

## WEB SEARCHING BEHAVIOUR OF AUTONOMOUS COLLEGE STUDENTS IN VELLORE DISTRICT : A SURVEY

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## ABSTRACT

*This paper explores various aspects of web search behaviour of students and research scholars of autonomous colleges in Vellore district in terms of access information, experience, location, purpose of web searching, favourite browsers, search technique, satisfaction etc. All these factors contribute to the way in which the students and scholars search the web. The tools used for this study is using questionnaires methods, and the data is studied in terms of percentage analysis.*

**Keywords:** Web Searching, Web Searching Behaviour, Search engines, Web Technology, Internet Access.

## INTRODUCTION

In the present century namely the twenty-first web monopolies the entire field of learning. Because of the availability of knowledge and information in the field of education the whole education community depends on web.

The web is a viable means to increase access to education and is used as a tool for learning. Web technology is now used for information literacy instruction to enhance the goals of conventional literacy instruction, to positively transform literacy instruction, to prepare students for the literacy of the future and to empower them.

Search is one of the most challenging and interesting problems in information retrieval system. Search behaviour is a strategy under taken to be used in searching for information (search behavior as the micro level of behaviour) when a user interacts with a specific information retrieval system to search for relevant information.

The search behaviour on the web environment is mainly influenced by the search quarry. The search quarry is a set of words or phrases a user enters when looking for information of a specific topic of subjects.

Search behaviour is a strategy undertaken by the user in searching for information. **Nachmias and Gilad**<sup>1</sup> defined search behaviour or search strategy as a user plan that consists of a series of actions (steps), aimed at searching information. In order to successfully find useful information on the web, users need to consider the usage of their searching strategies to generate better outcome.

**Zhang x**<sup>2</sup> defined search behaviour as the micro level of behaviour when a user interacts with a specific information retrieval system to search for relevant information.

According to **Thatcher**<sup>3</sup> search behaviours that are related to the internet searching are search tactics, search strategic behaviours and search behaviours.

### **Web Resources**

Web is increasingly becoming an important resource for today's learners. Web based learning resources like the e-books, online journal, online full text database, bibliographical database, open access journals, database, institutional repositories and others have gained respectable place in the higher education system.

Web resources can mean a multitude of things including website, e-books, online journals and database. Today, the web resources have become a voluble, perhaps indispensable resources in conducting research, not because of the added convenience of rapid information retrieval and sharing, but because, it also provides a mean of making resources available that the printed media simply cannot provide. The availability and growth of the web resources offer an opportunity to find information and data from all over the world.

### **OBJECTIVE OF THE STUDY**

The present study is an attempt to find out the pattern of web searching by the students and scholars in the autonomous colleges in and around Vellore. The study was conducted with the following objectives:

- To study the use pattern of the web by the autonomous college students
- To identify the different purpose of the web used by autonomous college students.
- To identify favourable search engines, web browser, search technique.
- To identify searching behaviour of Institutional Repositories, Open Access Journal, Web Blog.
- To find out the language wise web search behaviour
- To know the satisfaction level of the students and scholars with the information retrieved through the web
- To trace the problem faced by the students while using the web

### **SCOPE AND LIMITATION OF THE STUDY**

At present the academic community depends more and more on web resources for various educational purposes. The present study chose eight selected autonomous colleges in Vellore district and the sample categories are PG students and research scholars

### **METHODOLOGY**

The survey was conducted in the local institutions: Voorhees College, Muthurangam Government Arts College and Auxilium College besides Sacred Hearts College (Tirupattur) C Abdul Hakeem College (Malevisaram) and Islamiah College (Vaniyambadi) All the above are autonomous colleges and each is more than 25 years old. Each college was distributed twenty questionnaire and the Primary data collected through questionnaire were organized tabulated and interpreted by using simple statistics methods.

### **DEMOGRAPHIC ANALYSIS**

The total number of respondents involved in this study was 160 respondents. The gender distribution was 80 female and 80 male. The age wise distribution of the respondents was as follows:

25 years old and less 96.21%, between 26 and 30-3% and between 31 and 35-0.79%.

