E-Resources: A Reservoir for Information Seekers

Kalaiappan V
Dept of Library and Information Science
University of Madras
Chennai-5, India
Saravanan S
Madras School of Economics
Chennai, India

ABSTRACT: E-Resources play an incredible role in knowledge development. It acts as a reservoir of academic pursuits. The modern generation scholars are highly depending on the electronic resources as it is more convenient and can be accessed at any point of time. E-Resources contains information pertaining to electronic journals, ebooks, teaching notes and slides. The paper explores the importance of e-resources in the medical field and considered four national institution of AYUSH as study. The study highlights that e-resources become an integral part of regular academic activity and the information seekers are getting the required information anywhere at any point of time.

Keywords: E-Resources, AYUSH, Wilcoxon Test

DOI: 10.6025/ijis/2020/12/4/113-119

Received: 17 December 2019, Revised 2 May 2020, Accepted 30 May 2020

© 2020 DLINE. All Rights Reserved

1. Introduction

The modern world is completely dominated by Information and Communication Technology tools (ICTs). Information are passing through modern information technology tools at a faster rate, therefore, the information seekers are able to receive the information instantly wherever they are. In the academic, the role of ICT enabled tools play a significant role. Among various tools and resources, e-resources is one of them play a crucial role in the knowledge development. At present, the traditional concept of searching and accessing of library resources are changed because of the emergence of internet and its resources. Everyone retrieves the information through networked environments and possibly gets accurate information as well as unlimited. In the field of health sciences and information services information seeking become a challenge with it model shift from traditional system of accessing and using to on-line access and use. The Physicians as medical practioners are unable to spent more time to get their required information either for research or for their clinical trails through physical and electronic environments. However, it is to remember that the modern era facilitates many avenues to share the information among the academics and researchers of any disciplines either it may be health sciences or Science and technology and Social sciences. Thus, sharing of information is one component of information seeking as given in the Wilson's first model. It is necessary and inevitable for the libraries to study the user information search, access and use of it and also patterns or modalities of sharing of the information among themselves especially the faculties and scholars so as to devise a plan for procuring, organizing, disseminating as well as networking and resource sharing. The networking and resource sharing is to

maximize not only the use of the resources available within the library as well as to provide the needed information to its user that are available elsewhere. This paper attempts to examine the importance of e-resources in the knowledge development among the faculties and researcher in National Institutes of Ayurveda, Unani, Siddha, and Homoeopathy.

1.1. Information Sharing: An essential for Knowledge Development

Information sharing is a traditional one which is as much as old like civilization and culture which now reaches into new arena and domains with ICT applications. When mankind started communicating their knowledge to the individuals, the concept of information sharing is emerged. Though it reaches new heights at the moment, but it is basically psychological and behavioral aspects which need attentions of the professionals to understand the information sharing patterns of the individuals as well as the library users so as to ensure effective information sharing among them. Based on these aspects, this study is also focusing on the information sharing patterns of the academics and researchers of these institutions. Based on the outcome of this study it is expected to create or design a prototype library network as well as consortia to enhance, the effectiveness in the information sharing among these academics and researchers.

1.2. Information Seeking Behaviour Models: A glance

The meaning of information seeking was made by different scholars from time to time and among them, T.D Wilson definition is an appropriate one to quote here and also the extensive research works carried out by him on this area are highly commendable. Wilson (2000) defines information seeking behaviour as "the purposive seeking for information as a consequence of a need to satisfy some goal. In the course of seeking, the individual may interact with manual information system such as news paper or a library or with computer based system such as the World Wide Web. In recent decades scholars have used many terms to refer varied aspects of information seeking behaviour. D. O. Case (2002) states the information behaviour "is a term whose time has come" because it "captures a broader range of information related phenomena, many of which one "receiving fresh attention". Wilson's (1999) encapsulation of information seeking behaviour is "The totality of human behavior in relation to sources and channels of information including both active and passive information seeking and information use". From these definitions it can be concluded that the information seeking behaviour or perception is mainly depends upon the information needs of user and channels and forms of information. And at present many online publishers are capturing the seeking behaviours of their end users by conducting online surveys and transactional log analysis to enhance their access are usefulness of their products. These surveys and studies helping them to improve the access and browse modules of their products and continuously so as to enhance their market base.

