

## USE OF INTERNET BY THE USERS OF LIBRARIES OF SRI VENKATESWARA UNIVERSITY AND UNIVERSITY OF HYDERABAD: A SURVEY

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*Analysis of data collected from a stratified random sample of 1,650 users of libraries of Sri Venkateswara University, Tirupati, and University of Hyderabad, Hyderabad, with regard to their use of Internet using questionnaire method, reveals that most of the users (94.36%) have knowledge to use computers and Internet. Most of the users (96.61%) replied that they have access to Internet facility in their libraries. More than one-third of the users (34.91%) use Internet facility daily and 29.92 per cent of the users spend on an average 2 hours per week for using Internet. Majority of the users (78.69%) are using Google search engine. Majority of the users (78.69%) are either satisfied or highly satisfied with regard to Internet facilities available in their respective libraries. 'Insufficient number of computers', 'insufficient time slot', and 'lack of awareness on search techniques' are the major problems faced by the users in the use of Internet facilities. Significant differences have been found among the various groups of users viz., users of SVU and UH, arts and science disciplines, men and women, rural and urban, and research scholars and students, regarding certain aspects of Internet usage. A number of suggestions have been made to increase the usage of Internet facilities in the libraries of Sri Venkateswara University and University of Hyderabad.*

**Key words :** Users' Survey, University libraries, Internet use, ICT

### 1. INTRODUCTION

Information and Communication Technology (ICT) is used to store, retrieve, manipulate, transmit or receive information in a digital form and make it available to a wide range of users in all spheres of knowledge. A group of computers connected together for sharing the resources is called a network. Internet is a network of networks. It has become the most popularly used electronic information source in academic and research institutions all over the world by the academic community. Internet makes it possible for users to have access to wide range of up-to-date information irrespective of their geographical location. It changed conventional libraries into knowledge centres. Recent advances in ICT have not only increased tremendously the ability of access, store and process information within the library but also have brought significant changes in the concept, organization, functioning and management of library and information systems. University libraries are providing Internet facilities to their users to access e-resources. It is necessary to conduct users' surveys to examine how best the Internet services are being utilized by the users of these libraries so that the necessary steps can be undertaken to

improve Internet services. Hence, the present study has been undertaken to examine the use of Internet by the users of libraries of Sri Venkateswara University (SVU) and University of Hyderabad (UH). A brief profile of these university libraries has been given for an effective understanding of the results.

### **Sri Venkateswara University Library**

Sri Venkateswara University came into existence as a teaching and affiliating University on the 2nd September, 1954 with an area of 1,000 acres. The University Library was started in the year 1955. It is kept open for readers from 8-00 a.m. to 8-00 p.m. on all working days except on Sundays and holidays, on which days the library will function from 10-00 a.m. to 5-00 p.m. As on today, the university library has 3,57,072 documents which include books, back volumes of periodicals, and theses and dissertations. It is subscribing to 420 Indian print journals. SVU Library has established a digital library in the year 2006 to provide access to about 4,750 e-journals and databases received through UGC-INFONET Programme, and open access resources. The digital library has 34 computer systems to use e-resources. The library follows Open Access system for its collection. The library serves the information needs of about 8000 users viz., Students, Research Scholars, Teaching and Non-teaching staff of 4 constituent colleges of S.V.University namely SVU College of Arts, SVU College of Sciences, SVU College of Commerce, Management and Computer Science, and SVU College of Engineering. The library offers Book lending service, Readers' Advisory service, Inter-library loan facility, Reference service, and Photocopying service. As on today, 10 professionals, 4 semi-professionals and 48 supporting staff are working in the library. The library is partially computerized.

### **Library of University of Hyderabad, Hyderabad**

The University of Hyderabad (UH), a premier institution of post-graduate teaching and research in the country, was established in the year 1974 as a Central University with an area measuring about 2,324.5 acres. The University library was started in the year 1975 and it was renamed as 'Indira Gandhi Memorial Library' in the year 1989. It is kept open for readers from 9.00 a.m. to 12-00 midnight on all working days, and from 9.00 a.m. to 5.30 p.m. during Sundays and holidays. The library is centrally situated in the campus and easily accessible to all the departments. As on today the total collection of the library is 3,84,733 which includes books, back volumes of periodicals, theses and dissertations, and CD-ROM/DVDs. The library is providing access to about 9000+ online journals and databases received under UGC INFONET Programme. In addition to them, the library is subscribing to 639 print journals and 33 e-journals. The library follows Open access system for its collection. It serves the information needs of the Students, Research scholars, Teaching and non-teaching staff. The library offers Circulation and Reader services, IT and other Information services, Document delivery service, Inter-library Loan, Information literacy programmes, and Reprography services. As on today, 16 professionals, 21 semi-professionals and 27 supporting staff are working in the library. The library is fully computerized.

## **2. REVIEW OF LITERATURE:**

A few significant studies that have been conducted on the use of Internet in academic libraries are discussed in the following paragraphs.

