

Original Research Article

User Satisfaction of Electronic Resources and Services in Marine Science Research Libraries: A Study

Maranna O

Assistant Professor, DLISc, Rani Channamma University, Vidhyasangama, Belagavi-591156.

Received: 12/03/2015

Revised: 06/04/2015

Accepted: 06/04/2015

ABSTRACT

An analysis of 7 libraries of marine science and 239 marine scientists (users) of different categories have been conducted to measure the user needs and satisfaction level of users on e-resources and services among the major Marine science libraries in South India. The key variables for this study include: the existing status of E-resources, services and facilities, collections, mode of subscription of e-journals, user's visit to the libraries, availability and use of databases. User's suggestions to improve the library services have also been included.

Keywords: Marine science Libraries; E-resources; Library services; Scientists; User satisfaction.

INTRODUCTION

Electronic resources, particularly journal literature have become a major element of library collections worldwide. In marine science and research development institutions, electronic resources, as an integral part of an institute's libraries and academic resources, are assisting learning, teaching and research activities. Therefore, it has become a great challenge for the electronic resource producers and providers to understand the variety of scientists' demands in order to improve the efficiency and value of the utilisation of electronic resources. This needs to be undertaken so that the research libraries can attract more potential users and enhance the service quality and customer satisfaction. (Liyi Zhang and Pinghao Ye and Qiniu Liu, 2010). The present study is an attempt to analyse the use of e-resources by the

scientists of Marine science research and developmental Institutions and to find out the problems and constraints faced by the scientists in accessing the e-resources with some purposeful suggestions for its development.

Scope and Coverage

This research study is confined to the study of electronic resources and services with special reference to Marine science scientists. Geographically it is bounded to the Marine Science Research and development Institutions are covered, these research institutions were affiliated to Central Institute of Fisheries Education (CIFE) and Indian Council of Agricultural Research Institute (ICARI) Mumbai, India with special reference to South India. The study covers four states that include Karnataka, Andhra Pradesh, Tamil Nadu and Kerala.

Objectives of the Study

The objectives of the study are:

1. To assess the contemporary use of electronic information resources by the scientists.
2. To examine the attitude of the scientists towards use of e-resources.
3. To find out the main reason(s) behind the usage of electronic resources by them.
4. To identify and analyse the specific factors that promote or hinder the use of electronic resources.
5. To suggest measures for improving and promoting the existing library e-resources and services by the scientists.

METHODOLOGY

The survey questionnaire consisted of four sections. Section I was structured to elicit some demographic information about the study group. Section II sought to investigate the general information about searching patterns. Section III focused on library activities. Section IV is an open-ended question for final comments.

Method of data collection

To fulfill the objectives of the study, a structured questionnaire covering relevant aspects of the study was distributed among the marine science scientists. Further, random sampling techniques were used for distribution of questionnaire as it was not possible to collect data from all the target respondents under the scope of the study. Besides in some cases, personal interactions, verifications of records were made to get first hand information. The questionnaire was prepared in such a way that the respondents could easily understand the items. Total 373 questionnaires were distributed randomly among the scientists. i have collect questionnaires from only 239

out of 373 respondents. This constitutes 64% (239/373) of the total response.

RESULTS AND ANALYSIS

Analysis of data is the ultimate step in a research process. It is the link between raw data and significant results, leading to conclusions. This process of analysis has to be result-oriented.

Table 5.1. Gender wise distribution of Respondents

Sl No	Institutions	Male	Female	Total
1	CESS, Trivandrum	6.3	0.8	7.1
2	CIBA, Chennai	9.2	5.9	15.1
3	CIFT, Cochin	7.1	3.3	10.5
4	CMFRI, Cochin	10.0	13.0	23.0
5	INCOIS, Hyderabad	7.5	2.1	9.6
6	NIO, (Reg off), Cochin	6.3	2.5	8.8
7	NIOT, Chennai	21.8	4.2	25.9
	Total	68.2	31.8	100.0

