RESEARCH SCHOLAR'S INTERACTION WITH ONLINE INFORMATION RESOURCES IN THEIR ACADEMIC ACTIVITIES: A SURVEY

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ABSTRACT

The paper aims to study the perception of research scholars on importance of online information resources for accomplishing their academic tasks. In this study, questionnaire method was used for data collection. A total 120 questionnaires were distributed to the research scholars of twenty one departments at University of Mysore and 115 filled-in questionnaires were received back with overall response rate of 95.83%. The study findings indicates that the research scholars depend on numerous online resources for fulfil their various academic tasks. For example 'Community-based encyclopedias such as Wikipedia used for looking definition of concept, the 'University Library Web OPAC' for looking required books, 'University library-subscribed databases such as 'Web of Science' and 'SciFinder' for looking articles, 'Face-to-face reference services' for looking answer to some specific questions. Search engines are the most commonly used source for accomplishing task of preparing 'Research papers'. However, the online resources 'Social Network Sites' like Facebook' are very less important sources for performing both academic tasks of the research scholars. Even though, the use of online information resources have been increased, the traditional resources still play significant role than some other popular new online resources for performing the some specific tasks. The majority of respondents opined that the relevance of information is major criteria for seeking the information on the web.

Keywords: Online information resources, **I**nternet-based resources, Web resources, Online information seeking behavior, Academic information access, Research scholars, User studies, Internet.

INTRODUCTION:

Expansion of new web technologies has significantly influenced on user's perception in accessing numerous online information resources such as online dictionary, online encyclopaedia, online databases, academic blogs, library OPAC, virtual reference services, free community-based question answering sites, social networking sites, online bookstores like Amazon.com, and search engines. These resources are notably different from traditional resources available in libraries because web resources are networked, re-aggregated, heterogeneous, and available in multimedia formats. Information collections are dynamic and beyond physical boundaries (Wang, Hawk, and Tenopir 230). Creating and disseminating information online has become possible and desirable with the help of more vibrant, social and participatory Web 2.0 tools (Anderson, 195); at the same time, it becomes increasingly critical for people to utilize various online information resources as a great deal of relevant information is available only online (He 616). In this context, the present study focuses on examining how research scholars of the University of Mysore interact with online information resources in completion of their simple and complex academic tasks.

LITERATURE REVIEW:

The literature review of the previous studies depict that there are limited number of study to identify the importance of online information resources for fulfil the academic tasks of the Research scholar. Thompson reported that the majority of students begin a research assignment with the Internet, most often with a commercial search engine (259). Students believe that the Web to be an important and valuable educational resource, but they are not consistently successful at finding appropriate and educationally valuable sites (Ebersole 532). He conducted a comparative study on use of online information resources by the undergraduate students, and identified that the student used the different information resources for accomplish their various academic task. The search engines are most commonly used sources for performing the complex academic task, and interestingly the social networking sites like Facebook do not play significant role in completion of student's individual academic task (615). Traphagan investigated that undergraduate students typically prefer using publicly accessible Web-based resources to traditional academic resources, such as scholarly journal articles and books both in print and digital form; furthermore, they view the former as helpful academic tools with various utilities. They used most frequently web based resources such as Google and Wikipedia (1).

Hughes examined the international students' experience of using of online information resources to learn and extensive information literacy learning needs. The international students experience an array of strengths and challenges, and an apparent information literacy imbalance between their more developed information skills and less-developed critical information use (126). Lee, Paik and Joo identified that undergraduate students choose better information resources in their academic search tasks whereas several useful and credible sources were not frequently used, such as experts/professionals, librarians, research reports and institutional repositories. Although they perceive these sources as credible and useful, undergraduates are less likely to use them due to their lack of accessibility and familiarity. Undergraduate students' academic internet use is most strongly patterned along the lines of gender and subject-specialism rather than other individual characteristics or differences in technology access or expertise (Selwyn 11)

OBJECTIVES:

- To find out the importance of various online information resources in completion of simple academic tasks of research scholars.
- To find out the importance of various online information resources in completion of complex academic tasks of research scholars.
- To examine the extent of use of traditional and new online resources.
- To find out the important criteria for seeking information on web
- To identify the most frequently use of web browser.

