International Journal of Research in Library Science (IJRLS)

ISSN: 2455-104X

DOI: 10.26761/IJRLS.8.3.2022.1576

Volume 8, Issue 3 (July-September) 2022, Page: 177-190, Paper ID: IJRLS-1576

Received: 12 August. 2022 ; Accepted: 21 Sept. 2022 ; Published: 26 September. 2022

Web Search Behaviour of Engineering Students in BGS Institute of Technology at Adichunchanagiri University (ACU) of Karnataka, India

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ABSTRACT

This main objective of the study is to find the Web Search Behaviour of Engineering Students in BGS Institute of Technology at Adichunchanagiri University (ACU) of Karnataka, India. The study was conducted through structured questionnaire administered to 300 users of BGSIT and 285 was collected with a response rate of 95%. Essential statistical techniques (SPSS) and methods are used to examine the research data. The findings shows the engineering college students of BGSIT (BGS Institute of Technology) using different web search tools is presented in table 7.4. There is outstanding differences (P<.000) the tool of 'Google', 164(57.5%) of the users biggest choice is 'always' with a highest mean worth of 4.38 and SD is .955. The users with consider to the purposes of 'Job-hunting', maximum respondents the biggest choice is 'strongly agree' with a highest mean worth of 4.14 and SD is 1.18. There is outstanding differences (P<0.000) the web search skills of 'Simple search', 166(58.2%) of the respondents say 'always' with the highest mean worth of 4.30 and SD is 1.06, for Web search skills used by the respondents in BGSIT at ACU.

KEYWORDS: Web, Search Behaviour, e-Resources, Undergraduate students, Adi Chunachangiri University (ACU), Karnataka, India.

1. INTRODUCTION

Web search behaviour is playing major role for engineering college students in 21st century, Web is helpful to academic and research activities. The use of ICT (information and communication technologies) particularly computers and the Internet has become an integral part of today's educational system. Many educational functions such as research and scholarship, teaching and learning as well as management and administration increasingly become dependent upon ICTs. This is so because information and communication are central to any educational

system. Internet use in education enhances sharing of information; increases collaboration among students, academicians and institutions; improves provision of distance education; and has resulted in new forms of pedagogy, among many other benefits. The World Wide Web (Web), which is a portion of the Internet comprised of hypermedia links, has become a diverse source of information to the extent that it is now common for people to opt for it when finding information. Increasingly, students and instructors prefer Web-based than print information resources, and hence deserting traditional physical libraries (Greenstein and Healy, 2002; Chandel and Saikia, 2012).

2. REVIEW OF RELATED LITERATURE

Al-Samarraie & Al-Hatem **(2018)** purpose of this study is quantity and order of different compositions (areas) in the internet search results may contribute to individual's ability to find information considered to their search queries. The study showed that the use of different compositions in the display of Web results page notably influenced users perceptual experience by reducing their attention to the organic results area. The study find out the provides a rationale for further research study to consider the impact of quantity and order of Web page compositions on individuals perceptual attention and cognitive load in information-gathering task settings. **Islam (2013)** conducted of the UG (Undergraduate) students in the Department of LIS, University of Dhaka, Bangladesh. A questionnaire was prepared and used to gather facts on users use internet behavior, motive of internet use in the Department of LIS. The acquired input data were then assessed using software statistical package for the social sciences and the discovery have been explained. The results showed that users prefer digital resources to printed media in seeking information and respondents use the Internet mostly to do assignment and prepare for their lessons **Malik & Mahmood (2009)** explores different aspects of web search activities of university students, in terms of student's purpose of use, seeking skills, query formulation, occurrence of use, favorite search engine, etc. All these factors contribute to the way in which the students search the web. Data have been collected from students of the Faculty of Economics and Management Sciences, University of the Punjab, Lahore through a questionnaire. Key findings include the use of web for academic tasks, preference of Google, reformulation of query, use of basic and advance search features, browsing of first ten hits, and problem of slow speed.

3. PURPOSE OF THE STUDY

The motivation of this study was to "Web Search Behaviour of Engineering Students in BGS Institute of Technology at Adichunchanagiri University (ACU) of Karnataka, India."

4. SPECIFIC OBJECTIVES OF THE STUDY

1. To know the purposes of web searching.
2. To examine the use different types of web search tools.
3. To examine the web search skills of BGSIT students.
4. To find out the usage of e-journals database in BGSIT.
5. To know the usage of SM (Social Media).
6. To know the student's attitude towards web resources.
7. To find out the limitation or restriction in using web resources.

5. SCOPE AND LIMITATION

The scope of study Web Search Behaviour of Engineering Students in BGS Institute of Technology at Adichunchanagiri University (ACU) of Karnataka, India. Geographically the coverage of the BGS Institute of Technology, engineering students considered this study.