### **Analysis and Interpretation**

**Table 1. Respondents program of study**

<b>Degree</b>	<b>No of Respondents</b>	<b>Percentage</b>
UG	56	35.00%
PG	92	57.50%
MPhil & PhD	12	7.50%
Total	160	100

Course wise analysis of the respondents has revealed that UG come to 35%, postgraduate 57.50% and M Phil/PhD 7.50%.

### **Experience of web searching**

To date WWW (also known as web) has been one of the main sources of information of Internet users which includes professionals, students, laymen, clerk, and others<sup>4</sup>. Web search is a part of information retrieval (IR) which helps the user to find the needed information from a large collection of web documents.

**Table 2. Experience for web searching**

Period	No of Respondents	Percentage
6 Month	10	6.25
1-2 Yrs	53	33.15
3-4 Yrs	32	20.00
More than 5 Yrs	65	46.60
Total	160	100

Table 2 reveals that 33.15% of students have web searching experience for 1 to 2 years. 20% have experience of 3-5 years and 46% have experience of more than 5 years.

### Location for web searching

The Internet surfing enables to navigate a world full of interconnected information, discover new sites, read up-to-date information, and download things of interest. Surfing the Internet has become a daily routine of the new generation. The present generation especially the college students are well versed with the new technologies and their application in present networked society. Roberts and Foehr<sup>5</sup> observe that the Internet has fixed deep roots in the lives of the net generation students than all other technological innovations.

**Table 3. Location for web searching**

Period	No of Respondents	Percentage
Department	45	28.12
Library	56	35.00
House	24	15.00
Others place	35	21.87
Total	160	100.00

Table 3 depicts that 35% of the students were using common college library, 28.12% of the students Departmental libraries, 15% of the students were using website maintained at this home and 21.87% utilized website maintained in other place.

### Frequency of web searching

Web search is a part of information retrieval (IR) which helps the user to find needed information from a large collection of web documents. The following table tells about the frequency of web Searching.

**Table 4. Web Search**

Frequency	No of Respondents	Percentage
Occasionally	45	25.60
Once a day	25	15.00
Twice a day	35	21.87
More often	55	34.37
Total	160	100.00

In table 4, frequency of web searching level is shown. It is heartening to note that 34.37% use search more often, followed by 25% of the respondents who use it occasionally 21.87% twice a

day and 15% once a day.

### Purpose of web searching

Web is a popular source. Searching the Web can be challenging. Users are not always efficient in navigating the Web and finding high quality resources. Depending on their preferences and styles, certain users might experience more difficulties than others when searching the Web<sup>5</sup>.

**Ramirez** is of the opinion that the young generation who have more experience with computers and grow up with this technology will reveal different attitude towards reading in digital environment<sup>6</sup>.

The web provide information that serves many purposes including research, projects, research, seminars, assignment, entertainment, traveling, and information.

**Table 5. Purpose of web searching**

Frequency	No of Respondents	Percentage
Project	64	40.00
Research	24	15.00
Seminar/Conferences	16	10.00
Assignment	21	13.12
Any others	35	21.87
Total	160	100.00

Table 5 which deals with the purposes of web searching shows that 40.00% percent of respondents search web for Projects. The next important purpose of web searching is for research. This search was undertaken for preparing seminar papers and for writing assignments in that order.

### Favourite search engine

Web search engines have developed into widely used services and essential tools for finding web based information.

The use of search engine and other search system on the Internet has enabled the access and retrieval of information from the WWW. However, due to large amount of web pages available on the Internet and indexed in the search engine database, users are often overwhelmed by thousands of search results, in which only few are valuable<sup>7</sup>.

**Table 6. Favourite Search Engine**

Search engine	No of Respondents	Percentage
Google	90	56.25
Yahoo	70	43.75
Ask	25	15.62
Others	45	28.12
Total	230	143.75

(Note: Because of multiple choice options the percentage exceeds to 100% )

Table 6 show favorite search engines, Most of the respondent use Google. The next preferred search engine Yahoo and then comes Ask, and other search engines.

### **Favorite Web browser**

Web browser is probably the most frequently used software today and many tasks are highly repetitions. Web browser is the essential application programm for accessing web page. Web browser has own characters. This enable user to choose one's favorite browser. Some of the browser have good feature and easy way of accessing web information.

