B Evidence Based Library and Information Practice

Evidence Summary

The Majority of High-Impact Science Journals Would Accept Manuscripts Derived from Open Access Electronic Theses and Dissertations

A Review of:

Ramírez, M. L., McMillan, G., Dalton, J. T., Hanlon, A., Smith, H. S., & Kern, C. (2014). Do open access electronic theses and dissertations diminish publishing opportunities in the sciences? *College & Research Libraries*, 75(6), 808-821. http://dx.doi.org/10.5860/ crl.75.6.808

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Received: 3 Jun. 2015

Accepted: 28 Jul. 2015

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Abstract

Objective – To assess science journal publishers' attitudes and policies regarding open access electronic theses and dissertations (ETDs).

Design – Survey questionnaire.

Setting – Science journal publications.

Subjects – Editorial team members from 290 high-impact science journals.

Methods – The 16,455 science journals listed in the 2005-09 Thompson Reuter's Journal Performance Indicators (JPI) were identified as the base population for this study. The top five journals, as ranked by relative impact factor, from each of the 171 JPI-defined science disciplines were selected for the sampling frame. After the removal of duplicates, defunct titles, and pretest participants, the 715 resulting journals were grouped into 14 broader subject groups defined by the researchers. Randomized systematic sample was then employed to select a final sample size of 300 journals. Ten additional titles were later removed due to publication scope.

Email invitations to participate in the survey were sent to the selected journals on August 9, 2012. After two email reminders, the web survey closed on August 27. Six phone followups were made to a random sample of 100 out of the 246 non-responders between September 7 and 14 to increase the response rate.

Main Results – The final response rate for the survey was 24.8% (72 out of 290), and the findings had an 11.5% margin of error with 95% confidence interval.

Only 12.5% of the journals surveyed indicated they would "never accept" manuscripts derived from open access ETDs, while 51.4% indicated revised EDTs are "always welcome." The rest of the respondents had some acceptance restrictions, including case-by-case review (19.4%), accept only if the content differs significantly from the original (8.3%), accept or only if access to the original ETD was limited (1.4%). Five of the 72 respondents (6.9%) did not have a policy for accepting ETDs. Of the 17 researcher-created discipline categories, Engineering titles had the highest (85.7%, or 12 out of 14) and Medical journals had the lowest (25%, or 3 out of 14) proportion of respondents who would "always welcome" manuscripts derived from open access ETDs.

At least 50% of the journals from every type of publishing entity indicated they would "always welcome" revised ETDs. However, there are differences between the entities: University Presses were most likely to "always welcome" revised ETDs (87.5%), Commercial Publishers were more likely to have some acceptance restrictions (41.7%), and Academic Societies were the most likely entity to "never welcome" revised ETDs (12.7%).

Lastly, in a comparison of the results of this study with the results from a similar 2013 study conducted on social science, arts and humanities (SS&H) journals, the authors found statistically significant differences (p=0.025, α =0.05) between the editorial policies regarding revised ETDs of science and SS&H journals.

Conclusion – The study results suggest that, contrary to common perceptions, the majority of high-impact science journals would actually welcome revised open access ETDs submissions. Therefore, science scholars would not greatly reduce their chances for publishing manuscripts derived from EDTs by making the original ETDs accessible online.

Commentary

This article is a valuable contribution to the ongoing discussion about perceptions regarding open access scholarship. An examination of the study using the Glynn's critical appraisal checklist (2006) indicated an overall validity of 81%, above the accepted threshold (75%). Validities for the individual sections also met the threshold. The survey instrument was included in the article and the research methodology was clear.

Even so, the article had some areas for improvement. In particular, the researchers had drawn a number of generalizations about science journals as a whole without fully addressing the representativeness of the data. When choosing the survey recipients, the researchers first selected the top five ranked journals in each JPI subject categories, then used stratified sampling to select the final sample of 300 titles. Consequently, while the results represented how top ranked, highimpact science journals treated ETD-derived works, one cannot comfortably apply the same conclusion to all science journals.

In addition, the researchers did not fully explain the method for condensing the 171 JPI science disciplines into 14 subject groups. This omission could be problematic for others who wish to replicate or conduct similar studies. Moreover, since there were notable differences between the subject groups' perceptions toward revised ETDs, it would be valuable to know how interdisciplinary JPI subjects were treated. For instance, was the JPI subject category "Biophysics" grouped into the researcher-defined subject group of Biology or Physics?

Moreover, while the researchers are commended for conducting a pretest, it was unclear how the pretest findings affected the actual study. Specifically, editors-in-chief were identified as the most suitable survey respondents from the pretest. However, while editors-in-chief did compose 68.6% of the actual survey respondents, the researchers did not disclose whether specific efforts were made to contact the editors-in-chief, nor did they examine any potential impact of the respondents' position on their responses. It is possible that the pretest finding was biased and therefore not adopted, since all the pretest participants were editors-in-chief. However, such considerations were also not addressed.

Lastly, the interpretation of the results called for further scrutiny. This study generated solid evidence to demonstrate the level of publisher acceptance towards manuscripts derived from open access ETDs. However, the findings did not necessarily suggest, as the researchers concluded, that "publishers as a whole are accepting of [such] manuscripts" (p. 818). After all, 48.6% of those surveyed would not "always welcome" such manuscripts, and the level of acceptance also varied greatly by discipline. Therefore, readers are advised to interpret the findings with caution.

Nonetheless, and despite these minor issues, this study demonstrated the value of evidencebased practices and provided a good foundation for future research on the perception and impact of open access ETDs.

References

Glynn, L. (2006). A critical appraisal tool for library and information research. *Library Hi Tech*, 24(3), 387-399. <u>http://dx.doi.org/10.1108/073788306106</u> <u>92154</u>