6. METHODOLOGY AND SURVEY DESIGN

Survey method is used in the present study. A questionnaire is designed to collect date from the users of 285 from BGS Institute of Technology students at Adi Chunachangiri University. The questionnaire consists of questions on Purpose of web usage; Web Search Tools; Web search skills; Usage of e-Journals; Web social services; Web resources. Copies of questionnaires were distributed to the students of these Engineering college students personally and the filled in copies were collected personally form them.

7. RESULTS AND DISCUSSIONS

Preliminary questions in the survey sought to gather teaching faculties' demographics. Responses to these questions are presented in the multivariable below.

7.1. Gender

Table 7.1 shows the gender statistics usage of web resources. Out of the 285 respondents majority numbers175 (61.4%) of the respondents are female & remaining 110(38.6%) of the students are male users. It is observed that the majority of them were female users.

Table 7.1 Gender of the Users

S/N	Gender	No. of Users	%
1	Male	110	38.6
2	Female	175	61.4
	Total	**285**	**100.0**

Source: Primary data collected through questionnaire

7.2. Department Wise Respondents

Department wise separation of the BGSIT users is shown in table 7.2. The table shows that the 285 respondents, majority of the users 96 (33.7%) are from the Department of Electronics & Communication Engineering; 78 (27.4%) students are from the Department of CSE; 42 (14.7%) respondents are from the Department of CE, 39 (13.7 %) users are from the ME and 30 users are from the departments of Information Science & Engineering 10.5%.

Table 7.2 Department wise respondents

S/N	Departments	No. of Users	%
1	Civil Engineering	42	14.7
2	Mechanical Engineering	39	13.7
3	Electronics & Communication Engineering	96	33.7
4	Computer Science & Engineering	78	27.4
5	Information Science & Engineering	30	10.5
Total		**285**	**100.00**

7.3. Purpose of Web Searching

The engineering college students of BGSIT (BGS Institute of Technology) using web searching for various purposes, purposes of web searching is presented in table 7.3. There are outstanding differences (P<.000) the purpose of 'Accessing news and current affairs', scoring 124(43.5) the respondents say 'agree' with a mean worth of 3.61 and SD is 1.18.; among the users with consider to the purposes of 'Class assignments'. Majority of students the biggest choice is 'strongly agree'; with the highest mean worth of 4.08 and SD is 1.19. Table 7.3, reveal that, among user purposes of 'Communications'. The majority of the number of students are replayed that 'agree' with a mean worth of 3.94 and SD is 1.06. With consider to the purposes of 'Downloading software'

Table 7.3 Purpose of web usage

S/N	Purposes	Feedback in Percentage (N=285)					Mean	SD	P Worth
		1	2	3	4	5			
1	Accessing news and current affairs	25 (8.8)	28 (9.8)	44 (15.4)	124 (43.5)	64 (22.5)	3.61	1.18	.000
2	Class assignments	20 (7.0)	17 (6.0)	22 (7.7)	88 (30.9)	138 (48.4)	4.08	1.19	.000
3	Communications	13 (4.6)	18 (6.3)	38 (13.3)	120 (42.1)	96 ()	3.94	1.06	.000
4	Downloading software	32 (11.2)	23 (8.1)	40 (14.0)	81 (28.4)	109 (38.2)	3.74	1.34	.000
5	Education and self-improvement	24 (8.4)	19 (6.7)	39 (13.7)	79 (27.7)	124 (43.5)	3.91	1.26	.000
6	Electronic mail	10 (3.5)	11 (3.9)	36 (12.6)	132 (46.3)	96 (33.7)	4.03	.967	.000
7	Electronic newspapers and magazines	46 (16.1)	17 (6.0)	26 (9.1)	130 (45.6)	66 (23.2)	3.54	1.34	.000
8	Entertainment/recreation	17 (6.0)	20 (7.0)	49 (17.2)	117 (41.1)	82 (28.8)	3.80	1.11	.000
9	Job-hunting	24 (8.4)	7 (2.5)	18 (6.3)	92 (32.3)	144 (50.5)	4.14	1.18	.000
10	Research	25 (8.8)	15 (5.3)	56 (19.6)	129 (45.3)	60 (21.1)	3.65	1.13	.000

Key: 1 – Strongly disagree, 2 – Disagree, 3 – Neither agree nor disagree, 4 – Agree, 5 – strongly agree, SD = Standard deviation, N=Number of Respondents, P = Probability, Numbers in Parentheses Indicates Percentage.

