Author's response to reviews

Title: Open access versus subscription journals - A comparison of scientific impact

Authors:

Bo-Christer Björk (Bo-Christer.Bjork@hanken.fi)
Solomon David (dsolomon@msu.edu)

Version: 2 Date: 31 May 2012

Author's response to reviews: see over
RESPONSE TO REVIEWERS’ REPORTS

Reviewer’s report
Title: Open access versus subscription journals - A comparison of scientific impact
Version: 1

Date: 4 May 2012
Reviewer: Alma Swan

Reviewer’s report:

The study’s main aim is to show how the quality of Open Access (OA) journals (OAJs) compares to the quality of subscription journals, measured by citations, and whether paying for ‘Gold’ OA undermines standards of peer review, as has been claimed by various critics of Gold OA publishing. The authors have controlled for OA journals that became OA some time after launching as print-only subscription journals, and OA journals published from ‘other countries’ outside the research publishing hotspots of US, UK, Netherlands and Germany. The main finding is that OAJs that were born OA (the methodological assumption is that OAJs launched since 2002 are in this category) approach subscription journals in terms of quality measured by citations. Thus, a system involving author payments does not seem to diminish standards of peer review. This is a new empirical contribution to the debate about whether OA has encouraged a general lapse in peer review standards and adds to the body of evidence on this topic. It is recommended that this paper is published after attention is paid to the points below.

A. Major Compulsory Revisions
1. OA by any route is known to enhance citations: since the level of Green OA is around 12-20%, this could have a significant effect on the citation rate of the subscription journals studied, enhancing their citation rates enough, perhaps, to account for the observed citation advantage of these journals as a group. The authors should explain if and how they have controlled for the provision of OA through the ‘Green’ route for articles in subscription journals. Some discussion of this issue is warranted here so that the effects of Green OA in this experimental situation can be fully understood.

We added a section addressing this issue in the revised text in the second paragraph of page 5. We chose not to adjust for the potential impact of green OA because there is no consensus as to the citation advantage of green OA.

B. Minor Essential Revisions
1. In setting the context for the study the authors summarise the evidence so far as suggesting that ‘when eliminating for factors such as author’s [sic] selecting their better work for OA dissemination, the [citation] advantage ... is low or even non-existent’. The main study on this is not, however, cited, and this is not the conclusion of that study, which indicated that the OA citation advantage for both self-selected (presumed to be an author’s better work) and mandated (no selectivity permitted) is the same (Gargouri Y, Hajjem C, Larivière V, Gingras Y, Carr L, et al. (2010) Self-Selected or Mandated, Open Access Increases Citation Impact for Higher Quality Research. PLoS ONE
5(10): e13636. doi:10.1371/journal.pone.0013636). This work should be acknowledged and set into the context of the work, too.

The Gargouri at al study is now referenced and briefly discussed. The studies by Evans Reimar and Davis are still referenced but the phrasing has been changed to “some authors claim …”, and there is also some critique of the Davis study added.

2. The authors acknowledge that the increased readership that comes from OA may account for some of the citations for articles in OAJs, but say that they cannot isolate the effect of that factor. It would certainly be difficult to do this since the citation advantage does differ from discipline to discipline and the extent of the effect is by no means agreed by researchers in this field. However, the effect here could be significant: the authors are encouraged to address this issue with at least further discussion and referral to published studies that might provide some estimates of the extent of the effect.

Covered in the comments above.

C. Discretionary Revisions
There is a considerable number of typos and other small errors – such as missing words or ends of words – in the text. Although these do not in general affect the meaning of the prose, in one case (third sentence under the heading ‘Does OA threaten to undermine scientific peer review?’ the sentence is incomplete. Proof-correction would improve the manuscript.

Checking of the language needs to be done. The incomplete sentence has been changed.

Quality of written English: Needs some language corrections before being published
Statistical review: No, the manuscript does not need to be seen by a statistician.
Declaration of competing interests:
I declare I have no competing interests.

Date: 19 May 2012 Reviewer: Elena Giglia
Reviewer’s report:
1) General comment: the work is sound, but the premises look weak or better the link between premises and work are weak. I mean: if you want to demonstrate that OA does not undermine the peer review system, then make a study of alternative and open kinds of peer review as conducted in OA journals. The equation good peer review-more citations does not convince. I’d try to reinforce it.

The causal relationship between OA and the scientific quality level of the journals is very complex. The central issue is the rigor of the traditional peer review as well as the perception of authors, employers, tenure committees etc of the quality of the OA journals. Only very few OA journals use alternative and open kinds of peer review and the impact of that on scientific quality, and
such forms can also be implemented in traditional electronic journals. That subject could well merit a study of its own but is not in focus here.

2) The question posed by the authors are new BUT should be better defined.

A new paragraph has been added to the aims of the study section.

3) The methods are appropriate and well described, and provide sufficient details
4) The data are sound.
5) The discussion and conclusions are well balanced and adequately supported by the data.
6) The title and abstract accurately convey what has been found. 7) The writing is acceptable.

Minor essential revisions:

in the Background I suggest to include the interesting and perfectly fitting European SOAP - Study on Open Access Publishing findings, in order to give a more complete framework of the emergence and growth of Gold OA: http://project-soap.eu/

A reference to this report has been added in the background section, in the section dealing with hybrid OA. The SOAP project was the first to report on the general uptake level of 1-2%

In the paragraph Effects of the revenue model... there is a typo in line 2: compared as instead of compared as.

Corrected

Quality of written English: Acceptable
Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.
Declaration of competing interests: I declare that I have no competing interests