In an academic environment the teaching faculty seek the information for the reason such as class room discussions, conducting an experiment, reviewing a manuscripts, participating in the conferences, workshop. (Blackburn and Lawrence 1995). This means that the information seeking behaviour is a comprehensive and broad term that includes all activities of the faculty members and academicians requirements for his/her career. Subsequently, the students information seeking are concerned with the examinations, preparation of research reports and carrier advancements. Even among the students, few are experienced with functionalities and services of the libraries but few are novice user, so these types of user are to be trained properly for the extensive use of library resources available in physical and electronic forms. However, it is to remember that any marketing agency and even a service organization used to conduct periodical feedback or study to keep their customer intact and find new customers, like these firms library is also a service organization to enhance it services and functionalities it is necessary to carryout periodical user study.

2. Literature Survey

There are numerous studies are made in the information seeking behaviour and related field. A few studies have been critically examined here to get a deep understanding of the research problem. **Kacherki and Thombare** (2010) discussed information seeking patterns of the Library users. And also discussed the advantages and disadvantages of e-journals which are complimentary to each other. The findings showed that majority of users (70%) invented Journals available in both electronic and print forms. **Suresh and Lalitha K** (2009) surveyed the optimum utilization of Internet facilities and services, search strategy adopted, level of satisfaction derived and the problems encountered while surfing the net from the netizens of National Institutes of Technology, The results indicated valuable information about Internet users, search strategies and their level of satisfaction in using the web. **Suresh and Ghouse** (2009) explored information seeking behaviour in Research Universities in Dubai. A structured questionnaire with an objective to study how information is effectively managed and the extent of information services extended to the users in the libraries of Dubai with respect to their technological infrastructure, status of automation, networking and information services etc. **Chowdappa et.al** (2009) depict the extent of dependence of the control of t

dency of users of educational and research institutions of Mysore city on the electronic/digital media. The responses of 1000 users and the critical evaluation of 24 subject experts under Delphi study have been gathered to render valid findings and suggestions. Sami, and Iffat (2009) discussed the use of Electronic Information Services (EIS) introduced in the research libraries. The paper further analysed whether the awareness about the services and the background of the users have any impact on the use of Electronic Information Services. Vasappa and Shivalingaiah (2009) explained the library facilities and services required by the research scholars in the traditional universities in Karnataka State. The hypotheses formulated in this connection were partially proved by the study. Results showed that there were significant differences in the satisfaction level of facilities and services among research scholars of various disciplines. Mulla and Chandrashekara (2009) studied the effective use of Web OPAC in engineering college libraries in Karnataka and revealed that the tool is useful and at the same time respondents felt that there must be user orientation needed for the Web-OPAC. Jason Martin (2008) investigated information seeking behavior of Undergraduate students to gain a better understanding of where they find their research information academic vs nonacademic sources and to determine if library instruction had any impact on the types of sources used. Jamali and Nicholas (2008) examined relationship between academic status and research field of users with their information seeking behaviour. The data were gathered using questionnaire survey of Ph.D. students and staff of the physics and Astronomy of University College, London. Biswas and Haque (2008) revealed that researchers have primarily depended on periodicals of veterinary science and allied branches for their source of information. The geographical and chronological scattering of citations have also been included. The information inferred in the paper may be of help to Agricultural University Libraries to arrive at a need-based consideration in the selection and acquisition of journals within the limited resources.

