



Evidence Summary

Librarian and LIS Faculty Participation in Self-Archiving Practice Needs Improvement

A Review of:

Xia, J., Wilhoite, S. K., & Myers, R. L. (2011). A "librarian-LIS faculty" divide in open access practice. *Journal of Documentation*, 67(5), 791-805. doi:10.1108/00220411111164673

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Abstract

Objective – To compare librarian and LIS faculty open access (OA) self-archiving behavior.

Design – Logistical Regression Analysis.

Setting – Twenty top-ranked library and information science journals published in 2006.

Subjects – A total of 812 research articles in LIS journals.

Methods – For the purpose of data collection, the researchers first compiled a list of library and information science journals utilizing *Journal Citation Reports (JCR)* from 2006. Twenty journals were selected by considering impact factor and the list compiled was

checked against *Ulrich's Periodicals Directory* following a similar methodology utilized in a 2007 article by Anita Coleman. The sample included was representative of both library and information science journals, and there were exclusions of 3 types of journals: free online journals where OA participation could not be measured; subscription based journals that do not supply free articles; and annual review journals. Here, OA participation or OA practice is considered to be author self-archiving of articles that are not freely available online. Research articles were included in the sample; however, editorials and book reviews were excluded. The researchers also collected information about the article itself, including the title, name of the journal and name of the author. Only first author's status as librarian or LIS faculty was considered in data collection. One difficulty in

collecting data about the authors was that their professional status was not always clear. The researchers collected information on whether the author's status was librarian or faculty; when an author's status was unclear, researchers searched online to determine it. If the author's status still could not be determined via online searching, the authors chose to exclude those articles.

After the articles were collected, Google Scholar was searched in order to determine OA status. The articles that were deemed OA were opened and if the article was downloadable, it was included; otherwise, it was not included. Researchers also avoided linking to articles through their own library portal which would have allowed for access to articles through their own library's subscription. Other data was collected using Web of Science and included citation information; length of articles; and number of references, authors, and self-citations.

Analysis of data was performed utilizing logistic regression. The researchers selected the professional status (librarian or faculty) as the dependent variable, assigning 1 to librarian status and 0 to faculty status. The independent variables included the OA status of an article, citation count, self-citation counts, number of authors, length in pages, and number of references. Researchers also chose to normalize data by adding one citation to every article in the dataset because many did not receive citations. SPSS was utilized as the statistical analysis tool.

Main Results – Researchers were able to recognize a divide with regard to where librarians and librarian faculty publish. Librarians tend to avoid journals that focus on information science and publish more in journals related to the practice of librarianship.

After performing the logistic regression analysis, researchers also chose to look at the "dichotomous dependent variable" and the "dichotomous predictor variable." The dependent variable was article availability in OA and the predictor variable is professional status of the author. They ran a 2X2

contingency table and the p-value was below 0.05; therefore, there was a failure to reject the null hypotheses that there is no difference between librarian and faculty publication behaviors. An odds ratio was also calculated that reveals that librarians are only 1.029 times more likely to self-archive their articles than faculty.

Results from the logistic regression model analysis also included information that librarians and faculty have similar behavior with regard to self-archiving the OA version of their publication, and the researchers provide data in table format in order to depict the relationships between predictor variables and dependent variables. With regard to author status and citation counts, faculty have more citation numbers, self-citations are not related to author status, and faculty tend to self-cite more often. Librarians favor co-authorship more than faculty, and faculty articles tend to be lengthier and utilize more references.

Effectiveness of the logistic regression analysis was tested using the Hosmer-Lemeshow test for goodness of fit and showed that logistic regression analysis was the proper method for analyzing data collected with a 74.8 success rate.

According to the article, there is no difference between librarian and faculty with regard to self-archiving OA activity; faculty members receive more citations regardless of OA status; and there are differences between the two with regard to other variables of articles.

Conclusion – Because librarians and LIS faculty are considered to be advocates for self-archiving and are often involved with institutional repositories, it is surprising that they are not themselves participating more in self-archiving behaviors.

Commentary

The actual results of this study are much narrower than the researchers imply. The study discusses OA practice and the authors' language leads one to believe that the scope of

the article is larger. OA practice in this article means “librarian and LIS faculty self-archiving behavior,” but this was not always made clear throughout.

The differentiation between librarian and faculty was also unclear. It would be beneficial for the authors to clearly state whether the librarians included in the study are academic librarians who are not faculty status, or if they are practitioners outside of the academic arena. OA may not be as much of a concern for librarians who are not working in an academic setting.

The researchers identified limitations with regard to their methodology. One issue is that they were not completely able to identify whether an article was OA. Only Google Scholar was used to search for articles and no other databases were considered. Another limitation is that they had difficulty at times discovering the status of an author and also did not consider the status of co-authors, which may skew the data.

The data collected regarding OA citation numbers and consumption is interesting, but the main research question stated in the article is whether a librarian-faculty divide exists in OA contribution with regard to article self-archiving. Analyzing data related to OA article consumption would be better presented in another article and the focus should remain on the analysis of OA self-archiving between the two groups.

While there are some questions with regard to data collection, the data analysis was executed nicely. The researchers decided to employ a direct measure instead of using a survey instrument to determine whether there is a divide between librarians and faculty. They chose to use a logistic regression analysis and then went on to utilize a goodness-of-fit test, Hosmer-Lemeshow, which indicated that it was a good model to use for the purposes of this paper.

The main goal of this article was to present a divide between librarians and LIS faculty with regard to self-archiving. While there is no significant difference between the two groups, the research does present that self-archiving behavior is happening less than one would think. The results of the research could lead to implementation of self-archiving policies or mandated contribution to institutional or digital repositories. Librarians and LIS-faculty tend to educate scholars about self-archiving, but perhaps more education must take place within their own profession.

References

- Coleman, A. (2007). Self-archiving and the copyright transfer agreements of ISI-ranked library and information science journals. *Journal of the American Society for Information Science and Technology*, 58(2), 286-296.