Fasae and Aladeniyi<sup>1</sup> conducted a study on Internet use by students of Faculty of Science in two Nigerian universities to find out the purpose, frequency, place of accessing Internet, mostly used Internet sources and problems faced while using Internet. Mishra, Yadava and Bishat<sup>2</sup> made a survey to know Internet utilization pattern of the users of G.B. Pant University of Agriculture and Technology, Pantnagar. A majority of the students ( 85.7%) use Internet. Sixty one point five per cent of the men students and 51.6 per cent of the women students use Internet for preparing assignments. A majority of men ( 83.1% ) and women ( 61.3% ) students expressed that they face the problem of 'slow speed of Internet'. The study made by Nagi Reddy and Ali<sup>3</sup> reveals that the majority of respondents use Internet for one hour. It reveals that most of the users use Internet for academic purpose. It also indicates that most of the users use the search engine 'Google'.

A study made by Surendra Babu, Sarada and Ramaiah<sup>4</sup> on the use of Internet resources by the academic community of Sri Venkateswara University (SVU), Tirupati, reveals that the users from all the branches of science are making use of Internet resources better than the users of social sciences and humanities. The authors made recommendation for providing training to users in the use of Internet at the beginning of each semester to enhance the usage of Internet sources.

A study was conducted by Nazim and Saraf<sup>5</sup> on research scholars and faculty members of Banaras Hindu University, to know the extent to which Internet users are aware of and make use of the Internet and also to identify the problems faced by them. The results revealed that 61 per cent of the users access Internet for two hours per day. Two-thirds of them use Internet for browsing online journals and nearly one-fifth of them (20.53%) use Internet for general purposes. Google and AltaVista are the widely used search engines. The majority of users (57.5%) opined that they needed training in using Internet.

A study made by Khare, Thapa and Sahoo<sup>6</sup> analyzed the level of satisfaction of 100 Ph.D. scholars of Dr.H.S.Gour University, Sagar, M.P., with Internet services and reasons for non-use of Internet. The study reveals that 66 per cent of scholars use Internet, and 42 per cent of them use Google search engine to access information. One-third of the respondents are facing difficulties in using Internet. Forty five per cent of them are not satisfied with Internet facilities available in their library.

A study was conducted by Biradara and Sampath Kumar<sup>7</sup> to know the use of search engines and search strategy followed by research scholars and faculty members of Physics in various universities of Karnataka state. The study shows that the majority of respondents (84.33%) used search engines to retrieve information from the Internet. Among the search engines, the most frequently used search engines are Google (72.85%) and Yahoo (53.57%). Most of the respondents (84.33%) are aware of various search techniques for retrieving information from search engines.

A study was conducted by Sarasvathy and Giddaiah<sup>8</sup> on 100 users of Internet Centre of Mysore University Library, Mysore, with regard to their use of Internet resources. The results show that half of the users have nearly 8 years experience in using Internet. Most of the users (96.59%) are using Internet for E-Mail service. Majority of the users (62.5%) are facing problems in accessing Internet. Among them, 29.09 per cent of users expressed that the time allotted to them is insufficient.

A study made by Bamigboye<sup>9</sup> reveals that the majority of users of Olabisi Onabanjo University, Ago-Iwoye, Nigeria, are dissatisfied with the Internet facility. Ani<sup>10</sup> carried out a survey to find out the extent of Internet access and use by undergraduate students of three Nigerian universities. The findings of the study reveal that Internet service is extensively used by undergraduate students. Most of the students are using Internet in commercial Internet cybercafés due to lack of infrastructure and poor Internet connectivity in the libraries of these universities.

Loan<sup>11</sup> conducted a questionnaire based survey on Internet use among college students in Kashmir valley. The study showed that mostly students of computer science make use of Internet. Information overload and lack of knowledge on search techniques are the most commonly faced problems by the students of all faculties. The study carried out by Joteen Singh, Madhuri Devi and Rayachaudhury<sup>12</sup> on the use of Internet based e-resources by students, research scholars, teachers and non-teaching staff of Manipur University revealed that low speed Internet access, frequently interrupted power supply and lack of required full-text journals are the major problems faced by them.

It is evident from the above discussion that no study has been conducted on the use of Internet by the users of libraries of SVU and UH. Hence, the present study has been undertaken.

### **3. OBJECTIVES OF THE STUDY**

The specific objectives of the study are:

1. To examine the knowledge of users in using computers and Internet;
2. To determine place, frequency and average number of hours spent per week in using Internet;
3. To examine the purpose of using Internet;
4. To know the most frequently used search engines;
5. To examine the satisfaction of the users with regard to Internet facilities available in their respective libraries;
6. To examine the views of users with regard to user education programmes; and
7. To know the differences, if any, among the various groups of users of libraries of SVU and UH, in their views with regard to the use of Internet.

### **4. METHODOLOGY**

Survey method of research has been adopted in the present study.

#### **4.1. Selection of sample**

As on June 2011, the total number of students and research scholars, who are using the libraries of S.V.University and University of Hyderabad, is 8,209. Out of the total population, 4,705 users belong to S.V.University and 3,504 users belong to University of Hyderabad. As the population is large in terms of cost, time and efforts involved, the investigator has selected a sample of 1,650 users (20.1% of the total population) using Proportionate Stratified Random Sampling technique. Out of 1,650 selected for the study, 944 users (57.2%) belong to S.V.University and 706 users (42.8%) to University of Hyderabad.

## **4.2. Data collection**

A questionnaire was designed for the collection of data. A pilot study was conducted on 50 users and final questionnaire is prepared by incorporating the suggestions made by the users. Copies of questionnaire were distributed to 1,650 users and filled in questionnaire were collected from them personally during the period from January to April in the year 2012.