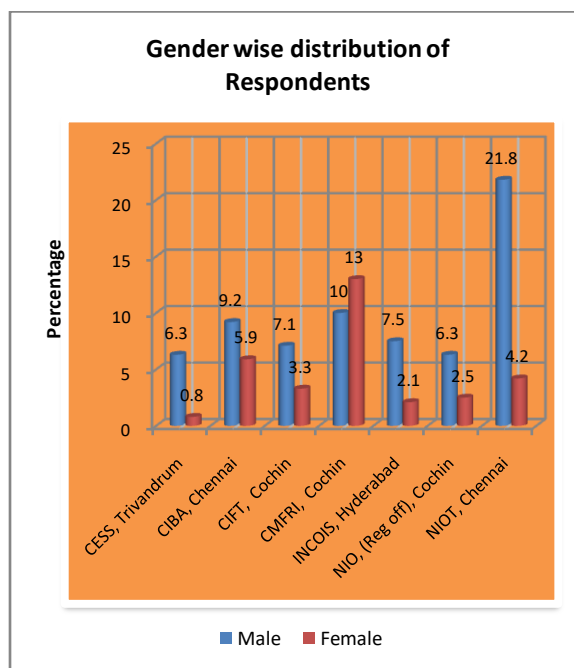


Figure 5.1. Gender wise distribution of Respondents

Table 5.1, figure 5.1 clearly show the institution wise and gender wise distribution of scientists. The sample population used in the present study contains more number of male scientists (68.2%) than female scientists (31.8%).

Table 5.2. Satisfying users' Information needs via E- Resources: Scientists

Sl No	User Needs	Total =239					χ^2
		Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	
1	The library provides adequate access to e-resources	19 (7.9)	197 (82.4)	07 (2.9)	01 (0.4)	15 (6.3)	17.667* Significant at 1% level
2	The library offer adequate instructions and assistance on use of e- resources.	18 (7.5)	218 (91.2)	02 (0.8)	00 (0.0)	01 (0.4)	11.841* Significant at 1% level
3	The library provide adequate training on use e-resources	21 (8.8)	200 (83.7)	10 (4.2)	00 (0.0)	08 (3.3)	13.999* Significant at 1% level

The opinion has been collected from scientists on performance of the library in providing accessibility to e-resources. The data has been tabulated and presented in Table 5.2.

Table 5.2 reveals that, a majority (98.1%) (Strongly agree 7.5% and agree 91.2%) of the respondents agreed that the library offers adequate instructions and assistance on the use of e-resources. Very small percent of respondents (0.8%) were neutral and (0.4%) disagreed strongly. The third particular is placed at second rank. Most (strongly agree 8.8% and agree 83.7%) of the respondents said the library provides adequate training on the use of e-resources, whereas 4.2% were neutral, and 3.3% disagreed strongly. The first particular placed at third rank. A large number (strongly agree 7.9% and agree 82.4%) of the respondents agreed with adequate access of e-resources whereas less number (2.9%) of the respondents were neutral, very less number disagreed (0.4%) and strongly disagreed (6.3%).

Chi-square test was made to test the significance of association between the degree of satisfaction towards the libraries

providing adequate access to e-resources and the designation of the scientists. The calculated chi-square value was found to be statistically significant. Therefore it can be inferred that there is an association between the level of satisfaction and the designation of scientists.

Chi-square test was made to test the significance of association between the degree of satisfaction towards the libraries offering was adequate instructions and assistance on the use of e-resources and the designation of the scientists. The calculated chi-square value was found to be statistically significant. Therefore it can be inferred that there is an association between the level of satisfaction and the designation of the scientists.

In addition the chi-square test was made to test the significance of association between the degree of satisfaction towards the libraries providing adequate training on use of e-resources and the designation of scientists. The calculated chi-square value was found to be statistically significant. Therefore, it can be inferred that there is an association between the level of satisfaction and the designation of the scientists.