METHODOLOGY:

The main purpose of the study is to identify the perception of research scholars on importance of online information source for accomplishing their simple as well as complex academic tasks.   The survey research method was used for the study. The structured questionnaire was designed for data collection and five-point Likert scale was used in the questionnaire. The research scholars are required to provide the importance of resources in completing the academic task in a five-point Liker scale: 1 = "not important at all", 2 = "not important", 3 = "not sure", 4 = "important", 5 = "very important". The questionnaire includes three parts. Section 1 has questions deal with the democratic information of the participants. Section 2 has questions which deal with participants view on important of online resources to perform simple individual academic task: looking for definitions of concepts, looking for books, looking for articles, and looking for answers to a specific question. Section 3 deals with participants view on important of online resources to perform complex academic tasks: preparing for research papers. The lists of online resources were employed in the questionnaire mainly belongs to four categories of resources: resources in tradition library such as library catalogue, digital resources in library such as online database, Web 1.0 resources such as search engine, and Web 2.0 resources such as social networking sites. The researcher distributed 120 questionnaires to research scholars of twenty one departments at the University of Mysore and 115 questionnaires were received back. This constituted overall response rate of 95.83%. All the selected departments of the university mainly belong to 3 disciplines such as Science, Social Science, and Commerce and Management. Each department was personally visited for data collection. The survey was done between the month of April, 2013 and January 2014. The data so collected has been analyzed and interpreted in the succeeding sections of the paper.

RESULT AND DISCUSSION

1.   Gender Wise Distribution

Table 1: Gender Wise Distribution

S/N	Gender	No of Respondents	Percentage
1	Male	77	66.96%
2	Female	38	33.04%
	Total	**115**	**100.00%**

The Gender wise distribution of the respondents is shown in the Table 1. It may be seen from the table that the majority of respondents 77(66.96%) are male and remaining 38(33.04%) are female.

2. Age Wise Distribution

Table 2: Age Wise Distribution

S/N	Age	No of Respondents	Percentage
1	<25	19	16.52%
2	26-30	90	78.26%
3	30-40	05	04.35%
4	40>	01	00.87%
	Total	**115**	**100.00%**

The Age wise distribution of the respondents is shown in Table 2. It may be seen from the table that 95 % of the respondents are younger. Among them the majority of respondents 90 (78.26%) belong to age groups of 26 – 30 years followed by 19 (16.52%) belongs to age group of less than 25 years, 05(04.35%) belongs to 30-40 years and 01 (00.87%) belongs to more than 40 years age.

3. Discipline Wise Distribution

Table 3: Discipline Wise Distribution

S/N	Discipline	Respondents	Percentage
1	Science	76	66.09%
2	Social Science	34	29.57%
3	Commerce and Management	05	4.35%
	Total	**115**	**100.00%.**

The table 3 indicates that the discipline wise distribution of the respondents. It may be seen from the table that the majority of respondents 76(66.09%) are belongs to Science discipline followed by Social Science 34(29.57%) and Commerce and Management 05(4.35%).

4. Hours Spent in browsing Internet in a Week

Table 4: Hours Spent in browsing Internet in a Week

S/N	Hours	No of Respondents	Percentage
1	0-5 hours	38	33.04%
2	6-10 hours	20	17.39%
3	11-15 hours	15	13.04%
4	16 or more hours	42	36.52%
	Total	**115**	**100.00%**

The Table 4 shows that the majority of respondents 42 (36.52%) spend more than 16 hours for browsing the internet; followed by 33.04% of respondents who spend 0 – 5 hours, 17.39% of respondents who spend 6 – 10 hours and 13.04% of respondents spend 11 – 15 hours in a week for browsing the internet.