## **5. ANALYSIS OF DATA AND DISCUSSION OF RESULTS**

The data collected from the users was analyzed according to the objectives stated using SPSS (Statistical Package for Social Sciences), presented in the form of tables and discussed the results in the following paragraphs.

### **5.1. Knowledge of computers and Internet**

In this digital era, it is essential for the users of university libraries to have knowledge to use computers and Internet not only for their day-to-day activities but also to utilize the e-resources efficiently and effectively provided by their respective libraries for meeting their information requirements.

Hence, a question has been posed to the users of libraries of SVU and UH to examine whether they have knowledge to use computers and Internet. The responses provided by them are shown in Table 1.

It is evident from Table 1 that most of the respondents (94.36%) replied that they have knowledge to use computers and Internet and only 5.64 per cent replied negatively in this regard. It is also evident from the table that there are significant differences between the users of SVU and UH, users of arts and science disciplines, and men and women users with regard to possessing knowledge to use computers and Internet as indicated by the Chi-square values, which are significant at 0.05 level with one degree of freedom. That means, more number of users of UH, users of science, and women users have knowledge to use computers and Internet compared to the users of SVU, users of arts and men users respectively.

It is obvious from the table that there are no significant differences in this regard between the research scholars and students, and rural and urban users as evidenced by the Chi-square values, which are not significant at 0.05 level with one degree of freedom.

Table 1

Distribution of users according their knowledge to use computers and Internet, library, category, discipline, gender and area ( in percentage )

Reply	Library		Category		Discipline		Gender		Area		Total
	SVU	UH	Research Scholars	Students	Arts	Science	Men	Women	Rural	Urban	
Yes	91.42	98.30	95.54	93.60	90.66	96.60	92.86	97.42	93.95	95.20	94.36
No	8.58	1.70	4.46	6.40	9.34	3.40	7.14	2.58	6.05	4.80	5.64
<b>Total</b>	<b>100</b> (n=944)	<b>100</b> (n=706)	<b>100</b> (n=650)	<b>100</b> (n=1000)	<b>100</b> (n=621)	<b>100</b> (n=1029)	<b>100</b> (n=1107)	<b>100</b> (n=543)	<b>100</b> (n=1108)	<b>100</b> (n=542)	<b>100</b> (N=1650)

- $\chi^2$  ( SVU – HU ) : 35.956 : df = 1 : TV = 3.84 : Sig at 0.05 Level
- $\chi^2$  ( Research scholars-Students ) : 2.783 : df = 1 : TV = 3.84 : NS at 0.05 Level
- $\chi^2$  ( Arts – Science ) : 25.678 : df = 1 : TV = 3.84 : Sig at 0.05 Level
- $\chi^2$  ( Men – Women ) : 14.231 : df = 1 : TV = 3.84 : Sig at 0.05 Level
- $\chi^2$  ( Rural – Urban ) : 1.069 : df = 1 : TV = 3.84 : NS at 0.05 Level

## 5.2. Internet Access

Internet has now-a-days become an important and the most popularly used electronic information source in university libraries as it plays a vital role in meeting the information requirements of students, research scholars and faculty members. Internet makes it possible to access enormous amount of up-to-date information and keep the users abreast of the latest developments in their subjects concerned.

A question has been put to the users to know whether they have access to Internet. The responses provided by them are shown in Table 2.

Table 2

Distribution of users according to their access to Internet, library, category, discipline, gender and area ( in percentage )

Reply	Library		Category		Discipline		Gender		Area		Total
	SVU	UH	Research scholars	Students	Arts	Science	Men	Women	Rural	Urban	
Yes	94.49	99.43	99.54	94.70	93.56	98.45	96.30	97.24	96.75	96.31	96.61
No	5.51	0.57	0.46	5.30	6.44	1.55	3.70	2.76	3.25	3.69	3.39
<b>Total</b>	<b>100</b> (n=944)	<b>100</b> (n=706)	<b>100</b> (n=650)	<b>100</b> (n=1000)	<b>100</b> (n=621)	<b>100</b> (n=1029)	<b>100</b> (n=1107)	<b>100</b> (n=543)	<b>100</b> (n=1108)	<b>100</b> (n=542)	<b>100</b> (N=1650)



$\chi^2$ ( SVU – HU )	:	30.087	:	df = 1	:	TV = 3.84	:	Sig	at 0.05 Level
$\chi^2$ ( Research scholars – Students )	:	28.128	:	df = 1	:	TV = 3.84	:	Sig	at 0.05 Level
$\chi^2$ ( Arts – Science. )	:	28.202	:	df = 1	:	TV = 3.84	:	Sig	at 0.05 Level
$\chi^2$ ( Men – Women )	:	0.984	:	df = 1	:	TV = 3.84	:	NS	at 0.05 Level
$\chi^2$ ( Rural – Urban )	:	0.216	:	df = 1	:	TV = 3.84	:	NS	at 0.05 Level

It is evident from Table 2 that most of the users (96.61%) replied that they have access to Internet in their libraries. The remaining 3.39 per cent of them replied negatively. This may be due to their unawareness of Internet facilities available in their libraries.

It is obvious from Table 2 that there are significant differences between the users of SVU and UH, research scholars and students, and users of arts and science disciplines in their replies with regard to their access to Internet in their libraries concerned as proved by the Chi-square values, which are significant at 0.05 level with one degree of freedom. That means more number of users of UH, research scholars, and users of science disciplines replied that they have access to Internet compared to the users of SVU, students and users of arts disciplines respectively. However, there are no significant differences in this regard between men and women users, and rural and urban users as indicated by Chi-square values, which are not significant at 0.05 level with one degree of freedom.

