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Predatory Journals in Scopus¹

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Summary

- The study maps the penetration of so-called "predatory" scholarly journals into the citation database Scopus. Predatory journals exploit the author pays open access model, and conduct only cursory or no peer review, despite claims to the contrary. Some such journals will publish almost anything for money. In the Czech context whether a journal is indexed in Scopus is crucial for determining the points that publications in that journal are awarded in the national performance-based evaluation of research organizations, which in turn is the basis for the allocation of institutional funding. Hence, in this evaluation framework, publishing in predatory journals that are indexed in Scopus has a clear "fiscal" advantage.
- Our analysis is based on a survey of "potential, possible, or probable" predatory journals by Jeffrey Beall at the University of Colorado. He maintains a blog with two regularly updated lists: i) a list of *standalone journals*, which contains individual predatory journals; and ii) a list of *publishers*, which implicates questionable publishing houses, usually with multiple journals. Beall's lists suffer from their own limitations but are in our view representative enough of the overall problem of predatory publishing.
- Using the Ulrichsweb register we compiled a comprehensive database of the journals that Jeffrey Beall considers predatory. The database covers both standalone journals, the names of which are easily obtained directly from Beall's first list, as well as the journals issued by predatory publishers implicated in Beall's second list. We then searched Scopus using the ISSN of each predatory

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journal in our database. To the best of our knowledge, the resulting list provides the first ever overview of predatory journals in Scopus.

- In total we found 3 218 predatory journals in Ulrichsweb, of which 281 came from the list of standalone journals and 2 937 from the list of predatory publishers. Our subsequent Scopus search yielded 405 journals with at least one indexed document. Over the period 2004-2015, we identified 306 thousand documents in Scopus that were published in journals nowadays considered by Jeffrey Beall to be predatory. Scopus is therefore surely not resistant to penetration by predatory journals.
- The long term trend is clear. In 2004, these predatory journals produced less than 2 thousand documents indexed in Scopus, accounting for a negligible 0.1% share; however, by 2015 this figure had increased to nearly 60 thousand, and accounted for almost 3.0% of all indexed documents. Until 2011 the share of predatory documents in Scopus grew exponentially; the expansion then stalled for a few years, but soared once again in 2015.
- Predatory publishing undermines the credibility of science most seriously in middle-income countries in Asia and North Africa that suffer from an underdeveloped culture of research evaluation. The results also call for caution in the Czech Republic. Nevertheless, fears that this phenomenon has the capacity to seriously damage Czech science turn out to be unwarranted at this point. Czech authors publish a few hundred articles annually in the predatory journals that are indexed in Scopus; this is a tiny fraction of the total national scientific output. Moreover, these questionable outputs are heavily concentrated in only a handful of predatory journals, hence the practice would be relatively easy to track and possibly stop, if tackled head on.
- Finally, our analysis reveals that Beall's lists need to be used with caution. Predatory publishing is a real problem and no doubt there are indeed fake outlets dressed up as scholarly journals, which are prepared to print anything for money. However, a very brief look at more detailed data for the Czech Republic is sufficient to reveal that Beall's list of publishers may implicate journals that are not necessarily "predatory" in the true sense. This is corroborated by the fact that some journals implicated in the list of publishers publish large numbers of documents by authors from countries with an advanced research evaluation culture, where fraudulent publications offer a low payoff in terms of career progress or research funding.