5. Use of Web Browser

Table 5: Use of Web Browser

S/N	Browser	No of Respondents	Percentage
1	Google Chrome	93	80.87%
2	Internet Explorer	36	31.30%
3	Mozilla Firefox	23	20.00%

A preference of use of web browser by the respondents is shown in the table 5. It may be seen from the table that the majority of respondents 93(80.87%) prefer to use 'Google Chrome' web browser followed by 'Internet Explorer' 36(31.30%) and 'Mozilla Firefox' is used by very least number of the respondents which represent 23(20.00%).

6. Importance of Online Information Resources for Looking the Definition of Concept

Table 6: Importance of Online Information Resources for Looking the Definition of Concept

S/N	Online Information Resources	Not at all important	Not Important	Not sure	Important	Very important	Mean
1	Community-based encyclopaedias such as Wikipedia	8 (6.96%)	4 (3.48%)	23 (20.00%)	47 (40.87%)	33 (28.70%)	**3.81 (1)**
2	Online printed dictionaries such as Oxford English Dictionary	1 (0.87%)	12 (10.43%)	28 (24.35%)	53 (46.09%)	21 (18.26%)	**3.70 (2)**
3	Online dictionaries such as disctionary.com	5 (4.35%)	9 (7.83%)	38 (33.04%)	43 (37.39%)	20 (17.39%)	**3.56 (3)**
4	Online version of printed encyclopaedia such as Britannica	6 (5.22%)	18 (15.65%)	42 (36.52%)	45 (39.13%)	4 (3.48%)	**3.20 (4)**

Table 6 reveals that importance of various online information resources for looking the definition of concept by the respondents. It may be seen from the table that the new online resource is more important over the traditional resources for looking the definition of concept. As shown in the table, the majority of respondents (mean=3.81) preferred the' Community-based encyclopaedias such as Wikipedia' for perform the task. The second preferred source is traditional resource 'Online printed dictionaries such as Oxford English Dictionary' (mean=3.70) followed by new online resource 'Online dictionaries such as Dictionary.com' (mean=3.56). The 'Online version of printed encyclopaedia' is used by least number of respondents (mean=3.20).

7. Importance of Online Information Resources for Looking / Searching Books

Table 7: Importance of Online Information Resources for Looking / Searching Books

S/N	Online Information Resources	Not at all important	Not Important	Not sure	Important	Very important	Mean
1	University Library Web OPAC	4 (3.48%)	4 (3.48%)	20 (17.39%)	50 (43.48%)	37 (32.17%)	**3.97 (1)**
2	Online Book search engines such as Google books	3 (2.61%)	6 (5.22%)	21 (18.26%)	50 (43.48%)	35 (30.43%)	**3.94 (2)**
3	Public Catalogue such as Library of congress catalogue and worldcat	2 (1.74%)	11 (9.57%)	38 (33.04%)	42 (36.52%)	22 (19.13%)	**3.62 (3)**
4	Online Bookstores such as Amazon.com	3 (2.61%)	16 (13.91%)	30 (26.09%)	51 (44.35%)	15 (13.04%)	**3.51 (4)**

Table 7 indicates that importance of various online information resources for looking required books by the respondents. It may be seen from the table that the traditional resource is more valued over the new online resource for looking required books. As shown in the table, the majority of respondents (mean=3.97) considered the University Library Web OPAC is a one of the popular traditional resource for fulfil the task followed by new online resource 'Online book search engines such as Google books' (mean=3.94). Interestingly, the dependency on 'Public Catalogue such as Library of congress catalogue and worldcat' (mean=3.62) are more important over 'Online Bookstores such as Amazon.com' (mean=3.51).

