REVIEW

The Internet is a globally interconnected set of computers through which information could be quickly accessed. Internet has become an invaluable tool for learning, teaching and research. Internet could be regarded as technology evolved in furtherance of the concept of paperless society. It is a super high wave invention, which is already advancing the cause of humanity of the greatest height especially in this millennium (Onatola, 2004). The Internet provides such facilities as Electronic Mail, Telnet, On-line Searching, Electronic Publishing, User Group/Listen, Usenet, Archie, Gopher, File Transfer Protocol, Veronica, Mosaic and World Wide Web (WWW).

The Internet sometimes simply called "the Net" is a worldwide system of computer network- a network of networks in which users at any one computer can, if they have permission, get information from any other computer (and sometimes talk directly to users at other computers). It was conceived by the Advanced Research Projects Agency (ARPA) of the U.S. government in 1969 and was first known as the ARPANET. The original aim was to create a network that would allow users of a research computer at one university to be able to "talk to" research computers at other universities. Today, the Internet is a public, cooperative, and self-sustaining facility accessible to hundreds of millions of people worldwide. The Internet has broken down barriers of communication and information access from anywhere in the world. It is often referred to as "Information Highway" because of its capacity to transmit a vast amount of information to anybody anywhere in the world. It is fast, reliable and does not have much restriction on content, format or geographical location. It also has a wide range of facilities which assist users to access the almost infinite information on the net. It thus offers the opportunity for access to up to date research reports and knowledge globally. It has thus became an important component of electronic services in companies, organizations, government, individual set-up as well as institutions especially libraries.

Many students have examined the information searching behavior of internet users. Singh presented the results of a study on the use of internet by the librarians in Malaysia. The findings revealed that 90% of respondents used internet for work related purposes of which most of the respondents were recent users. Naushad Ali conducted a study at Aligarh Muslim University, Aligarh. The study showed that more than 50% of the study population was satisfied regarding the timings of the internet services, but were not satisfied with staff's cooperation, and reservation facility. Chandran conducted a study on use of internet resources and services S.V University, Tirupati, which showed that more than 56% of respondents used internet for accessing information. it was found that web and e –mail services of internet were used by a majority of the respondents. A survey of use of internet facility at the Guru Nanak Dev University, Amritsar was conducted by Kaur, which indicated that all respondents used internet for sending e-mail and 82% for web browsing. More than 60% of the respondents used internet for primary information, 38% for secondary and only 15% used it for consulting OPACs.

Kalichman et al conducted a survey on the internet access and use for health information among people living with HIV-AIDS. They found that majority of people were not aware about the availability of health information on internet.

BACKGROUND INFORMATION ABOUT NTR UNIVERSITY OF HEALTH SCIENCE

The Government of Andhra Pradesh has the distinction of establishing the first University of Health Sciences fulfilling the recommendations of several committees. Thus the "Andhra Pradesh University of Health Sciences" was established by Act No.6 o the Andhra Pradesh legislature and was inaugurated on 9-4-1986 by the late Sri N.T.Rama Rao, the then Chief Minister of Andhra Pradesh. The University of Health Sciences started functioning at Vijayawada from 01-11-1986. After the death of its founder Sri N.T. Rama Rao the University was named after him as NTR University of Health Sciences, Andhra Pradesh with effect from 2.2.1998 vide Act No.4 of 1998.

OBJECTIVES OF THE STUDY

This study aims to determine Internet Searching and usage by the undergraduate students of NTR University of Health Science, Vijayawada, and Andhra Pradesh. The objectives of the study are the following:

- Determine the adequacy of provision and access to Internet by the undergraduate students of this institution.
- To find out the extent of use of the internet and its resources at NTR University of Health Sciences.
- Which of the Internet facilities are mostly being used?
- Determine benefit of Internet use to these students.
- to understand about the research tools of the NTR University of Health Sciences,
- To identify the problems faced by the internet users.

METHODOLOGY

The study was limited to undergraduate students of NTR University Health Sciences of four faculties as follows

1. Faculty of Medical Sciences
2. Faculty of Dental Sciences
3. Faculty of Nursing
4. Faculty of Physiotherapy

A questionnaire was designed and distributed to 235 respondents to of the mentioned institutes and faculties. The samples for this study were drawn through random selection method. To find out the real users and non users of the internet a questionnaire was distributed among the selected sample in the institutes and faculties covered .all the respondents selected as sample were familiar with the computer and the internet.

Table -1 Frequency distribution of Respondents

Faculty	Frequency	Percentage
Medical	87	37.02
Dental	58	24.70
Nursing	49	20.85
Physiotherapy	25	10.63
Ayurvedic	16	6.80
Total	235	100.00

Table 1 shows that 37.02% (87) of the respondents were from the faculty of medicine.24% (58) were from the Faculty of   Sciences, 20.85 %(49) were from the Faculty of Nursing, 10.63% (25) were from the Faculty of Physiotherapy, 6.80 %(16) were from the Faculty of Ayurvedic. This is an indication that all the faculties and colleges within the university were well represented in the survey.

