### Webology, Volume 5, Number 4, December, 2008

**Home Table of Contents Titles & Subject Index Authors Index** 

# What is not available online is not worth reading?

#### Hamid R. Jamali

Assistant Professor, Ph.D., Department of Library and Information Studies, Faculty of Psychology and Education, Tarbiat Moallem University, No 49, Mofateh Ave, P.O.Box: 15614, Tehran, Iran. Email: h.jamali (at) gmail.com

Received November 20, 2008; Accepted December 20, 2008

#### **Abstract**

This short article discusses an emerging trend in the information-seeking behaviour of scientists, i.e. mere reliance on online information. Based on a study of physicists and astronomers, this article shows that more scientists now assume that if articles are of enough quality and significance, they must be available online and vice versa. Though still in a low minority, a number of scientists believe that what is not available online is not worth the effort to obtain it.

## **Keywords**

Online access: Open access; Accessibility

#### Introduction

As <u>Wilson and Walsh</u> (1995) state, a fundamental requirement for information-seeking is that some source of information should be accessible. The lack of an easily accessible source may inhibit information-seeking altogether, or may impose higher costs than the enquirer is prepared to pay. Looking for information and making a relevance judgment is normally done based on the surrogates of the information resources i.e. titles, abstracts, subject keywords, excerpts presented in search engines and so on. Once users locate the information they want they need to access the information resource whether it is a journal article, an e-print, a book or any other kind of information resource. Most of journals can be accessed nowadays online as well as in print format which are preserved in libraries.

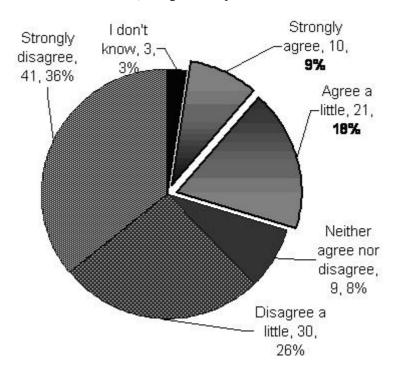
## Reliance on online availability

In a study of information seeking behaviour of physicists and astronomers (Jamali, 2008), which included semi-structured interviews with 56 faculty members and PhD students at the University College London, they were asked about the way they obtain and access information resources, particularly about accessing articles - probably the most important source of information in physics and astronomy. All of the interviewees in the study stated that their preference was to obtain the articles online as PDF files. The reason of course was the convenience associated with accessing an article electronically compared to having to go to the library and reading or photocopying the print version. The participants wanted to be able to access the articles online and if necessary save or/and print them. Statements such as 'if it is not online I am annoyed' were the normal kind of expressions the interviewees made in reply to the question about the way they access and obtain the articles.

The interviewees then were asked what they would do if the article was not available online. Going to the library in order to access the hard copy was the second option that a considerable number of interviewees said they would choose. However, a few (four) of the interviewees stated that before going to the library they would try to see if a colleague had a copy, or they might even contact the author and ask for a copy. Surprisingly seven interviewees thought that *if an article is not online then it is not worth the effort to obtain it.* They said that if it is not available online they would not bother to look for it elsewhere and they would try to find an alternative source of information if possible.

In order to see whether this was a common belief among physicists and astronomers, a question was included in a follow up survey with 114 respondents (47.1% response rate, total population=242). The respondents in the survey were exposed to the following statement and asked to express their level of agreement or disagreement: 'If an article is not available online, it's probably not worth the effort to obtain it.' The majority of respondents (62.3%) a little or strongly disagreed with the statement. However, 27.2% of respondents agreed a little or strongly with the statement (Figure 1).

Figure 1. Respondents by their level of agreement with the statement: 'If an article is not available online, it's probably not worth the effort to obtain it'



The reason they thought so was the assumption that if an article is a valuable one, even if it is too old to have been published in the electronic format, someone somewhere must have scanned it and put its electronic version on a repository. This is the case for most of classic and important papers in physics and astronomy. The following quotation shows this perception. When the interviewee was asked why he would give up trying to access an article which is not online, he answered:

"It's not worth it. So when you know Einstein's papers from 1905, right for instance, I don't have to go and get the German [journal] right, I know that it's online somewhere because somebody scanned it in, right, so."