It is observed that many respondents say 'strongly agree'; with a mean worth of 3.74 and SD is 1.34.; among the patrons with consider to the purposes of 'Education and self-improvement', maximum respondents the biggest choice is 'strongly agree' with a mean worth of 3.91 and SD is 1.26. BGSIT students with consider to the purposes of 'Electronic mail', majority of students the biggest choice is 'agree'; with the highest mean worth of 4.03 and SD

is .967. Table 7.3, reveal that the student purposes of 'Electronic newspapers and magazines', the majority of the number of the students are replayed that 'agree' with a mean worth of 3.54 and SD is 1.34. With consider to the purposes of 'Entertainment/recreation' it is observed that many respondents say 'strongly agree'; with a mean worth of 3.80 and SD is 1.11.; among the respondents with consider to the purposes of 'Job-hunting', maximum respondents the biggest choice is 'strongly agree' with a highest mean worth of 4.14 and SD is 1.18. The last parameter of the user purposes of 'Research', it is observed that majority of users say 'agree' with the mean worth of 3.65 and SD is 1.13., for sthe purposes of web searching in B G S Institute of Technology.

7.4. Use Different Types of Web Search Tools in BGSIT

Use of different types of web search tools using by the BGSIT students are in the form of Google; Yahoo; Infoseek; MSN Search; Altavista; Google scholar; Ask.com; Gigablast; Searchalot; Bing; AOL.com; Baidu; Wolframalpha; DuckDuckGo; Internet Archive; Yandex.ru. The analysis of different web search tools used by the respondents is shown in table 7.4.

The engineering college students of BGSIT (BGS Institute of Technology) using different web search tools is presented in table 7.4. There is outstanding differences (P<.000) the tool of 'Google', 164(57.5%) of the users biggest choice is 'always' with a highest mean worth of 4.38 and SD is .955; the students with consider to the tool of 'Yahoo'. More number of students biggest choice is 'always'; with the mean worth of 3.63 and SD is 1.38. Table 7.4, reveal that, among user tool of 'Infoseek'. The maximum number of users are replayed that 'very often' with a mean worth of 3.62 and SD is 1.21. Consider to the tool of 'MSN Search' it is observed that many users say 'very often' with the mean worth of 3.62 and SD is 1.30. Among the respondents to the tool of 'Altavista', more number of users the biggest choice is 'very often' with the mean worth of 3.52 and SD is 1.29; for different web search tools used by the respondents in BGSIT at ACU. The parameter shows that the tool of 'Google scholar', more number of the user's biggest choice is 'always' with a mean worth of 3.52 and SD is 1.29; the BGSIT students with consider to the tool of 'Ask.com'. More number of users biggest choice is 'very often'; with the mean worth of 3.64 and SD is 1.36.

Table 7.4 Web Search Tools

S/N	Search Engines	Feedback in Percentage (N=285)					Mean	SD	P Worth
		1	2	3	4	5			
1	Google	11 (3.9)	6 (2.1)	12 (4.2)	92 (32.3)	164 (57.5)	4.38	.955	.000
2	Yahoo	38 (13.3)	26 (9.1)	39 (13.7)	82 (28.8)	100 (35.1)	3.63	1.38	.000
3	Infoseek	20 (7.0)	38 (13.3)	50 (17.5)	98 (34.4)	79 (27.7)	3.62	1.21	.000
4	MSN Search	33 (11.6)	27 (9.5)	49 (13.7)	103 (36.1)	83 (29.1)	3.62	1.30	.000
5	Altavista	36 (12.6)	19 (6.7)	60 (21.1)	94 (33.0)	76 (26.7)	3.52	1.29	.000

6	Google scholar	18 (6.3)	18 (6.3)	31 (10.9)	88 (30.9)	130 (45.6)	4.03	1.17	.000
7	Ask.com	27 (9.5)	30 (10.5)	46 (16.1)	99 (34.7)	83 (29.1)	3.64	1.26	.000
8	Gigablast	75 (26.3)	19 (6.7)	25 (8.8)	68 (23.9)	98 (34.4)	3.33	1.62	.000
9	Searchalot	6 (2.4)	33 (11.6)	65 (22.8)	99 (34.7)	82 (28.8)	3.76	1.05	.000
10	Bing	17 (6.0)	52 (18.2)	44 (15.4)	104 (36.5)	68 (23.8)	3.54	1.20	.000
11	AOL.com	59 (20.7)	19 (6.7)	41 (14.4)	86 (30.2)	80 (28.1)	3.38	1.47	.000
12	Baidu	11 (3.9)	44 (15.4)	38 (13.3)	93 (32.6)	99 (34.7)	3.79	1.18	.000
13	Wolframalpha	27 (9.5)	32 (11.2)	63 (22.1)	92 (32.3)	71 (24.9)	3.52	1.24	.000
14	DuckDuckGo	35 (12.3)	42 (14.7)	39 (13.7)	72 (25.3)	97 (34.0)	3.54	1.40	.000
15	Internet Archive	43 (15.1)	32 (11.2)	22 (7.7)	117 (41.1)	71 (24.9)	3.49	1.37	.000
16	Yandex.ru	6 (2.1)	47 (16.5)	53 (18.6)	99 (34.7)	80 (28.1)	3.70	1.11	.000

1 – Never, 2 – Rarely, 3 – Sometimes, 4 Very often –, 5 –Always, SD = Standard deviation, N=Number of Respondents, P = Probability, Numbers in Parentheses Indicates Percentage.