8. Importance of Online Information Resources for Looking / Searching Articles

Table 8: Importance of Online Information Resources for Looking / Searching Articles

S/N	Online Information Resources	Not at all important	Not Important	Not sure	Important	Very important	Mean
1	University library-subscribed Databases (LISA and Web of Science and SciFinder Scholar)	4 (3.48%)	4 (3.48%)	20 (17.39%)	49 (42.61%)	38 (33.04%)	**3.98 (1)**
2	Online Academic search engine such as Google Scholar and CiteSeers	4 (3.48%)	8 (6.96%)	17 (14.78%)	44 (38.26%)	42 (36.52%)	**3.97 (2)**
3	Online publisher databases such as such Emerald and Science Direct	2 (1.74%)	7 (6.09%)	30 (26.09%)	37 (32.17%)	39 (33.91%)	**3.90 (3)**
4	Online Open Access databases such as JSTOR	2 (1.74%)	6 (5.22%)	38 (33.04%)	41 (35.65%)	28 (24.35%)	**3.76 (4)**
5	Online social reference management sites as CiteULike and Bibsonomy	9 (7.83%)	8 (6.96%)	48 (41.74%)	37 (32.17%)	13 (11.30%)	**3.32 (5)**

Table 8 reveals that the importance of various online information resources for looking required articles by the respondents. It may be seen from the table that the traditional and new online resources are gained equal importance for completing the academic task of looking for required

article. As shown in the table, the majority of respondents (mean=3.98) gave more importance to 'University library-subscribed databases such as 'Web of Science' and 'SciFinder' for fulfil the task followed by new online resource 'Online academic search engine such as Google and CiteSeers' (mean =3.97), 'Online publisher database such Emerald and Science Direct' (mean=3.90), the 'Online open access databases such as JSTOR' (mean =3.76), and 'Online social reference management sites as CiteULike and Bibsonomy' are used by least number of the respondents (mean=3.32).

9.   Importance of Online Information Resources for Looking Answer to some Specific Questions

Table 9: Importance of Online Information Resources for Looking Answer to some Specific Questions

S/N	Online Information Resources	Not at all important	Not Important	Not sure	Important	Very important	Mean
1	Face-to-face reference services	6 (5.22%)	11 (9.57%)	25 (21.74%)	51 (44.35%)	22 (19.13%)	**3.63 (1)**
2	Virtual reference services such as Ask a Librarian	5 (4.35%)	15 (13.04%)	43 (37.39%)	41 (35.65%)	11 (9.57%)	**3.33 (2)**
3	Free community-based question answering sites such as Yahoo Answers	7 (6.09%)	16 (13.91%)	40 (34.78%)	42 (36.52%)	10 (8.70%)	**3.28 (3)**
4	Professional community-based question answering sites such as Uclue	7 (6.09%)	14 (12.17%)	52 (45.22%)	35 (30.43%)	7 (6.09%)	**3.18 (4)**
5	Friends in social networking sites such as Facebook	11 (9.57%)	23 (20.00%)	27 (23.48%)	42 (36.52%)	12 (10.43%)	**3.18 (5)**

The Table 9 shows the importance of various online information resources for looking answer to specific question by the respondents. It may be seen from the table that the traditional resource is more important over the new online resource for accomplishing the task of looking answer to specific question. The majority of respondents (mean=3.63) assumed that 'Face-to-face reference services' are significant sources for fulfil the task followed by new online resource 'Virtual reference services such as Ask a Librarian' (mean=3.33), the 'Free community-based question answering sites such as Yahoo Answers' (mean=3.28). Interestingly the 'Professional community-based question answering sites such as Uclue (mean=3.18) and 'Friends in social networking sites such as Facebook' (mean=3.18) are considered as less important sources.