It should be said that physics and astronomy are among pioneer fields in scholarly communication and electronic publishing and the rate of online availability of journal articles is very high in these fields (Gould & Pearce, 1991; Nicholas et al., 2005; Wertman, 1999). However, in some subfields, the situation is better than the others. In astronomy especially, the online availability is well-advanced. Referring to online availability of material, an interviewee from the field of astronomy stated:

". . . for astronomical journals it's remarkably comprehensive. It really is extremely good."

The study (<u>Jamali</u>, 2008) had an intradisciplinary perspective and investigated the differences in information seeking behaviour of scientists from different subfields of physics and astronomy. The study showed that the rate of agreement with the statement was higher among High Energy Physicists and Astronomers & Astrophysics, of which 17 and 14 percent strongly agreed respectively. These two areas were the first two and probably the most advanced subject areas in arXiv e-print repository and this might be one of the reasons of their reliance on electronic material.

## **Concluding remarks**

This surprising statement "what is not online is not worth the effort to obtain it" made by some scientists indicates a few points. The positive side is the high uptake of electronic information services among scientist in certain fields such as physics and astronomy and that they have fully embraced digital information services. However, this statement also indicates a change in the perception that users have of the value of information sources based on their means of accessibility. It implies that at least in some scientific fields online availability of articles is a measure of their collective quality assessment by their subject community. This is the case especially about old articles as it was shown in the quotation above. This trend shows the high expectation of scientists for being able to access all the information they need in the online format. This puts a pressure on publishers, information providers and librarians to make more and more information available in digital format.

This association of online availability with the value of information by scientists can have a negative effect as there might be valuable articles that are not available in electronic format and therefore might be neglected. This raises concern about reinvention of the wheel in science, an issue that was highlighted and warned about by <u>Lancaster</u> (2003) in the introduction of the third edition of his book on indexing.

This approach of users to use of information resources also can be looked at from another perspective, which is perceived accessibility. Users have a perception of the accessibility of the resources they want to use. Past research has shown a strong positive relationship between perceived accessibility and the selection of a particular information source (Gerstberger & Allen, 1968; O'Reilly, 1982; Morrison & Vancouver, 2000). If users think that they may not have access to a particular information resource they would be reluctant to try to use it and would attempt to satisfy their information needs by using another information resource. Ease of access and the principle of least effort play a part in the choice of information resources. The use of Zipf's least effort principle in providing information services has already been recommended (Bigdeli, 2007).

#### References

- Bigdeli, Z. (2007). <u>Iranian engineers' information needs and seeking habits: An agro-industry company experience</u>. *Information Research*, 12 (2), paper 290. Retrieved November 25, 2007, from http://informationr.net/ir/12-2/paper290.html
- Gerstberger, P.G., & Allen, T.J. (1968). Criteria used by research and development engineers in the selection of an information source. *Journal of applied psychology*, 52 (4), 272-279.
- Gould, C. C. and Pearce, K. (1991). *Information needs in the sciences: An assessment*. Mountain View, California: Research Library Group.
- Jamali, H.R. (2008). *Information-seeking behaviour of physicists and astronomers: an intradisciplinary study*. University College London, Unpublished PhD thesis.
- Lancaster, F. W. (2003). *Indexing and abstracting in theory and practice*, (3rd ed.). London: Facet.
- Morrison, E.W., & Vancouver, J.B. (2000). Within-person analysis of information seeking: The effects of perceived costs and benefits. *Journal of Management*, 26 (1), 119-137.
- Nicholas, D., Huntington, P., Rowlands, I., Jamali, H.R., & Haynes, J. (2005). An investigation of physicists' information-seeking behaviour, publishing practices, and views on the scholarly publishing system: with special reference to the Institute of Physics and its journals, Report of an international survey. London: CIBER.
- O'Reilly, C.A. (1982). Decision makers' use of information sources: The impact of quality and accessibility of information. *The Academy of Management Journal*, 25 (4), 756-771.
- Wertman, E.R. (1999). *Electronic preprint distribution: a case study of physicists and chemists at the University of Maryland*. Unpublished MSc, Virginia Polytechnic Institute and State University, Blacksburg, VI.
- Wilson, T.D., & Walsh, C. (1995). *Information behaviour: An interdisciplinary perspective*. London: British Library Research and Development Department.

## Bibliographic information of this paper for citing:

Jamali, Hamid R. (2008). "What is not available online is not worth reading?" *Webology*, **5**(4), Article 63. Available at: http://www.webology.ir/2008/v5n4/a63.html

Alert us when: New articles cite this article

Copyright © 2008, Hamid R. Jamali.