Table 7.4, shows that, among the respondent tools of 'Gigablast'. Majority of respondents are replayed that 'always' with a mean worth of 3.33 and SD is 1.62.; with consider to the tool of 'Search a lot' it is observed that more number of respondents are say 'very often' with a mean worth of 3.54 and SD is 1.20. Among the users to the tool of 'Bing', majority of the users biggest choice is 'very often' with the mean worth of 3.54 and SD is 1.20; There is outstanding differences (P<.000) the tool of 'AOL.com', more number of the respondents 164(57.5%) biggest choice is 'very often' with the mean worth of 3.38 and SD is 1.47. The students with consider to the tool of 'Baidu'. Maximum of students biggest choice is 'always'; with second highest mean worth of 3.79 and SD is 1.18. Table 7.4, reveal that, among user tool of 'Wolframalpha'. The more number of users are replayed that 'very often' with a mean worth of 3.52 and SD is 1.24; with consider to the tool of 'DuckDuckGo' it is observed that many users say 'always' with the mean worth of 3.54 and SD is 1.40; consider the respondents to the tool of 'Internet Archive', BGSIT users the biggest choice is 'very often' with the mean worth of 3.49 and SD is 1.27. The last parameter of the tool of 'Yandex.ru', majority of the respondent's biggest choice is 'very often' with the mean worth of 3.70 and SD is 1.11; for different web search tools used by the respondents in BGSIT at ACU.

7.5. Web Search Skills of BGSIT Students.

Web search skills of BGS Institute of Technology students such as: Simple search; Phrase searching; Boolean operators such as AND, OR, AND NOT; Word truncation; Query modifiers such as entitle and file type; Combined search. The analysis of Web search skills used by the users is presented in table 7.5.

Table 7.5 Web search skills

S/N	Web search skills	Feedback in Percentage (N=285)					Mean	SD	P Worth
		1	2	3	4	5			
1	Simple search	12 (4.2)	14 (4.9)	17 (6.0)	76 (26.7)	166 (58.2)	4.30	1.06	.000
2	Phrase searching	15 (5.3)	26 (9.1)	32 (11.2)	130 (45.6)	82 (28.8)	3.84	1.10	.000
3	Boolean operators such as AND, OR, AND NOT	29 (10.2)	22 (7.7)	40 (14.0)	92 (32.3)	102 (35.8)	3.76	1.29	.000
4	Word truncation	20 (7.0)	19 (6.7)	36 (12.6)	134 (47.0)	76 26.7()	3.80	1.12	.000
5	Query modifiers such as entitle and file type	28 (9.8)	20 (7.0)	44 (15.4)	103 (36.1)	90 (31.6)	3.73	1.25	.000
6	Combined search	11 (3.9)	17 (6.0)	39 (13.7)	149 (52.3)	69 (24.2)	3.87	.975	.000

1 – Never, 2 – Rarely, 3 – Sometimes, 4 Very often –, 5 –Always, SD = Standard deviation, N=Number of Respondents, P = Probability, Numbers in Parentheses Indicates Percentage.

There is outstanding differences (P<.000) the web search skills of 'Simple search', 166(58.2%) of the respondents say 'always' with the highest mean worth of 4.30 and SD is 1.06; the students with consider to the web search skills of 'Phrase searching'. Majority of the student's biggest choice is 'very often'; with the mean worth of 3.84 and SD is 1.10. Table 7.5, shows that, among user web search skills of 'Boolean operators such as AND, OR, AND NOT'. The more number of students are replayed that 'always' with the mean worth of 3.76 and SD is 1.29. The users with consider to the web search skills of 'Word truncation'. Maximum of students biggest choice is 'very often '; with a mean worth of 3.80 and SD is 1.12. Consider to the web search skills of 'Query modifiers such as entitle and file type' it is observed that majority of the users say 'very often' with the mean worth of 3.73 and SD is 1.25. Among the respondents to the web search skills of 'Combined search', maximum number of respondents highest choice is 'very often' with the mean worth of 3.87 and SD is .975; for Web search skills used by the respondents in BGSIT at ACU.

7.6. Usage of Electronic-Journals Database in BGSIT

Usage of e-Journals database in BGS Institute of Technology students such as: Springer Link; Taylor & Francis Journals; Sage Journals; DOAJ; Emerald; Science Direct; Scopus; Web of Science etc.