2.1. Profile of the Study Area: AYUSH

As mentioned earlier, to treat the patients and impart higher education research in the traditional medical systems, many institutions, research centres, laboratories were established in different parts of the country. Especially these institutions are proliferated in the last century as many of the private institutions established in different parts of the country. These institutions are comes under one umbrella which is known as AYUSH (Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy). It was established as Indian Medicine and Homoeopathy under the Department of Ministry of Health and family Welfare in the year 1995 and renamed as AYUSH in the year 2003. The roles of AYUSH are to monitor and control the traditional medical system institutions and research centres. The AYUSH can be compared with that of the MCI (Medical Council of India) which monitors and controls the roles of allopathic medical institutions and research centres in the country. Four different institutions are:

NIAL: National Institute of Ayurveda Library, Jaipure

NIUL: National Institute of Unani Library, Bangalore

NISL: National Institute of Siddha Library, Chennai

NIHL: National Institute of Homoeopathy Library, Kolkata

All these traditional medical institutions are served with very good medical libraries. It is unfortunate that most of the traditional medical literature available in ancient India were either destroyed by the invaders or not preserved properly. However, few of the institutions in India having known the importance of traditional medical systems, they have the objectives of saving these systems from extinct by the influence of allopathic developments.

3. Materials and Methods

The dataset for the study has been collected from 429 respondents in the four institutions. They are grouped under Faculty, Researcher and Students category. The study has made use of Likert scaling method to rate the respondents' opinion. Further, the study has applied ranksum tests the hypothesis that two independent samples (that is, unmatched data) are from populations with the same distribution by using the Wilcoxon rank-sum test, which is also known as the Mann–Whitney two-sample statistic (Wilcoxon 1945; Mann and Whitney 1947). median performs a nonparametric *k*-sample test on the equality of medians. It tests the null hypothesis that the *k* samples were drawn from populations with the same median.

For Wilcoxon rank sum test, there are two independent random variables, X1 and X2, and the null hypothesis is $X1\sim X2$. The data are ranked without regard to the sample to which they belong. If the data are tied, average ranks are used. Wilcoxon's test statistics is computed by by using the following formula

$$T = \sum_{i=n}^{n_1} R_{1i}$$

The Two tailed values of the variables, such as Traditional knowledge Digital Library (.407), e-Thesis of AYUSH (.333), UGC Infonet indicate that the dependency of the respondents on these resources for academic do not differ from research because their values are greater than the table value of 0.05. Thus, these e-resources are highly valuable for the respondents for both of these activities. The variables such as resources on Ethno Medicine Database, Nutritional Database, Patient Database, Online

Sl.No	Sources	Role	*1	*2	*3	*4	*5	Mean Rank	Two-tailed Probability
1	Content of herbal Databases	Academic	77 (17.9)	128 (29.8)	101 (23.5)	81 (18.9)	42 (9.8)	118.38	.001 < 0.05
		Research	43 (10.0)	140 (32.6)	102 (23.8)	89 (20.7)	55 (12.8)	120.18	
2	Content of Ethno Medicine Database	Academic	22 (5.1)	160 (37.3)	102 (23.8)	89 (20.7)	56 (13.1)	108.90	.000 < 0.05
		Research	77 (17.9)	128 (29.8)	101 (23.5)	81 (18.9)	42 (9.8)	86.60	
3	Content of Nutritional Database	Academic	61 (14.2)	141 (32.9)	92 (21.4)	81 (18.9)	54 (12.6)	87.00	.000 < 0.05
	Buttouse	Research	22 (5.1)	160 (37.3)	102 (23.8)	89 (20.7)	56 (13.1)	90.13	
4	Content of Patient Database	Academic	41 (9.6)	124 (28.9)	95 (22.1)	97 (22.6)	72 (16.8)	99.51	.000 < 0.05
		Research	59 (13.8)	141 (32.9)	93 (21.7)	81 (18.9)	55 (12.8)	80.26	
5	Online Clinical News	Academic	39 (9.1)	142 (33.1	104 (24.2)	91 (21.2)	53 (12.4)	92.14	.001 < 0.05
		Research	36 (8.4)	123 (28.7)	95 (22.1)	97 (22.6)	78 (18.2)	104.39	
6	TKDL information	Academic	39 (9.1)	146 (34.0)	113 (26.3)	82 (19.1)	49 (11.4)	83.56	.407 > 0.05
		Research	40 (9.3)	141 (32.9)	104 (24.2)	91 (21.2)	53 (12.4)	85.34	
7	e- Content of Herb world news	Academic	50 (11.7)	159 (37.1)	98 (22.8)	85 (19.8)	37 (8.6)	92.29	.002 < 0.05
		Research	39 (9.1)	147 (34.3)	112 (26.1)	82 (19.1)	49 (11.4)	80.50	