### 5.3. Frequency of using Internet

It is evident from Table 2 that most of the users ( 96.61% ) informed that they have access to Internet in their libraries. These users were again asked a question to know about their frequency of using Internet. The responses made by them are presented in Table 3.

Table 3

**Distribution of users according to their frequency of using Internet, library, category, discipline, gender and area ( in percentage )**

Frequency of visit	Library		Category		Discipline		Gender		Area		Total
	SVU	UH	Research scholars	Students	Arts	Science	Men	Women	Rural	Urban	
Daily	25.67	45.01	33.08	34.95	36.49	32.87	34.24	34.09	32.90	29.60	34.19
Once in a week	28.14	15.67	22.57	22.70	21.86	23.10	20.54	26.89	21.63	26.40	22.65
More than once in a week	22.98	15.39	18.08	20.70	16.70	21.32	21.76	15.34	23.64	14.40	19.64
Occasionally	23.21	23.93	26.28	21.65	24.96	22.70	23.45	23.67	21.83	29.60	23.53
<b>TOTAL</b>	<b>100</b> (n= 892)	<b>100</b> (n= 702)	<b>100</b> (n= 647)	<b>100</b> (n= 947)	<b>100</b> (n= 581)	<b>100</b> (n= 1013)	<b>100</b> (n= 1066)	<b>100</b> (n= 528)	<b>100</b> (n= 994)	<b>100</b> (n= 600)	<b>100</b> (N= 1594)

$\chi^2$ ( SVU – HU )	:	81.589	:	df = 3	:	TV = 7.81	:	Sig	at 0.05 Level
$\chi^2$ ( Research scholars – Students )	:	5.235	:	df = 3	:	TV = 7.81	:	NS	at 0.05 Level
$\chi^2$ ( Arts – Science )	:	6.486	:	df = 3	:	TV = 7.81	:	NS	at 0.05 Level
$\chi^2$ ( Men – Women )	:	13.714	:	df = 3	:	TV = 7.81	:	Sig	at 0.05 Level
$\chi^2$ ( Rural – Urban )	:	31.291	:	df = 3	:	TV = 7.81	:	Sig	at 0.05 Level

Table 3 presents that a high percentage of the users ( 34.19%) use Internet daily, 23.53 per cent of them occasionally, 22.65 per cent of them use Internet once in a week and the remaining of them ( 19.64% ) use Internet more than once in a week.

It is evident from the table that there are significant differences between the users of SVU and UH, men and women users, and rural and urban users in using Internet in their libraries as indicated by Chi-square values which are significant at 0.05 level with three degrees of freedom. That means, the users of UH, men users, and rural users are using Internet more, compared to the users of SVU, women users, and urban users respectively. However, there are no significant differences in this regard between the research scholars and students and users of arts and science disciplines as evidenced by the Chi-square values, which are not significant at 0.05 level with three degrees of freedom.

#### 5.4. Average time spent on Internet

The users of libraries of SVU and UH were asked to mention the average number of hours spent in a week in using Internet for getting the required information. The replies given by them are presented in Table 4.

It is observed from Table 4 that a high percentage of users (29.92%) spend 2 hours per week on Internet, 26.41 per cent of them spend less than one hour, 25.41 per cent of them spend more than 3 hours, and the remaining of them (18.26%) spend 3 hours.

It is evident from the table that there are significant differences between the users of SVU and UH, research scholars and students, men and women users, and rural and urban users with regard to the time spent on Internet in their libraries as indicated by Chi-square values which are significant at 0.05 level with three degrees of freedom. That means the users of UH, research scholars, men users and urban users are spending more time on Internet compared to the users of SVU, students, women users and rural users respectively. However, there is no significant difference in this regard between the users of arts and science disciplines as evidenced by the Chi-square value which is not significant at 0.05 level with three degrees of freedom.



Table 4  
Distribution of users according to average time spent on Internet in a week,  
library, category, discipline, gender and area ( in percentage )

Time spent	Library		Category		Discipline		Gender		Area		Total
	SVU	UH	Research scholars	Students	Arts	Science	Men	Women	Rural	Urban	
Less than one hour	31.95	19.37	21.79	29.57	27.02	26.06	27.58	24.05	28.27	26.00	26.41
2 hours	31.17	28.35	35.09	26.40	30.12	29.81	27.30	35.23	29.88	32.40	29.92
3 hours	14.57	22.93	16.69	19.32	17.72	18.56	20.45	13.83	18.11	17.80	18.26
More than 3 hours	22.31	29.34	26.43	24.71	25.13	25.57	24.67	26.89	23.74	23.80	25.41
Total	100 (n=892)	100 (n=702)	100 (n=647)	100 (n=947)	100 (n=581)	100 (n=1013)	100 (n=1066)	100 (n=528)	100 (n=994)	100 (n=600)	100 (N=1594)

$\chi^2$  ( SVU – HU ) : 47.265 : df = 3 : TV = 7.81 : Sig at 0.05 Level

$\chi^2$  ( Research scholars – Students ) : 20.393 : df = 3 : TV = 7.81 : Sig at 0.05 Level

$\chi^2$  ( Arts – Science ) : 0.308 : df = 3 : TV = 7.81 : NS at 0.05 Level

$\chi^2$  ( Men – Women ) : 18.256 : df = 3 : TV = 7.81 : Sig at 0.05 Level

$\chi^2$  ( Rural – Urban ) : 4.018 : df = 3 : TV = 7.81 : Sig at 0.05 Level

### 5.5. Place of using Internet

The users can use Internet at central library, department, home, cybercafé and any other place depending upon their convenience. They were asked to mention the place from which they use the Internet. The distribution of users according to the place of using Internet is presented in Table 5.