The analysis of usage of e-Journals database used by the respondents is presented in table 7.6. There is outstanding differences (P<.000) the usage of e-Journals database of 'IEEE/IEL Online', majority of the respondents 182(63.9%) say 'always' with the highest mean worth of 4.51 and SD is 794; the respondents with consider to the e-Journals

database of 'Springer Link'. Majority of the users replayed 'always'; with a mean worth of 3.93 and SD is 1.05.; the respondents with consider to the e-Journals database of 'Taylor & Francis Journals'. More number of the users biggest choice is 'always'; with the mean worth of 3.75 and SD is 1.23. Table 7.6, reveals that, among user using e-Journals database of 'Sage Journals'. The highest number of users are replayed that 'very often' with the mean worth of 3.49 and SD is 1.36, for the usage of e-journals databases by the students of BGSIT at ACU.

The users with consider to the e-Journals database of 'Google Scholar', the majority of the students biggest choice is 'always'; with a mean worth of 4.06 and SD is 1.16. BGSIT students are consider to the e-Journals database of 'ASCE (American Society of Civil Engineers)' it may be seen that, majority of the users say 'always' with a mean worth of 3.73 and SD is 1.44.; the usage of e-Journals database of 'ProQuest Engineering journals', the BGSIT users say 'very often'' with a mean worth of 3.89 and SD is 1.17; the users with consider to the e-Journals database of 'EBSCO'. Highest number of the respondents biggest choice is 'always'; with the mean worth of 4.14 and SD is 1.18.; among the respondents using e-Journals database of 'McGraw Hill'. The more number of users are replayed that 'always' with the mean worth of 3.95 and SD is 1.29. There is outstanding differences (P<.000) the usage of e-Journals database of 'ASTM Digital Library', more number of the students say 'very often' with the mean worth of 3.81 and SD is 1.05; the respondents to the using e-Journals database of 'Wiley Blackwell'. Majority of the users says 'always'; with a mean worth of 3.65 and SD is 1.29.

Table 7.6 Usage of e-Journals

S/N	Journal databases	Feedback in Percentage (N=285)					Mean	SD	P Worth
		1	2	3	4	5			
1	Springer Link	11 (3.9)	28 (9.8)	19 (6.7)	139 (48.8)	88 (30.9)	3.93	1.05	.000
2	Taylor & Francis Journals	24 (8.4)	17 (6.0)	66 (23.2)	78 (27.4)	100 (35.1)	3.75	1.23	.000
3	Sage Journals	32 (11.2)	52 (18.2)	25 (8.8)	96 (33.7)	80 (28.1)	3.49	1.36	.000
4	DOAJ	32 (11.2)	22 (7.7)	39 (13.7)	86 (30.2)	106 (37.2)	3.74	1.33	.000
5	Emerald	25 (8.8)	42 (14.7)	30 (10.5)	107 (37.5)	81 (28.4)	3.62	1.27	.000
6	ScienceDirect	10 (3.5)	25 (8.8)	29 (10.2)	85 (29.8)	136 (47.7)	4.09	1.11	.000
7	Scopus	19 (6.7)	30 (10.5)	56 (19.6)	96 (33.7)	84 (29.5)	3.69	1.19	.000
8	Web of Science	32 (11.2)	18 (6.3)	46 (16.1)	99 (34.7)	90 (31.6)	3.69	1.28	.000
9	Google Scholar	6 (2.1)	43 (15.1)	19 (6.7)	78 (27.4)	139 (48.8)	4.06	1.16	.000
10	IEEE/IEL Online	2 (.7)	10 (3.5)	12 (4.2)	79 (27.7)	182 (63.9)	4.51	.794	.000

11	ASCE(American Society of Civil Engineers)	47 (16.5)	17 (6)	13 (4.6)	96 (33.7)	112 (39.3)	3.73	1.44	.000
12	ProQuest Engineering journals	27 (9.5)	9 (3.2)	25 (8.8)	130 (45.6)	94 (33)	3.89	1.17	.000
13	EBSCO	17 (6)	15 (5.3)	36 (12.6)	61 (21.4)	156 (54.7)	4.14	1.18	.000
14	McGraw Hill	20 (7.0)	17 (6.0)	40 (14.0)	88 (30.9)	120 (42.1)	3.95	1.19	.000
15	ASTM Digital Library	11 (3.9)	18 (6.3)	72 (25.3)	98 (34.4)	86 (30.2)	3.81	1.05	.000
16	Wiley Blackwell	26 (9.1)	29 (10.2)	60 (21.1)	73 (25.6)	97 (34.0)	3.65	1.29	.000
17	ASME(American Society of Mechanical Engineers)	12 (4.2)	30 (10.5)	46 (16.1)	110 (38.6)	87 (30.5)	3.81	1.11	.000
18	Knimbus Digital library	19 (6.7)	28 (9.8)	86 (30.2)	67 (23.5)	85 (29.8)	3.60	1.19	.000
19	Kopykitab E-Books/Test preparation platform	41 (14.4)	43 (15.1)	70 (24.6)	68 (23.9)	63 (22.1)	3.25	1.34	.000
20	Sententia- An Assistive Tool for formal Writing (NetAnalytiks)	44 (15.4)	50 (17.5)	38 (13.3)	82 (28.8)	71 (24.9)	3.57	1.51	.000