Table- 2 Internet Search Literacy

Internet Search literacy	Frequency	Percentage
Yes	203	86.38
No	21	8.94
No response	11	4.68
Total	235	100.00

Table 2 shows that 86% (203) of the respondents were internet literate while only 8.94 %(21) were not internet literate and only 4.68 %(11) did not respond. This showed that majority of the undergraduate students of NTR University of Health Sciences internet search literate and thus able to browse/surf the net, e-mail friends, download material, research works, etc from the internet and communicate with their lecturers and loved ones.

Table-3 Access to internet facilities

Access	Frequency	Percentage
Yes	218	92.77
No	17	7.23
Total	235	100.00

The respondents were asked whether they have access to internet facilities around them, their responses as depicted in table 3 which showed that 92.77%(218) of the respondents had access to internet facilities7.23%(17) do not have access to internet. It can be inferred that despite the fact that the university does not provide much of the internet facilities, the students still patronized and accessed internet facilities through the privately owned cyber cafes in towns where the university annexes were located. It can also be rightly deduced (see tables 2 and 3) that the students internet literacy is a factor of it accessibility and use (se tables 4-7) as the percentage (number) that indicated that they have access to the facilities.

Table-4 Frequency of internet use

Frequency of Use	Frequency	Percentage
Daily	86	35.60
Weekly	92	39.15
Fortnightly	33	14.04
Monthly	24	10.22
Total	235	100.00

Table 4 shows that showed the respondents frequency of use of the internet35.60% (65) of the respondents browsed the net daily,39.15%(92) surfed the net weekly,14.04%(33),browsed Fortnightly and 10.22%(24) browsed monthly. From this result it could be seen that a good percentage of the respondents browsed the internet regularly as 75.74. %(178) used it weekly for sending e-mails, academic purposes and getting information.

Table-5 Internet Facility used by the respondents

Internet facilities	Frequency	Percentage
E-mail	63	26.80
Web pages	92	39.15
Search engines	34	14.48
News group	22	9.36
Discussion group	24	10.21
Total	235	100.00

The respondents were asked which internet facilities are available for their accessibility. Their responses as shown in table 5 indicated that 26.80 %(63) made good use of e-mails, 39.15(92) made use of web pages like those of academic materials and other university sites,14.48% (34) made use of search engines,9.36 % (22) used news groups and only 10.21% (24)

Table-6 duration of internet Use

Duration of use	Frequency	Percentage
0-1hrs	112	47.67
1-2hrs	82	34.90
2-3hrs	25	10.63
3-4hrs	8	3.40
4-5hrs	5	2.13
Above 5hrs	3	1.27
Total	235	100.00

Table 6 showed that the duration of respondents' internet search time. It was shown that 47.67% (112) of the respondents used the internet for between 0-1hr , 34.90% (82) surfed the net for1- 2 hours 10.63%(25) surfed the net for2- 3 hours,3.40%(8) surfed the net3- 4 hours ,2.13%(5) surfed the net 4-5 hours and 1.27% (3) surfed the net 5 and above hours. Majority ay not be able to afford long hours of internet browsing probably due to economic reasons, the need to study for their academics and some other social reasons.

Table-7 Purpose(s) of Browsing

Purpose(s)	Frequency	percentage
Academic activities	104	44.26
Sending messages (e.g E-mail)	62	26.38
Information/knowledge	36	15.31
Entertainment /leisure	18	7.67
Distance learning programme	15	6.38
Total	235	100.00

Table 7 revealed respondents purpose of browsing the internet. The data showed that 104 out of the 235 majority respondents signified that they used the internet academic activities getting information for various reasons,62 of them are used it sending messages,36 of them are used to information /knowledge ,18 of them are used it Entertainment/Leisure, and finally 15 of them used to it Distance Learning Programmes. It can be seen from the data that majority of the respondents browsed academic activities. Sending message browsed purposely for sending electronic mails, or messages to their friends, relatives, loved ones, lecturers as well as colleagues.

Table-8 Problems Faced by Internet Users

Problem	Frequency	Percentage
Frequent loss of signal	76	32.34
Frequent black out/power outage	47	20.01
High cost of browsing	38	16.17
Slow internet access speed	33	14.04
Too long to down load/view of web pages	26	11.06
Inadequate browsing skill	15	6.38
	235	100.00

Table 8 showed the problems respondents usually encountered in the use of internet. The data ranked in decreasing order revealed that frequent loss of signal 32.34% (76) ,frequent black out/power outage 20.01%(47); High cost browsing 16.17%(38); slow internet access speed 14.04% (33); Too long to down load /view of web pages 11.06% (26)and finally 6.38% (15) inadequate browsing skill. One can infer that loss of signal, power outage, the high cost of browsing the usually slow internet connection/accession were major factors that could limit the undergraduate students of NTR University of Health Sciences the effective use of internet.

Suggestions and Recommendations

It is glaring that internet access provision at NTR University of Health Sciences is grossly inadequate. The major source of internet access comes through the private cyber café business centers around the university and branches environment. This makes the cost of access very high and unaffordable to the students who usually pay through their pocket money for food and other provisions.