**Table 7. Favorite Web Browses**

<b>Search engine</b>	<b>No of Respondents</b>	<b>Percentage</b>
Internet Explorer	85	53.12
Mozila/Epic	43	26.87
Google chrome	29	18.12
Others	43	26.87
Total	160	124.98

(Note: Because of multiple choice options the percentage exceeds to 100% )

Table 7 shows that (53.12%) respondents were using Internet explorer browser,(26.87%) were using Mozilla / Epic (18.12%) Google chrome and other browser 26.87 percent.

### **Search techniques**

**Table 8 Searching Skill**

<b>Search Technique</b>	<b>No of Respondents</b>	<b>Percentage</b>
Basic search	60	56.6
Advanced search	40	20
Truncation search	37	13.30
Boolean operator	23	10
Total	160	100.00

Table 8 gives details about searching skills of the respondents. Most of the students were using basic search whose percentage is 56.60% Advanced Search was used by 20.00%, and 13.30% used Truncation and 10.00% Boolean operator search.

### **Institutional Repositories and ETD Search**

Institutional repositories are nothing but a web based database of scholarly knowledge. Repositories are important for educational institutions in helping to manage IR are cumulative and they collect, organize and disseminate digital resources to the desired scholars

Institutional Repositories in university generally include pre prints of journal articles, seminar

papers, technical reports, research data, theses, dissertations, important print collections, teaching and learning materials.

ETD is digital documents. Theses and dissertations provide tangible evidence of the scholarly development of students and their ability to effectively communicate research findings. Research presented in these of dissertations is accessible to scholars all over the world via the world web.

Institutional repositories and ETD are important sources depended on by the academic community. Popular institutes and universities provide these facilities on web which is provided free and any one can access them.

**Table 9 Institutional Repositories and ETD Search**

<b>Institutional Repositories, ETD</b>	<b>No of Respondents</b>	<b>Percentage</b>
Yes	56	35.00%
No	104	65.00%
Total	160	100.00

Table 9 shows usage of Institutional Repositories and ETD. It was found that 35% of respondents access Institutional repositories and ETDs. The remaining respondents are not aware of this service.

**Accessing Open Access journals**

Open accesses journals are scholarly journals published electronically and are available free. Open access journals provide access to full-text contents of scholarly, peer-reviewed journals. There are two types of open access journals. One is available electronically, and the other is available both in electronic as well as print version. Open Access journal is freely available on web and one can access through internet. Open access to e-resource supports higher education and research in a networked world that is aiming for education for sustainable development.

**Table 10 Accessing open Access Journals**

<b>Satisfaction</b>	<b>No of Respondents</b>	<b>Percentage</b>
Yes	44	27.50
No	116	72.25
Total	160	100.00

Accessing open Access Journals is presented in table 10. Among 160 respondents only 44 have utilized this. The remaining respondents are unaware of it.

**Web blog**

Blogs are powerful communicative and publishing tools. Blogging helps connecting people and learning collaboratively. It leads to reading, thinking, reflecting and then writing and publishing. Blog also publish useful information. Some of the popular institutes, libraries and, persons maintain the blog. The blog sites also provide current and latest information.

**Table 11 Web Blog**

Web Blog	No of Respondents	Percentage
Yes	73	45.62
No	87	54.38
Total	160	100.00

Usage of Web blog is presented in table 11. Seventy three respondents 45.62% used blog whereas than remaining 87 (54.38%) did not use it.

### Language wise web browsing

Loan<sup>8</sup> reports that the Internet has increased access to information, use of foreign sources, contacts with worldwide readers and time spent on reading, and has decreased dependence on print sources, contacts with print sources, reading in local languages and reading of books.

**Table 12 Language wise web searching**

Language	No of Respondents	Percentage
English	104	65.00
Vernacular (Tamil)	56	35.00
Hindi	-	-
Others	160	100.00

Information is published in different languages. Table 11 shows language wise web searching. 65% of the respondents search English and the remaining search in vernacular (Tamil language) No one goes to Hindi, and other languages. Most of the respondent solely depend on English web.

### Satisfaction about information retrieval

Search satisfaction is one of the indication in order to determine the users achievement of his information need. Information need is the information required by user to solve or fulfill certain task<sup>9-10</sup>.