1 – Never, 2 – Rarely, 3 – Sometimes, 4 Very often –, 5 –Always, SD = Standard deviation, N=Number of Respondents, P = Probability, Numbers in Parentheses Indicates Percentage.

The analysis of usage of e-Journals database used by the respondents is presented in table 7.6. The respondents with consider to the e-Journals database of 'ASME (American Society of Mechanical Engineers)'. More number of the users biggest choice is 'very often '; with the mean worth of 3.81 and SD is 1.11. Table 7.6, reveals that, among user using e-Journals database of 'Knimbus Digital library'. The highest number of users are replayed that 'always' with the mean worth of 3.60 and SD is 1.19, the users to the using e-Journals database of 'Kopykitab E-Books/Test preparation platform', users replayed 'sometimes'; with the lowest mean worth of 3.25 and SD is 1.34. The last parameter of using e-Journals database of 'Sententia- an Assistive Tool for formal writing (NetAnalytiks)', maximum number of respondents highest choice is 'very often' with a mean worth of 3.57 and SD is 1.51; for the usage of e-journals databases by the students of BGSIT at ACU.

7.7. Usage of SM (Social Media).

Usage of web social services in BGS Institute of Technology students such as: Facebook; Twitter; LinkedIn; YouTube; Blogs; Delicious; Wikis; Podcast; Flickr; Google+; Pinterest etc. The Table 7.7 indicate that usage of web social services used by the respondents is presented in table. There is outstanding differences (P<.000) the usage of web social services of 'WhatsApp', is the first highest majority of the respondents 207(72.6%) say 'always' with the first highest mean worth of 4.48 and SD is 995; the respondents with consider to the web social services of

'Facebook' is the second highest majority of the users replayed 'always'; with a second highest mean worth of 4.35 and SD is 1.10.

Table 7.7 Web social services

S/N	Social web	Feedback in Percentage (N=285)					Mean	SD	P Worth
		1	2	3	4	5			
1	Facebook	16 (5.6)	10 (3.5)	15 (5.3)	60 (21.1)	184 (64.4)	4.35	1.10	.000
2	Twitter	27 (9.5)	17 (6.0)	32 (11.2)	138 (48.4)	71 (24.9)	3.73	1.17	.000
3	LinkedIn	45 (15.8)	28 (9.8)	52 (18.2)	58 (20.4)	102 (35.8)	3.51	1.45	.000
4	YouTube	5 (1.8)	7 (2.5)	35 (12.3)	87 (30.5)	151 (53.0)	4.31	.905	.000
5	Blogs	22 (7.7)	30 (10.5)	48 (16.8)	112 (39.3)	73 (25.6)	3.65	1.19	.000
6	Delicious	59 (20.7)	35 (12.3)	26 (9.1)	76 (26.7)	89 (31.2)	3.35	1.53	.000
7	Wikis	26 (9.1)	25 (8.8)	32 (11.2)	118 (41.4)	84 (29.5)	3.73	1.23	.000
8	Podcast	66 (23.2)	43 (15.1)	49 (17.2)	67 (23.5)	60 (21.1)	3.04	1.47	.000
9	Flickr	38 (13.3)	25 (8.8)	46 (16.1)	78 (27.4)	98 (34.4)	3.61	1.38	.000
10	Google+	8 (2.8)	16 (5.6)	26 (9.1)	85 (29.8)	150 (25.6)	4.24	1.02	.000
11	Pinterest	66 (23.2)	38 (13.3)	5 (1.8)	92 (32.3)	84 (29.5)	3.32	1.57	.000
12	Instagram	5 (1.8)	7 (2.5)	54 (18.9)	82 (28.8)	147 (48.1)	4.19	.945	.000
13	Tumblr	40 (14.0)	17 (6.0)	66 (23.2)	72 (25.3)	90 (31.6)	3.54	1.35	.000
14	Flickr	16 (5.6)	42 (14.7)	39 (13.7)	88 (30.9)	100 (35.1)	3.75	1.23	.000
15	Reddit	71 (24.9)	14 (4.9)	38 (13.3)	72 (25.3)	90 (31.6)	3.34	1.56	.000
16	Snapchat	40 (14.0)	28 (9.8)	54 (18.9)	97 (34)	66 (23.2)	3.42	1.32	.000
17	WhatsApp	6 (2.1)	17 (6.0)	18 (6.3)	37 (13.0)	207 (72.6)	4.48	.995	.000