Table 5.3. Ranking of Quality of Information Acquire from Electronic Resources

Sl No	Research Institute Scientists	High Quality	Some what high quality	Poor quality	Total	χ^2
1	Pri. Scientist / Scientist. F	60 (25.1)	05 (2.1)	00 (0.0)	65 (27.2)	10.346* Significant at 1% level
2	Scientist E/ Scientist E1,E2	18 (7.5)	00 (0.0)	00 (0.0)	18 (7.5)	
3	Sr. Scientist / Scientist -(C D)	84 (35.1)	10 (4.2)	00 (0.0)	94 (39.3)	
4	Scientist / Scientist –B	53 (22.2)	08 (3.3)	01 (0.4)	62 (25.9)	
	Total	215 (90.0)	23 (9.6)	01 (0.4)	239 (100.0)	

Table 5.3 gives a general view of rating the quality of e-resources. 90% of scientists, agreed with the high quality of information acquired from e-resources, whereas 9.6% of scientists said somewhat high quality of e-resources and 0.4% of scientists agreed with the poor quality of information acquired from e-resources.

Chi-square values have been calculated to test the significance of

association between the ranking of quality of information and designation of scientists. The calculated chi-square value was found to be statistically significant at 1% probability level. Therefore, it could be inferred that, there is a significant association between the designation of scientists and the level of ranks assigned to the quality of information.

Table 5.4. Rank of Access Time Search an Electronic Resource

Sl No	Research Institute Scientists	Very fast	Fast	Some what fast	Slow	Total	χ^2
1	Pri. Scientist / Scientist. F	25 (10.5)	38 (15.9)	02 (0.8)	00 (0.0)	65 (27.2)	17.002* Significant at 1% level
2	Scientist E/ Scientist E1,E2	09 (3.8)	06 (2.5)	03 (1.3)	00 (0.0)	18 (7.5)	
3	Sr. Scientist / Scientist -(C D)	29 (12.1)	54 (22.6)	11 (4.6)	00 (0.0)	94 (39.3)	
4	Scientist / Scientist -B	26 (10.9)	25 (10.5)	09 (3.8)	02 (0.8)	62 (25.9)	
	Total	89 (37.2)	123 (51.5)	25 (10.5)	02 (0.8)	239 (100.0)	

In response to the question about rating, the typical access time to search an electronic resource, different categories of scientists opined in different ways and the data is presented in Table 5.4. A large number of scientists rated it as fast (51.5%) and followed by very fast (37.2%) and somewhat fast (10.5%). Only two respondents rated it as slow.

Chi-square values have been calculated to test the significance of

association between the rating of the typical access time to search an e-resource and designation of scientists. The calculated chi-square value was found to be statistically significant at 1% probability level. Therefore, it could be inferred that, there is a significant association between the designation of scientists and the level of ranks assigned to rating the typical access time to search an e-resource.

Table 5.5. Rate of Usability of the Library Websites

Sl No	Research Institute Scientists	Very Easy	Easy	Somewhat Easy	Not easy	Total	χ^2
1	Pri. Scientist / Scientist. F	13 (5.4)	24 (10.1)	26 (10.9)	02 (0.8)	65 (27.2)	17.656* Significant at 1% level
2	Scientist E/ Scientist E1,E2	03 (1.3)	09 (3.8)	06 (2.5)	00 (0.0)	18 (7.5)	
3	Sr. Scientist / Scientist -(C D)	13 (5.4)	31 (13.0)	49 (20.5)	01 (0.4)	94 (39.3)	
4	Scientist / Scientist -B	07 (2.9)	30 (12.6)	20 (8.4)	05 (2.1)	62 (25.9)	
	Total	36 (15.1)	94 (39.3)	101 (42.3)	08 (3.3)	239 (100.0)	

To know the web usability, respondents were asked to rate the usability of the library websites. Usability rate of

library website is given in Table 5.5. A large number of scientists rated the usability of library website as somewhat easy (42.3%)

followed by easy (39.3%) and very easy (15.1%). scientists (3.3%) rated it as not easy.

Chi-square value has been calculated to test the significance of association between the usability of library websites and designation of scientists. The calculated chi-square value was found to be statistically significant at 1% probability level. Therefore, it could be inferred that, there is a significant association between the designation of scientists and the level of ranks assigned to the usability of library websites.