It is clear from Table 5 that a high percentage of the users (44.92%) are using Internet in the library. The remaining users use at department (28.55%), home (15.18%), cybercafé (10.98%) and other places (0.50%).

It is also evident from the table that more number of users of UH, research scholars, users of science disciplines, men users, and urban users are using Internet at their departments compared to the users of SVU, students, users of arts disciplines, women users and rural users respectively. It is also obvious from the table that more number of users of SVU are using Internet at cybercafé compared to the users of UH.

Table 5  
Distribution of users according to their place of using Internet, library, category, discipline, gender, area ( in percentage )

Place	Library		Category		Discipline		Gender		Area		Total (N=1594)
	SVU (n=892)	UH (n=702)	Research scholars (n=647)	Students (n=947)	Arts (n=581)	Science (n=1013)	Men (n=1066)	Women (n=528)	Rural (n=994)	Urban (n=600)	
Library	44.42	45.51	43.12	46.15	45.96	42.12	44.18	46.40	46.98	41.5	<b>44.92</b>
Department	23.33	35.11	39.26	21.22	23.75	31.29	30.30	25.0	27.57	30.17	<b>28.55</b>
Home	15.78	14.33	15.62	14.89	13.43	16.19	14.35	16.86	14.19	16.83	<b>15.18</b>
Cybercafé	15.78	4.78	10.20	11.51	11.36	10.76	11.82	9.28	8.25	15.5	<b>10.98</b>
Other places	0.69	0.28	0.46	0.53	0.69	0.39	0.56	0.38	0.30	0.80	<b>0.50</b>

Note: Respondents were permitted to tick more than one answer

### 5.6. Purpose of using the Internet

The users access Internet for various purposes such as course work, research work, sending and receiving e-mails, knowing the latest developments and job opportunities. A question has been put to the users to know the purpose for which they use Internet. The replies given by them are shown in Table 6.

Table 6  
Distribution of users according to the purpose of using Internet, library, category, discipline, gender and area ( in percentage ).

Purpose	Library		Category		Discipline		Gender		Area		Total (N=1594)
	SVU (n=892)	UH (n=702)	Research scholars (n=647)	Students (n=947)	Arts (n=581)	Science (n=1013)	Men (n=1066)	Women (n=528)	Rural (n=994)	Urban (n=600)	
Course work	25.33	27.78	21.64	29.67	25.82	26.75	26.92	23.67	26.16	26.8	<b>26.41</b>
Research work	23.77	29.77	46.52	14.04	25.98	27.94	28.80	24.05	25.25	30.5	<b>27.23</b>
E-mail	18.05	25.36	21.79	20.91	22.20	20.73	21.67	20.45	19.01	25.0	<b>21.27</b>
Keeping abreast of the latest developments	22.76	10.97	18.70	16.79	14.11	19.55	16.98	18.75	17.20	18.17	<b>17.57</b>
Job opportunities	11.10	3.28	9.74	6.23	7.06	7.99	8.72	5.49	6.94	8.83	<b>7.65</b>

Note: Respondents were permitted to tick more than one answer.

It is evident from Table 6 that more than one-fourth of users (27.23%) responded that they are using Internet for research purpose. It is also evident from it that 26.41 per cent of them are using Internet for their course work, 21.27 per cent of them for e-mails, 17.57 per cent of them to keep themselves abreast of the latest developments and 7.65 per cent of them for job opportunities.

### 5.7. Most frequently used search engines

A vast amount of information is available on Internet. Users use various search engines to search the information on Internet. A search engine is a programme that searches documents on the World Wide Web for specified keywords and retrieve a list of the documents where the keywords were found. There are various search engines namely Google, Bing, Yahoo, MSN, Alta Vista etc.

A question has been posed to the users to know the search engines used by them for getting the required information. The replies given by them are shown in Table 7.

Table 7  
Distribution of users according to the search engines used,  
library, category, discipline, gender and area ( in percentage ).

Search engine	Library		User		Discipline		Gender		Area		Total (N= 1594)
	SVU (n= 892)	UH (n= 702)	Research scholars (n= 647)	Students (n= 947)	Arts (n= 581)	Science (n= 1013)	Men (n= 1066)	Women (n= 528)	Rural (n= 994)	Urban (n= 600)	
Google	72.71	84.83	76.66	79.09	76.77	78.87	79.36	75.57	76.86	80.17	78.10
Bing	11.24	12.49	13.45	10.67	13.08	11.06	12.10	11.17	12.70	15.17	11.79
Yahoo	25.77	33.12	27.98	29.78	28.40	29.42	26.74	33.71	28.61	29.92	29.05
MSN	19.87	29.37	15.77	21.23	23.41	24.38	21.20	29.73	21.23	28.67	24.03
Others (Netscape, AltaVista etc.)	15.02	19.20	15.92	17.53	16.01	17.37	18.48	13.64	12.37	24.33	16.88

Note: Respondents were permitted to tick more than one answer.