18	Quora	33 (11.6)	56 (19.6)	38 (13.3)	70 (24.6)	88 (30.9)	3.44	1.39	.000
19	Viber	9 (3.2)	32 (11.2)	66 (23.2)	75 (26.3)	103 (36.1)	3.81	1.13	.000
20	Digg	68 (23.9)	33 (11.6)	44 (15.4)	80 (28.1)	60 (21.1)	3.11	1.47	.000
21	StumbleUpon	88 (30.9)	46 (16.1)	25 (8.8)	70 (24.6)	56 (19.6)	2.86	1.55	.000
22	BizSugar	56 (19.6)	48 (16.8)	50 (17.5)	74 (26.0)	57 (20.0)	3.10	1.41	.000
23	Periscope	28 (9.8)	36 (12.6)	68 (23.9)	72 (25.3)	81 (28.4)	3.50	1.29	.000

1 – Never, 2 – Rarely, 3 – Sometimes, 4 Very often –, 5 –Always, SD = Standard deviation, N=Number of Respondents, P = Probability, Numbers in Parentheses Indicates Percentage.

Consider to the usage of web social services of 'Stumble Upon', is the lowest number of respondents 88(30.9) say 'never'' with the first lowest mean worth of 2.86 and SD is 1.55; Table 7.6, shows that, among user using web social services of 'Podcast', is the second lowest number of users are replayed that 'never' with the second lowest mean worth of 3.04 and SD is 1.47, for the usage of web social services by the students of BGSIT at ACU.

7.8. Attitude towards Web Resources

Attitude towards web resources in BGS Institute of Technology students such as: Academic work would suffer without Web services; Avoid the use of the Web and still perform better and Opportunity to choose between web and printed resources for academic work, I would choose web resources.

Table 7.8 Web resources

S/N	Statements	Feedback in Percentage (N=285)					Mean	SD	P Worth
		1	2	3	4	5			
1	Academic work would suffer without Web services	5 (1.8)	6 (2.1)	20 (7.0)	88 (30.9)	166 (58.2)	4.42	.850	.000
2	Avoid the use of the Web and still perform better	20 (7.0)	22 (7.7)	18 (6.3)	144 (50.5)	81 (28.4)	3.86	1.12	.000
3	Opportunity to choose between web and printed resources for academic work, I would choose web resources	2 (.7)	5 (1.8)	30 (10.5)	156 (54.7)	92 (32.2)	4.16	.733	.000

Key: 1 – Strongly disagree, 2 – Disagree, 3 – Neither agree nor disagree, 4 – Agree, 5 – strongly agree, SD = Standard deviation, N=Number of Respondents, P = Probability, Numbers in Parentheses Indicates Percentage

There is outstanding differences (P<.000) the attitude towards web resources of 'Academic work would suffer without Web services', is the first highest majority of the respondents 166(58.2%) say 'strongly agree' with the highest mean worth of 4.42 and SD is 850; the respondents with consider to the Attitude towards web resources of 'Avoid the use of the Web and still perform better' is the second highest majority of the users replayed 'agree' with the mean worth of 3.86 and SD is 1.12 and the last parameter of 'Opportunity to choose between web and printed resources for academic work, I would choose web resources' more number of students replayed 'agree' with the mean worth of 4.16 and SD is .733 for attitude towards web resources by the students of BGSIT at ACU.

7.9. Limitation or Restriction in Using Web Resources

Limitation or restriction in using web resources in BGS Institute of Technology students such as: Poor quality of retrieved information; Slow internet at SUA; Inadequate search skills; Restricted downloading of e-resources (require passwords); Limited access to computers and etc. The Table 7.9 indicates that limitation or restriction in using web resources the respondents is presented in table.