Findings

The sample population used in the present study contains more number of male scientists (68.2%) than female scientists (31.8%).

The majority (98.1%) (Strongly agree 7.5% and agree 91.2%) of the respondents agree that the library offers adequate instruction and assistance on the use of e-resources. Very small percent of respondents (0.8%) were neutral and 0.4% disagreed. (Tables 5.2).

A general view of rating the quality of e-resources. 90% of scientists agreed with the high quality of information acquired from e-resources, whereas 9.6% of scientists said somewhat high quality of e-resources and 0.4% of scientists agreed with the poor quality of information acquired from e-resources (Table 5.3).

A large number of scientists rated e-resources as fast (51.5%) and followed by very fast (37.2%) and somewhat fast (10.5%). Only two respondents rated it as slow. (Tables 5.4).

A large number of scientists rated the usability of library website as somewhat easy (42.3%) followed by easy (39.3%) and very easy (15.1%). (Tables 5.5).

REFERENCES

- Liyi Zhang Pinghao Ye Qihua Liu, (2011), "A survey of the use of electronic resources at seven universities in Wuhan, China", Program, Vol. 45 Iss 1 pp. 67 - 77. Permanent link to this document: <http://dx.doi.org/10.1108/00330331111107402>
- Peter R. Young, "Measurement of Electronic Services in Libraries: Statistics for the Digital Age," IFLA Journal 24 (1998): 157-160.
- Carol Tenopir and Eleanor Read, "Patterns of Use and Usage Factors for Online Databases in Academic Libraries," College & Research Libraries 61 (May 2000): 234-446.
- Carol Tenopir and Eleanor Read, "Patterns of Use and Usage Factors for Online Databases in Academic Libraries," College & Research Libraries 61 (May 2000): 244.
- Deborah D. Blecic, Joan B. Fiscella and Stephen E. Wiberley, Jr., "The Measurement of Use of Web-based Information Resources: An Early Look at Vendor-supplied Data," College & Research Libraries 62 (September 2001): 434-453.
- Charles R. McClure and John Carlo Bertot, ed., Evaluating Networked Information Services: Techniques, Policy, and Issues (Medford, NJ: American Society for Information Science and Technology, 2001).
- Biradar, B. S and Sampath Kumar, B. T (2005). Use of Internet by Physicists in Universities of Karnataka State. *ILA Bulletin*, 41 (4), 25-40.
- Biradar, B. S (2008). Use of Search Engines for Retrieval of Scholarly Information: A Case Study. *IASLIC Bulletin*, 53 (4), 215-222.
- Biradar, B. S and Sampath Kumar, B. T (2008). Use of Search Engines by Research scholars and Faculty members of physics departments in the universities of Karnataka State. *Annals*

of Library and Information Studies, 53, 62-68.

- Mishra (2005). Internet utilization pattern of undergraduate students. *University News*, 43 (13), 8-12.
- Kaur, Amritpal (2002). Use of Internet by Scientists in Guru Nanak Dev University: A Survey. Paper presented at the XX IASLIC Conference, Calcutta.

- Mishra (2005). Internet utilization pattern of undergraduate students. *University News*, 43 (13), 8-12.
- Walke, Rajpal (December 13-16 2007). Use of Electronic Resources by NPL (India) Researchers: A Survey. Paper presented at the 53rd All India Library Conference, New Delhi.

How to cite this article: Maranna O. User satisfaction of electronic resources and services in marine science research libraries: a study. *Int J Res Rev*. 2015; 2(4):169-174.

International Journal of Research & Review (IJRR)

Publish your research work in this journal

The International Journal of Research & Review (IJRR) is a multidisciplinary indexed open access double-blind peer-reviewed international journal published by Galore Knowledge Publication Pvt. Ltd. This monthly journal is characterised by rapid publication of reviews, original research and case reports in all areas of research. The details of journal are available on its official website (www.gkpublication.in).

Submit your manuscript by email: gkpublication2014@gmail.com OR gkpublication2014@yahoo.com