8	Content of Phytotherapies.org	Academic	44 (10.3)	140 (32.6)	101 (23.5)	89 (20.7)	55 (12.8)	88.11	.000 < 0.05	
		Research	49 (11.4)	159 (37.1)	99 (23.1)	86 (20.0)	36 (8.4)	79.49	.001 < 0.05	
9	e- Content of AYUSH portal	Academic	77 (17.9)	128 (29.8)	101 (23.5)	81 (18.9)	42 (9.8)	119.39	.000 < 0.05	
		Research	43 (10.0)	140 (32.6)	102 (23.8)	89 (20.7)	55 (12.8)	120.37	.000 < 0.03	
10	e- Content of Pharmacopeia Monograph	Academic	22 (5.1)	160 (37.3)	102 (23.8)	89 (20.7)	56 (13.1)	108.90	.001 < 0.05	
		Research	77 (17.9)	128 (29.8)	101 (23.5)	81 (18.9)	42 (9.8)	86.60		
11	Meteria medica	Academic	59 (13.8)	141 (32.9)	93 (21.7)	81 (18.9)	55 (12.8)	86.67	.000 < 0.05	
		Research	22 (5.1)	160 (37.3)	102 (23.8)	89 (20.7)	56 (13.1)	89.57		
12	e- manuscripts	Academic	37 (8.6)	124 (28.9)	95 (22.1)	98 (22.8)	75 (17.5)	100.20	.002 < 0.05	
		Research	59 (13.8)	141 (32.9)	93 (21.7)	81 (18.9)	55 (12.8)	78.06		
13	e – journals of AYUSH	Academic	38 (8.9)	143 (33.3)	104 (24.2)	91 (21.2)	53 (12.4)	93.44	.333 > 0.05	
		Research	37 (8.6)	124 (28.9)	95 (22.1)	98 (22.8)	75 (17.5)	102.72		
14	e-Thesis on AYUSH	Academic	39 (9.1)	146 (34.0)	113 (26.3)	82 (19.1)	49 (11.4)	83.62	.002 < 0.05	
		Research	38 (8.9)	143 (33.3)	104 (24.2)	91 (21.2)	53 (12.4)	84.33	.000 < 0.05	
15	e- Bibliographic	Academic	49 (11.4)	159 (37.1)	98 (22.8)	86 (20.0)	37 (8.6)	92.66		
		Research	39 (9.1)	146 (34.0)	113 (26.3)	82 (19.1)	49 (11.4)	81.00	.001 < 0.05	
16	e-Maps relates herbal material location	Academic	43 (10.0)	140 (32.6)	102 (23.8)	89 (20.7)	55 (12.8)	87.94	.000 < 0.05	
		Research	50 (11.7)	159 (37.1)	97 (22.6)	86	37 (20.0)	78.30 (8.6)	+	

17	e - Books	Academic	77 (17.9)	128 (29.8)	101 (23.5)	81 (18.9)	42 (9.8)	120.87	.001 < 0.05
		Research	46 (10.7)	138 (32.2)	102 (23.8)	(20.7)	89 (12.6)	54 119.46	
18	Pub Med	Academic	22 (5.1)	160 (37.3)	102 (23.8)	89 (20.7)	56 (13.1)	108.64	.000 < 0.05
		Research	78 (18.2)	128 (29.8)	100 (23.3)	81 (18.9)	42 (9.8)	86.80	
19	e-Magazines relates to Herbal Medicine	Academic	59 (13.8)	141 (32.9)	93 (21.7)	81 (18.9)	55 (12.8)	87.37	.002 < 0.05
		Research	25 (5.8)	158 (36.8)	102 (23.8)	88 (20.5)	56 (13.1)	90.00	
20	Web of Science	Academic	37 (8.6)	124 (28.9)	95 (22.1)	98 (22.8)	75 (17.5)	99.45	.000 < 0.05
		Research	60 (14.0)	140 (32.6)	93 (21.7)	81 (18.9)	55 (12.8)	77.80	
21	Wikipedia	Academic	38 (8.9)	143 (33.3)	104 (24.2)	91 (21.2)	53 (12.4)	93.44	.002 < 0.05
		Research	37 (8.6)	124 (28.9)	95 (22.1)	98 (22.8)	75 (17.5)	102.72	
22	UGC Infonet	Academic	39 (9.1)	146 (34.0)	113 (26.3)	82 (19.1)	49 (11.4)	85.44	.636 > 0.05
		Research	45 (10.5)	138 (32.2)	102 (23.8)	91 (21.2)	53 (12.4)	83.64	
23	Open Sources on AYUSH Journals	Academic	49 (11.4)	159 (37.1)	98 (22.8)	86 (20.0)	37 (8.6)	92.14	.007 < 0.05
		Research	44 (10.3)	143 (33.3)	111 (25.9)	82 (19.1)	49 (11.4)	79.56	