10.   Importance of Online Information Resources for preparing Research Papers

Table 10: Importance of Online Information Resources for preparing Research Papers

S/N	Online Information Resources	Not at all important	Not Important	Not sure	Important	Very important	Mean
1	**Online search engines**	4 (3.48%)	5 (4.35%)	16 (13.91%)	45 (39.13%)	45 (39.13%)	**4.06 (1)**
2	**Online database**	2 (1.74%)	1 (0.87%)	23 (20.00%)	51 (44.35%)	38 (33.04%)	**4.06 (2)**
3	**Online Encyclopaedias / dictionaries**	3 (2.61%)	6 (5.22%)	27 (23.48%)	58 (50.43%)	21 (18.26%)	**3.77 (3)**
4	**Online academic discussion forum**	2 (1.74%)	6 (5.22%)	34 (29.57%)	48 (41.74%)	25 (21.74%)	**3.77 (4)**
5	**Academic blogs**	3 (2.61%)	6 (5.22%)	25 (21.74%)	61 (53.04%)	20 (17.39%)	**3.77 (6)**
6	**Community-based question answering sites**	5 (4.35%)	8 (6.96%)	33 (28.70%)	52 (45.22%)	17 (14.78%)	**3.59 (5)**
7	**Social network sites**	8 (6.96%)	20 (17.39%)	26 (22.61%)	36 (31.30%)	25 (21.74%)	**3.43 (7)**

The Table 10 indicates that the importance of online information resources for preparing research papers by the respondents. It may be seen from the table that the 'Online search engines' and 'Online database are foremost online resources for performing the complex academic task of preparing research papers, which represent mean score 4.06 each. The next preferred resources are 'Online encyclopaedias/dictionaries', 'Online academic discussion forum' and 'Academic blogs' which represent mean score 3.77 each. Followed by the 'Community-based question answering sites' (mean=3.59). The social network sites are considered as less important resources (mean=3.43).

11. Important criteria for Seeking Information on Web

Table 11: Important criteria for Seeking Information on Web

S/N	Important criteria	Not at all important	Not Important	Not sure	Important	Very important	Mean
1	Relevancy	1 (0.87%)	4 (3.48%)	15 (13.04%)	52 (45.22%)	43 (37.39%)	**4.15 (1)**
2	Recentness	5 (4.35%)	2 (1.74%)	20 (17.39%)	57 (49.57%)	31 (26.96%)	**3.93 (2)**
3	Familiarity of search tools	5 (4.35%)	8 (6.96%)	20 (17.39%)	52 (45.22%)	30 (26.09%)	**3.82 (3)**
4	Credibility	5 (4.35%)	5 (4.35%)	29 (25.22%)	47 (40.87%)	29 (25.22%)	**3.78 (4)**
5	Abundance	3 (2.61%)	5 (4.35%)	26 (22.61%)	63 (54.78%)	18 (15.65%)	**3.77 (5)**
6	Ease of use	2 (1.74%)	6 (5.22%)	35 (30.43%)	50 (43.48%)	22 (19.13%)	**3.73 (6)**

The Table 11 examines the important criteria for seeking information on Web by the respondents. It may seen from the table the majority of the respondents (mean=4.15) gave more importance

towards the relevance of information available on the web to fulfil their information needs. The 'recentness' is second preferred criteria (mean=3.93); followed by 'Familiarity of search tools' (mean=3.82), 'Credibility of information' (mean=3.78), 'Abundance of relevant information' (mean=3.77), and lastly 'Ease of use of search tools (mean=3.73)

CONCLUSION:

The present study examined the perception of research scholars on importance of online information resources for performing the simple and complex academic tasks. The study result reveals that the traditional resources (or online version of traditional resources) are more valid resources for fulfil some academic tasks. For example "looking for required books" and "looking for answers to a specific question". Similarly the new online resources are also valid resources in completion of some other academic tasks. For example "looking for definition of concept". The traditional and new online resources are gained equal importance in completion of the academic task of looking for required article. 'Online search engines' and 'Online database' are foremost online resources for preparing research papers. However, the online resources 'Social Network Sites' like Facebook' are very less important sources for performing both academic tasks of the research scholars. Even though, the use of online information resources have been increased, the traditional resources still play significant role than some other popular new online resources for performing the some specific tasks.

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