Table 7 clearly shows that the majority of the users (78.10%) are using Google search engine. This result confirms the earlier finding of Nagi Reddy and Ali<sup>13</sup> in which it was found that most of the users use search engine ‘Google’. It is also evident from the table that 29.05 per cent of them are using Yahoo, 24.03% per cent of them are using MSN, 11.79 per cent of them are using Bing and 16.88 per cent of them are using other search engines. It can be concluded from the table that Google is the mostly used search engine in SVU and UH.

### 5.8. Satisfaction with Internet facilities

A question has been posed to the users to know their satisfaction with regard to the Internet facilities available in their libraries. The responses made by them are presented in Table 8.

It is evident from Table 8 that the majority of the users (78.6%) are either satisfied or highly satisfied with the Internet facilities available in their libraries, 9.35 per cent of them are neither satisfied nor dissatisfied and the remaining of them (12.04%) are either dissatisfied or highly dissatisfied.

It is also evident from the table that there are significant differences in satisfaction with regard to

Internet facilities available in their libraries among the users of SVU and UH, research scholars and students and rural and urban users as indicated by the Chi-square values, which are significant at 0.05 level with four degrees of freedom. That means, the users of UH, research scholars, and rural users are more satisfied compared to the users of SVU, students and urban users respectively. However, there are no significant differences in satisfaction in this regard between the users of arts and science disciplines, and men and women users as evidenced by the Chi-square values, which are not significant at 0.05 level with four degrees of freedom.

Table 8  
Distribution of users according to their satisfaction with Internet facilities,  
library, category, discipline, gender and area ( in percentage )

Level of Satisfaction	Library		Category		Discipline		Gender		Area		Total
	SVU	UH	Research scholars	Students	Arts	Science	Men	Women	Rural	Urban	
Highly satisfied	8.18	9.54	6.65	10.24	8.95	8.69	8.35	9.66	9.36	7.00	8.78
Satisfied	60.99	81.05	74.81	66.42	70.22	69.60	69.89	69.70	69.92	68.80	69.82
Neither satisfied nor dissatisfied	13.34	4.27	7.42	10.67	8.95	9.58	8.54	10.98	8.65	11.20	9.35
Dissatisfied	13.00	1.85	8.50	11.81	9.29	7.40	9.01	6.25	7.65	10.60	8.11
Highly dissatisfied	4.48	3.28	2.63	4.86	2.58	4.74	4.22	3.41	4.43	2.40	3.94
<b>Total</b>	<b>100</b> (n=892)	<b>100</b> (n=702)	<b>100</b> (n=647)	<b>100</b> (n=947)	<b>100</b> (n=581)	<b>100</b> (n=1013)	<b>100</b> (n=1066)	<b>100</b> (n=528)	<b>100</b> (n=994)	<b>100</b> (n=600)	<b>100</b> (N=1594)

$\chi^2$  ( SVU – HU ) : 119.863 : df = 4 : TV = 9.49 : Sig at 0.05 Level  
 $\chi^2$  ( Research scholars – Students ) : 18.928 : df = 4 : TV = 9.49 : Sig at 0.05 Level  
 $\chi^2$  ( Arts – Science ) : 6.180 : df = 4 : TV = 9.49 : NS at 0.05 Level  
 $\chi^2$  ( Men – Women ) : 6.859 : df = 4 : TV = 9.49 : NS at 0.05 Level  
 $\chi^2$  ( Rural – Urban ) : 12.351 : df = 4 : TV = 9.49 : Sig at 0.05 Level

### 5.9. Problems faced in using Internet

A question has been put to the users to know whether they have faced any problem in using Internet. The replies given by them are shown in Table 9.

Table 9  
Distribution of users according to problems faced in using Internet,  
library, category discipline, gender and area (in percentage).

Response	Library		Category		Discipline		Gender		Are		Total
	SVU	UH	Research scholars	Students	Arts	Science	Men	Women	Rural	Urban	
Yes	59.93	44.08	51.41	54.07	53.11	52.86	53.49	51.88	53.81	51.18	52.95
No	40.07	55.92	48.59	45.93	56.89	57.14	46.51	58.12	46.19	48.82	47.05
Total	100 (n=892)	100 (n=702)	100 (n=647)	100 (n=947)	100 (n=581)	100 (n=1013)	100 (n=1066)	100 (n=528)	100 (n=994)	100 (n=600)	100 (N=1594)

$\chi^2$  ( SVU – HU ) : 35.752 : df = 1 : TV = 3.84 : Sig at 0.05 Level  
 $\chi^2$  ( Research scholars – Students ) : 0.993 : df = 1 : TV = 3.84 : NS at 0.05 Level  
 $\chi^2$  ( Arts – Science ) : 0.008 : df = 1 : TV = 3.84 : NS at 0.05 Level  
 $\chi^2$  ( Men – Women ) : 0.329 : df = 1 : TV = 3.84 : NS at 0.05 Level  
 $\chi^2$  ( Rural– Urban ) : 0.875 : df = 1 : TV = 3.84 : NS at 0.05 Level

It is clear from Table 9 that majority of the users (52.95%) are facing problems in using Internet. Further, it is understood from the table that 47.05 per cent of them are not facing any problem in using Internet.