^{*1-} High Dependence *2- Frequent Dependence *3- Occasional Dependence *4- Rare Dependence *5- No Dependence

Clinical News, Phytotherapies.org, Pub Med, e-maps relates herbal material location, Web of Science and Pharmacopeia Monograph (0.000) indicate respondents dependency for academic do differ from the research because it has Zero value. Thus, they are useful but not much useful for the respondents for these reasons. On the other side the other variables such as e-Magazines relates to Herbal Medicine, e-Books e-journals on AYUSH, e-Bibliographic Database on AYUSH and Open Sources on AYUSH Journals do differ from teaching and research because their values are smaller than the table value of 0.05. Thus they opined that these are not much useful for both the purposes.

4. Conclusion

It is perceived that e-resources play a key role in the knowledge development. The high level of usage of electronic resources even as evident among academicians and researchers is an indication to the fact that even without the expertise knowledge of manipulating information in an electronic environment, students are still getting satisfaction from the little they could get out of electronic sources although handicapped by their low level of ICT experience. This high level of use is also as a result of their perception of ease and usefulness of electronic sources such as the web.

References

- [1] Umeshareddy, Kacherki., Thombare, Mahesh J. (2010). Print vs e-Journal and information seeking patterns of users: a case study of SPJIMR. DESIDOC Journal of Library and Information Technology, 30 (1) 22-25.
- [2] Jange, Suresh., Sami, Lalitha. K. (2009). Challenges and Opportunities: A Trend Report of Internet Users at National Institutes of Technology in India. SRELS Journal of Information Management, 46 (4) 391-402.
- [3] Jange, Suresh., Pasha, M.G. Ghouse. (2009). Information Management and Services at Research Universities in Dubai. *SRELS Journal of Information Management*, 46 (2), 141-148.
- [4] Chowdappa, N., Chandrashekara, M., Ramasesh, C. P. (2009). Impact of Electronic Information Sources on the Academic Users in Mysore: An Analytical Study. *SRELS Journal of Information Management*, 46 (2) 155-162.
- [5] Sami, Lalitha. K., Iffat, Rabia. (2009). Use of Electronic Information Services in Research Libraries. *SRELS Journal of Information Management*, 46 (1) 43-50.
- [6] Gowda, Vasappa., Shivalingaiah, D. (2009). Awareness and Use of Library Facilities and Services by the Research Scholars in the Universities in Karnataka: An Analytical Study. *SRELS Journal of Information Management*, 46 (2) 163-178.
- [7] Mulla, K. R., Chandrashekara, M. (2009). Access of Web-OPAC in Engineering College Libraries in Karnataka: A Survey. *SRELS Journal of Information Management*, 46 (3) 321-332.
- [8] Jason Martin. (2008). Information seeking behaviour of undergraduate education major's does library instruction play a role. Evidence Based Library and Information Practice, 3 (4).
- [9] Jamali, H. R., Nicholas, D. (2008). Information seeking behaviour of physicists and astronomers. *Aslib proceeding*, 60 (5), 444-462.
- [10] Biswas, Bidhan Chandra., Haque, Md Enamul. (2008). Information Use Pattern of Researchers in Veterinary Science and Animal Husbandry: A Citation Study. SRELS Journal of Information Management 45 (3) 355-363.