Table 7.9 Limitations

S/N	Limitations	Feedback in Percentage (N=285)					Mean	SD	P Worth
		1	2	3	4	5			
1	Poor quality of retrieved information	20 (7.0)	32 (11.2)	64 22.5	79 (27.7)	90 (31.6)	3.66	1.22	.000
2	Slow internet at SUA	47 (16.5)	36 (12.6)	30 (10.5)	82 (28.8)	90 (31.6)	3.46	1.45	.000
3	Inadequate search skills	25 (8.8)	17 (6.0)	50 (17.5)	89 (31.2)	104 (36.5)	3.81	1.24	.000
4	Restricted downloading of e-resources (require passwords)	44 (15.4)	40 (14.0)	49 (17.2)	92 (32.3)	60 (21.1)	3.29	1.35	.000
5	Limited access to computers	45 (15.8)	50 (17.5)	18 (6.3)	100 (35.1)	72 (25.3)	3.36	1.42	.000
6	Unreliable power	17 (6.0)	19 (6.7)	36 (12.6)	75 (26.3)	138 (48.4)	4.05	1.19	.000
7	Too much information retrieved	12 (4.2)	5 (1.8)	60 (21.1)	90 (31.6)	118 (41.4)	4.04	1.03	.000
8	Lack of assistance from librarians	4 (1.4)	12 (4.2)	30 (10.5)	159 (55.8)	80 28.1)	4.05	.825	.000
9	Searching of information can be very tedious	57 (20.0)	22 (7.7)	38 (13.3)	104 (36.5)	64 (22.5)	3.34	1.12	.000
10	Web is definitely not 100% secure	16 (5.6)	23 (8.1)	26 (9.1)	112 (39.3)	108 (37.9)	3.96	1.14	.000

Key: 1 – Strongly disagree, 2 – Disagree, 3 – Neither agree nor disagree, 4 – Agree, 5 – strongly agree, SD = Standard deviation, N=Number of Respondents, P = Probability, Numbers in Parentheses Indicates Percentage.

There is outstanding differences (P<.000) the limitation or restriction in using web resources of 'Lack of assistance from librarians', is the first highest majority of the respondents 159(55.8%) say 'agree' with the first highest mean worth of 4.05 and SD is .825;. the respondents with consider to the limitation of 'Too much information retrieved' is the second highest majority of the users replayed 'strongly agree'; with a second highest mean worth of 4.04 and SD is 1.03. Consider to the limitation or restriction in using web resources of 'Restricted downloading of e-resources (require passwords)', is the lowest number of respondents 40(14.0) say 'disagree'' with the first lowest mean worth of 3.29 and SD is 1.35; Table 7.9, shows that, among user to the limitation or restriction in using web resources of 'Searching of information can be very tedious', is the second lowest number of users are replayed that 'disagree' with the second lowest mean worth of 3.34 and SD is 1.12, for the limitation or restriction in using web resources to the students of in BGS Institute of Technology at Adichunchanagiri University (ACU).

FINDINGS

Important findings of the study "Web Search Behaviour of Engineering Students in BGS Institute of Technology at Adichunchanagiri University (ACU) of Karnataka, India." are presented here.

1. There is outstanding differences (P<.000) the tool of 'Google', 164(57.5%) of the users biggest choice is 'always' with a highest mean worth of 4.38 and SD is .955. (Table 7.4.)
2. Majority of the residents with consider to the web search skills of 'Simple search', 166(58.2%) of the respondents say 'always' with the highest mean worth of 4.30 and SD is 1.06. (Table 7.5.)
3. There is outstanding differences (P<.000) the usage of e-Journals database of 'IEEE/IEL Online', majority of the respondents 182(63.9%) say 'always' with the highest mean worth of 4.51 and SD is 794. (Table 7.6.)
4. Among the respondents with consider to the usage of web social services of 'WhatsApp', is the first highest majority of the respondents 207(72.6%) say 'always' with the first highest mean worth of 4.48 and SD is 995. (Table 7.7.)
5. More number of the users attitude towards web resources of 'Academic work would suffer without Web services', is the first highest majority of the respondents 166(58.2%) say 'strongly agree' with the highest mean worth of 4.42 and SD is 850. (Table 7.8.)
6. Limitation or restriction in using web resources of 'Lack of assistance from librarians', is the first highest majority of the respondents 159(55.8%) say 'agree' with the first highest mean worth of 4.05 and SD is .825. (Table 7.9.)

CONCLUSION

The conclusion of the study show that majority of the students had good experience in using the Web. More number of the users were accessing the Internet more through own modems than other access points such as the college LAN (local area network), and cybercafés. Most of the respondents showed positive attitude towards Web resources and were relying on these resources for their accessing news and current affairs; Class assignments; Communications; Downloading software; Education and self-improvement; Electronic mail; Electronic newspapers and magazines; Entertainment/recreation; Job-hunting and, research. Many students preferred using search engines such as Google and Google scholar as well as social media/networking tools such as WhatsApp and Facebook.

Although, only a few number of the users were using other important Web tools such as Bing. The discovery of the study also shows that more number of users were using simple search to retrieve information from the Web. Boolean operators such as AND, OR, AND NOT were rarely used. Likewise, the use of e-journal databases with regards to the students at BGS Institute of Technology was very low. Restrictions in downloading e-resources were regarded as major problem in using Web resources. Institution should promote the effective utilization of electronic-resources for the academic/research purpose.

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