It is evident from the table that there is a significant difference between the users of SVU and UH in facing problems while using Internet as indicated by Chi-square value which is significant at 0.05 level with one degree of freedom. That means more number of users of SVU are facing problems in using Internet compared to the users of UH. However, there are no significant differences between the research scholars and students, users of arts and science disciplines, men and women users, and rural and urban users in this regard as indicated by Chi-square values, which are not significant at 0.05 level with one degree of freedom.

### 5.10. Types of problems

The users of libraries are facing the problems such as insufficient number of computers, insufficient time slot, lack of search techniques, lack of support from library staff etc. It is evident from Table 9 that the majority of the users (52.95%) are facing problems in using Internet at their libraries. These users were again asked a question to know the types of problems faced by them in using Internet. The replies given by them are shown in Table 10.

Table 10  
Distribution of users according to the types of problems faced,  
library, category discipline, gender and area (in percentage).

Types of Problems	Library		Category		Discipline		Gender		Area		Total (N=844)
	SVU (n=535)	UH (n=309)	Research scholars (n=332)	Students (n=512)	Arts (n=309)	Science (n=535)	Men (n=570)	Women (n=274)	Rural (n=537)	Urban (n=307)	
Insufficient number of computers	55.64	48.20	43.98	46.88	47.89	44.49	47.72	41.61	47.13	43.32	45.78
Insufficient time slot	40.40	33.26	24.40	40.82	28.80	37.57	35.26	32.48	34.82	33.55	34.35
Lack of awareness on search techniques	31.22	29.23	29.82	29.30	31.72	28.22	30.88	26.64	31.47	26.06	29.55
Lack of support from the staff	10.18	8.25	8.74	8.01	8.74	8.04	7.19	10.58	7.26	10.01	8.33

**Note:** Respondents were permitted to tick more than one answer.

Table 10 reveals that a high percentage of users ( 45.78%) are facing the problem of ‘insufficient number of computers’ in their respective libraries. It is also evident from the table that 34.35 per cent of users are facing the problem of ‘insufficient time slot’, 29.55 per cent of them are facing the problem of ‘lack of awareness on search techniques’ and 8.33 per cent of them are facing the problem of ‘lack of support from the staff’.

### 5.11. Participation in user training programmes

Libraries of SVU and UH are providing Internet facilities to their users. In order to create awareness and better utilization of these facilities, user orientation and training programmes are being conducted by these libraries now and then.

In order to know whether the users of these libraries participated in any of the training programmes, a question has been posed to them. The replies given by them are shown in Table 11.

Table 11  
Distribution of users according to their participation in user training programmes, library, category, discipline, gender and area (in percentage).

Reply	Library		Category		Discipline		Gender		Area		Total
	SVU	UH	Research scholars	Students	Arts	Science	Men	Women	Rural	Urban	
Yes	36.86	27.62	43.85	25.80	36.07	31.00	32.61	33.52	32.58	33.58	32.91
No	63.14	72.38	56.15	74.20	63.93	69.00	67.39	66.48	67.42	66.42	67.09
Total	100 (n=944)	100 (n=706)	100 (n=650)	100 (n=1000)	100 (n=621)	100 (n=1029)	100 (n=1107)	100 (n=543)	100 (n=1108)	100 (n=542)	100 (N=1650)

$\chi^2$ (SVU – HU)	:	15.633	:	df = 1	:	TV = 3.84	:	Sig at 0.05 Level
$\chi^2$ (Research scholars – Students)	:	58.106	:	df = 1	:	TV = 3.84	:	Sig at 0.05 Level
$\chi^2$ (Arts – Science)	:	4.509	:	df = 1	:	TV = 3.84	:	Sig at 0.05 Level
$\chi^2$ (Men – Women)	:	0.136	:	df = 1	:	TV = 3.84	:	NS at 0.05 Level
$\chi^2$ (Rural – Urban)	:	0.164	:	df = 1	:	TV = 3.84	:	NS at 0.05 Level

It is evident from Table 11 that majority of the users (67.09%) did not participate in the training programmes conducted by their libraries. It is also evident from it that the remaining 32.91 per cent of them participated in the training programmes.

It is clear from the table that there are significant differences between the users of SVU and UH, research scholars and students, and users of arts and science disciplines in the participation of training programmes conducted by their respective libraries as indicated by Chi-square values, which are significant at 0.05 level with one degree of freedom. That means more number of users of UH, research scholars and users of arts disciplines participated in training programmes conducted by their libraries compared to the users of SVU, students, and users of science disciplines respectively. However, there are no significant differences between men and women users and rural and urban users in this regard as indicated by Chi-square values which are not significant at 0.05 level with one degree of freedom.

### 5.12. Need for user training programmes

Those, who replied that they did not participate in any training programme, were again asked to know whether the training programmes are needed for them for better usage of various facilities including Internet facility provided by their libraries. The replies given by them are shown in Table 12.

Table 12 shows that most of the users (92.41%) felt that the training programmes are required for better usage of various library facilities including Internet facility provided by their libraries and the remaining 7.59 per cent of them felt that these programmes are not required.

Table 12

Distribution of users according to their responses with regard to the need for training programmes, library, category, discipline, gender and area (in percentage).

