

# **Evidence Based Library and Information Practice**

## Evidence Summary

Doctoral Students in New Zealand Have Low Awareness of Institutional Repository Existence, but Positive Attitudes Toward Open Access Publication of Their Work

#### A Review of:

Stanton, K. V., & Liew, C. L. (2012). Open access theses in institutional repositories: An exploratory study of the perceptions of doctoral students. *Information Research*, 17(1), paper 507. Available from http://InformationR.net/ir/17-1/paper507.html

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#### Abstract

Objective – To investigate doctoral students' knowledge of and attitudes toward open access models of scholarly communication and institutional repositories, and to examine their willingness to comply with a mandatory institutional repository (IR) submission policy.

**Design** – Mixed method, sequential exploratory design.

**Setting** – A large, multi-campus New Zealand university that mandates IR deposit of doctoral theses.

**Subjects** – Two doctoral students from each of four university colleges were interviewed. All

901 doctoral students were subsequently sent a survey, with 251 responding.

Methods – Semi-structured interviews with eight subjects selected by purposive sampling, followed by a survey sent to all doctoral students. The authors used NVivo 8 for analysis of interview data, along with a two-phase approach to coding. First, they analyzed transcripts from semi-structured interviews line-by-line to identify themes. In the second phase, authors employed focused coding to analyze the most common themes and to merge or drop peripheral themes. Themes were mapped against Rogers' diffusion of innovation theory and social exchange theory constructs to aid interpretation. The results were used to develop a survey with a fixed set

of response choices. Authors then analyzed survey results using Excel and SurveyMonkey, first as a single data set and then by discipline.

Main Results - The authors found that general awareness of open access was high (62%), and overall support for open access publication was 86.3%. Awareness of IRs as a general concept was much lower at 48%. Those subject to a mandatory IR deposit policy for doctoral theses overwhelmingly indicated willingness to comply (92.6%), as did those matriculating prior to the policy (83.3%), although only 77.3% of all respondents agreed that deposit should be mandatory. Only 17.6% of respondents had deposited their own work in an IR, while 31.7% reported directly accessing a repository for research. The greatest perceived benefits of IR participation were removal of cost for readers, ease of sharing research, increased exposure and citing of one's work, and professional networking. The greatest perceived risks were plagiarism, loss of ability to publish elsewhere, and less prestige relative to traditional publication. The reason most given for selecting a specific publication outlet was recommendation of a doctoral supervisor. Disciplinary differences in responses were not sizable.

For additional interpretation, the authors applied Rogers's diffusion of innovations theory to determine the extent to which IRs are effective innovations. The authors posit that repositories will become a more widely adopted innovations as awareness of IRs in general increases, and through increased awareness that IR content is discoverable through major search engines such as Google Scholar, thus improving usability and increasing dissemination of research. Using the social exchange theory framework, the authors found that respondents' expressed willingness to deposit their work in IRs demonstrated altruistic motives for sharing their research freely with others, appreciation for the reciprocity of gaining access to others' research, and awareness of the potential direct reward of having their work cited more often.

**Conclusion** – Authors identified that lack of awareness, rather than resistance to deposit, as

the main barrier to IR depository participation. Major benefits perceived for participating included the public good of knowledge sharing and increased exposure for one's work. Concerns included copyright and plagiarism issues. These findings have implications for communication and marketing campaigns to promote doctoral students' deposit of their work in institutional repositories. While respondents reported low direct use of IRs for conducting research, the vast majority reported using Google Scholar, and so may have unknowingly accessed open access repository content. This finding suggests that attention be given to enhanced metadata for optimizing discoverability of IR content through general search engines.

## Commentary

[Critical appraisal tool used: Booth & Brice (2003). CRiSTAL checklist for appraising a user study. Available from: <a href="http://nettingtheevidence.pbwiki.com/f/use.do">http://nettingtheevidence.pbwiki.com/f/use.do</a> c]

The authors have made a useful contribution to the literature on attitudes toward new modes of scholarly communication, and provide a thorough literature review of prior studies. Colleges and universities relying on a "build it and they will come" approach for IR participation have typically been disappointed. Studies of faculty have identified multiple barriers to participating in open access publication in general and IRs in particular. Faculty concerns about increased plagiarism, copyright, and tenure qualification have been widely reported. Prior studies have also found significant disciplinary differences in open access support. By focusing on doctoral students, this study sheds light on the attitudes of emerging researchers. It is to be expected that awareness and attitudes of doctoral students would be largely consistent with studies of faculty, who transmit the social norms of the academy to their students. However, the authors' unanticipated finding of weak disciplinary differences suggests that the next generation of researchers may be more receptive to IR participation regardless of their

disciplines' traditional form of scholarly communication.

The objectives of the current study and the study population have been clearly defined. The mixed method approach is of benefit in conducting research into attitudes about complex concepts and practices. Eight doctoral students were interviewed, and criteria for interview subject selection, other than the college within the university, are not stated. The study would have been enriched by additional interview results. The overall survey response rate of 28% on the survey is also disappointing, though not uncommon in this type of research, and the authors do note the possibility of response bias. Additional clarity is provided by reporting both percentages and number of responses for specific questions. No tests were applied to determine statistical significance of the findings. This leaves the reader to conclude whether a particular result may or may not be meaningful. However given the consistency with prior studies, the findings are credible. Library practitioners could readily replicate the methodology to gauge local attitudes.

As colleges and universities develop institutional repositories, it is important to understand the motivating factors and barriers affecting researchers' willingness to participate. Mandatory deposit policies may be useful, but cannot substitute for individual researcher's buy-in to both the concept and practice of open access publication. As the next generation of academic faculty, doctoral students' awareness and understanding of IR benefits and risks will be crucial in shaping this new form of scholarly communication. By understanding these attitudes, librarians and others involved in IR development can create more effective communication and marketing programs. The finding that doctoral supervisor recommendation most influenced choice of publication venue suggests that marketing and advocacy aimed at this group may greatly influence IR participation.

[these columns are not symmetrical in length]