**Table 13 satisfaction about information Retrieval**

Information retrieval	No of Respondents	Percentage
Moderate	94	58.75
High	27	16.87
Very high	22	13.75
Low	12	10.62
Total	160	100.00

Table 13 presents the satisfaction level of information retrieval Only 22 respondents are 'very highly' satisfied whereas the level of satisfaction of 27 was high. 94 respondents were moderately satisfied and the satisfaction level of 12 was low.



### Problem encountered while using internet

The World Wide Web contains tremendous amount of information. However it should be a very difficult problem admitted that discovering the relevant resources has become intense. As the quantity of information grows, people's ability of finding relevant materials has decreased proportionately.

**Table 14 Problem encountered while using internet**

Information retrieval	No of Respondents	Percentage
Slow access speed	88	55.00
Difficulty in finding relevant information	24	15.00
It take too long to download pages	19	12.00
Cost associated with accessing internet	16	10.00
Privacy problems	13	8.00
Total	160	100

It can be inferred from table 13 that internet use is not free from problems. The problems encountered while using the internet mainly come from five factors: slow access speed, length of time required to download pages, difficulty in finding relevant information, cost associated with accessing internet and privacy problems. Most of the respondents (55.00%) pointed out slow speed followed by difficulty in finding relevant information, 15.00%, had to spend longtime for downloading and 12.00 % had to face problems associated with accessing internet and about 10% came across low speed internet connection.

### FINDING OF THE STUDY

- Nearly half of the respondents (46.60%) have web search experience for more than five years
- Majority of them depend on user web searching in private place
- Nearly one fourth of respondents work more often on web search
- About 40% of the respondents use web search for project purpose.
- Majority of respondents (56.25%) use Google search engine.
- More than quarter of respondents use internet explorer for web searching.
- More than one third of the respondents (37.50%) use basic search technique.
- Above 65.00% of respondents are not aware of the institutional repositories and ETDs.
- 45.00% of the respondents use web blog
- Most of the respondents use English language for web search (65.00%)
- More than half of (58.75%) respondents are moderately satisfied with the information retrieval.
- 46.00 % of the respondents are not aware of open access journals.
- 55% of respondent face slow access speed

## SUGGESTIONS

- Based on the analysis of the study the following suggestions have been made.
- Location of web search (library 25%) frequency of web search (once a week-15.60%) in weeks 15%) very less. The management should provide more computer systems, high band with Internet connection, sufficient staff, and altered times.
- The performance of students of autonomous science and arts college is not upto the mark. The main reason for this is non-availability of web resources. The managements should take all steps to equip general departmental libraries with the required material. Students should have sufficient access to for course material, institutional repositories, open access journal and the like.
- The teaching faculty also should constantly provide and create awareness about web resources. The assignment and course work based should be oriented towards web resources.
- The authority must conduct training programme for users regarding how to use web for research and teach, search techniques, search engines, character of browsers and the like.
- The authority should motivate their librarians to conduct workshop training programme for better utilization web for research.
- The Librarian should create Web site or Blog and provide the useful free resources, ETD, IRs, Open Access Journals Links.
- Awareness programmes should be arranged to make the students conscious about the importance of web-resource in present day.
- Assignments and activities which demand the use of web resources can be given to the students.
- More facilities should be provided for the students to access web-recourses like e-journals, Open access journals , Course material, Institutional repositories, Electronics Thesis's, Archaizes, E-Books, E-Learning Materials, Video tutorials, CD, and Video conferences.
- Training programme should be arranged for teacher educators to make them learn and understand latest advancement in web technology.
- Special learning hours can be provided for web use in the time table.
- The curriculum of education programmed should be framed in such a manner that it helps the teacher educators to explore different facilities accessible through web.

## CONCLUSION

In the present day context the development of a nation depends upon the availability and use of IT and web technology. Information is one of the fundamental and national resources, which is very vital for the development of a society. Web technology has been the biggest and most precious gift of the living society to future generation. Within a short span of the time web technology has revolutionized the whole philosophy of teaching learning process and scholarly communication. All level of academic community the society have become totally dependent on it. It enables effective and quick delivering of learning content and experience affording truly flexible learning, any time anywhere. At higher education level everyone needs through knowledge pertaining to searching of information for the process growth and research.

In the current century web technology plays a very important role in teaching and learning. In future it would be impossible to go for without the technology in higher education. Web based

education not only probes unreachable remote areas, but also saves time and reduced expenses.

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