Reply	Library		Category		Faculty		Gender		Area		Total
	SVU	UH	Research scholars	Students	Arts	Science	Men	Women	Rural	Urban	
Yes	94.13	90.41	99.73	88.81	91.44	92.96	93.16	90.86	91.57	94.17	92.41
No	5.87	9.59	0.27	11.19	8.56	7.04	6.84	9.14	8.43	5.83	7.59
Total	100 (n=596)	100 (n=511)	100 (n=365)	100 (n=742)	100 (n=397)	100 (n=710)	100 (n=746)	100 (n=361)	100 (n=747)	100 (n=360)	100 (N=1107)



### 5.13. Willingness to attend training programmes

Those, who felt that user training programmes are needed, were again asked a question to know their willingness to participate if such programmes are conducted.

Table 13

Distribution of users according to their willingness to attend user training programmes, library, category, discipline, gender and area ( in percentage )

Reply	Library		Category		Faculty			Gender		Area		Total
	SVU	UH	Research scholars	Students	Arts	Science	Men	Women	Rural	Urban		
Yes	89.62	88.64	89.51	85.27	86.16	83.07	83.10	86.81	81.99	89.01	92.35	
No	10.38	11.36	10.49	14.73	13.84	16.93	16.90	13.19	18.01	10.99	7.65	
Total	100 (n=348)	100 (n=195)	100 (n=285)	100 (n=258)	100 (n=224)	100 (n=319)	100 (n=361)	100 (n=182)	100 (n=361)	100 (n=182)	100 (N=543)	

Table 13 shows that most of the users (92.35%) replied that they are willing to attend the training programmes for better usage of various facilities including Internet facility, if such programmes are conducted by their libraries and only a few of the users (7.65%) responded negatively.

## 6. FINDINGS

Basing on the analysis of data, the following findings have been drawn.

- Most of the users ( 94.36% ) have knowledge to use computers and Internet. More number of users of UH, users of science, and women users have knowledge to use computers and Internet compared to the users of SVU, users of arts, and men users respectively.
- Most of the users (96.61%) have access to Internet facility in their libraries. More number of users of UH, research scholars, and users of science disciplines, have access to Internet compared to the users of SVU, students, and users of arts discipline respectively.
- A high percentage of the users (34.19%) use Internet facility daily and 22.65 per cent of them use this facility once in a week. The users of UH, men users and rural users are using Internet more, compared to the users of SVU, women users, and urban users respectively.
- A high percentage of users (29.92%) are spending on an average 2 hours in a week on Internet and 26.41 per cent of them are spending less than one hour. The users of UH, research scholars, men users, and urban users are spending more time on Internet compared to the users of SVU, students, women users, and rural users respectively.

- A high percentage of the users (44.92%) are using Internet in the library. The other places from which the users using Internet are department (28.55%), home (15.18%) and cybercafé (10.98%). More number of users of UH, research scholars, users of science disciplines, men users, and urban users are using Internet at their departments concerned compared to the users of SVU, students, users of arts disciplines, women users, and rural users respectively.
- More than one-fourth of the users (27.23%) are using Internet for research purpose, 26.41 per cent of them are using for their course work and 21.27 per cent of them are using for e-mails.
- Majority of the users (79.94%) are using Google search engine. It is followed by Yahoo (30.49%) and MSN (24.79%).
- Majority of the users (78.69%) are either satisfied or highly satisfied with regard to Internet facilities in their libraries. The users of UH, research scholars and rural users are more satisfied compared to the users of SVU, students and urban users respectively.
- Majority of the users (52.95%) are facing problems in using Internet.
- Majority of the users (67.09%) did not participate in training programmes conducted by their libraries. More number of users of UH, research scholars, and users of arts disciplines participated in training programmes conducted by their libraries compared to the users of SVU, students, and users of science disciplines respectively.
- Most of the users (92.41%) felt that the user training programmes are required for better utilization of library services including Internet facilities. Among these users, most of them (84.35%) are willing to participate if such programmes are conducted by their libraries.

## **7. SUGGESTIONS**

The following suggestions have been made by the investigators on the basis of findings obtained.

- Nearly one-fourth of the users use Internet on an average less than one hour in a week. Hence, to enhance the frequency of using Internet facility, the users should be informed about the various Internet facilities and e-resources available in their libraries.
- Most of the users are using Google search engine to search the required information. They should be told about other search engines and meta search engines, and search techniques to retrieve information.
- Majority of the users are facing problems of ‘insufficient number of computer systems’ (45.78%), ‘insufficient time slot’ (34.35%), and ‘lack of awareness on search techniques’ (29.55%), in using Internet facilities at their libraries. Hence, authorities should provide adequate number of computer systems to meet the requirements of users. The authorities should take necessary steps to enhance the time slot if feasible in S.V.University library

where one hour duration time slot is given to research scholars and half-an-hour duration time slot is given to students. The library staff members should be provided training in the use of Internet so that they can assist the users if necessary in using Internet.

- The study reveals that 67.09 per cent of the users did not participate in training programmes conducted by their libraries and among them, 92.35 per cent are willing to attend if the training programmes are conducted by their libraries. The study also reveals that 29.55 per cent of the users are facing the problem of 'lack of awareness on search techniques'. Hence the libraries should conduct user education programmes/information literacy programmes to research scholars and students regularly. In these programmes, the users should be explained how to use computer and Internet, Internet services available, importance of Internet, e-resources and services, and search methods and the techniques used to get the required information. The training programme should be made compulsory to the research scholars and students.
- Significant differences have been found among the various groups of users in certain aspects of Internet usage. Hence, steps are to be undertaken by the authorities concerned to reduce the differences among the various groups of users by providing user education programmes.

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