- Faculties and Departmental libraries are equipped with the internet facilities as well.
- Faculty member's offices should also be equipped with the internet facilities.

- Faculty members, librarians as well as the university students should be trained in the use of internet. This can be done by drawing up a calendar of training programmes for these groups of people.
- More computers with the latest specifications and multimedia kit should be installed so that users can use internet telephony, video-conferencing, chatting and other useful services of the internet.
- Problem of slow connectivity should be overcome by using or subscribing to higher bandwidth connectivity.
- Sites providing only entertainment or pornographic should be locked so that students should not unnecessarily use computers.

CONCLUSION

The internet has emerged as the single most powerful vehicle for providing access to unlimited information. The internet is and inseparable part of today's educational system. The dependency on the internet and its services is increasing on a daily basis and the university community is depending more and more on the internet for their various educational purposes. The internet facility has enabled the lectures and students to enhance their academic excellence by providing them the latest information and access to the worldwide information. In order to make the internet more beneficial, the library staffs who have acquire a good deal of efficiency in the collection, organization and retrieval of information should feel duty bound to see that the users are able to obtain right information at the right time. They should organize and classify the information on a website in such a way that the users are able to find easily the information they need for their studies and research purposes. The library services supplemented by internet services can be of great assistance to the users in getting the right information at the right time.

REFERENCES

1. Kumar, Rajeev, and Kaur, Amritpal (2006). Internet use by teachers and students in engineering colleges of Punjab, Haryana and Himachal Pradesh States of India: an analysis, Electronic Journal of Academic and special Librarianship,Vol.7 No.1(spring).

2. Ojedokun, A (2001). Internet access and usage by students of the University of Botswana. African Journal of Library Archival and Information Science, Vol.11 No.2 pp.97-107.

3. Bavakutty, M. and Salih Muhamad, T.K (1999). Internet services in Calicut University .Conference, Academic Libraries in the Internet Era. Ahmadabad, India: Proceeding of the 6th National Convention on Academic Libraries in the Internet Era. pp 37-44.

4. Anasi, S. (2006). Internet use pattern of undergraduate students at the University of Lagos, Nigeria. University of Dares Salaam Library Journal, Vol 8(1&2): p.1.

5. Singh, D. the use of Internet among Malaysian Librarians. Malaysian Journal of Library and Information Sciences,3(2)(1998)1-10.

6. Naushad Ali, P.M. Internet and its use in Aligarh Muslim University: A Survey. Conference on Information Services in a Networked Environment in India. Organized by

INFLIBNET. 18-20 December, Ahmadabad. p.178-.82.

7. Chandran, D. Use of internet resources and services in S.V.University, Tirupati. Conference on Information Services in a Networked Environment in India. Organized by INFLIBNET. 18-20 December, Ahmadabad.124-127.

8. KaurA, Internet facility at GNDU: A survey National seminar on Academic Libraries in the Modern Era. Organized by IASLIC, 4-6 December 2000, Bhopal.p.119-124.

9. Badu, E.E. Internet awareness and use in the University of Ghana, Information Development, 21,(4)(2005) 260-268.

10. Asemi, A. information searching abits of Internet users: A case study on the Medical Sciences University of Isfahan, Iran. Webology.2 (1) (2005). Available at http//www.webology.ir/2005/v2n;/a10.html.

11. Mahajan P. Internet use by Researchers: A study of Punjab University, Chandigarh, Library Philosophy & Practice,8 (2) (2005). 1-4.

12. Kaur, A & Manhas, S (2008). Use of internet services and resources in the engineering colleges of Punjab and Haryana (India): A study. The International Information & library Review 40,10-20.

13. Lyon, B.J., Stavri, P,Z., Hochestin, D.C., & Nardini, H,G. (1998). Internet access in the libraries of the national network of Libraries and Medicine. Bulletin of the Medical Library Association 86.4: 486-490.

14. Luambano.I., and Nawe, J. (2004). Internet use by students of the University of Dares Salaam. Library Hi Tech News, 10: 13-17.

15. Nazim, M. (2008).Information searching behaviour in the internet age: A users' study of Aligarh University. The International Information and Library Review, 40: 73-81.

16. Ndinoshiho J.M. (2010). The use of electronic Information services by undergraduate nursing students at the University of Nambia's Northern Campus: A descriptive study. Information Development 26: 57-65.

17. Salaam, M.O. and Degbore, A.M. (2010). Internet access and use by students of private universities in Ogun State, Nigeria. Library Philosophy and Practice 2010(march).

18. Tadasad, P.G., Maheswarappa, B.S., and Alur, S.A.(2003). Use of internet by undergraduate students of P.D.A College of Engineering. Gulbarga. Annals of Library and information Studies, 50(1), 31-42.

19. Sharma, R., Verma, U., Sawhney, V.Arora, S. and Kapoor, V.(2006).Trends of Internet use among medical students. JK science: Journal of Medical Science & Rsearch, 8 (2), 101-102.

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