The interest of the scientific community in expert opinions from journal peer review procedures

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Abstract

We have used the F1000Prime data set to investigate the reception of expert opinions, which

were published under their own DOI, in the scientific community ($n_p=114,582$ Papers with

n_e=149,119 expert opinions). F1000Prime is a post-publication peer review system in which

important literature from the biomedical area is read and assessed by selected researchers. We

have investigated the reception of the expert opinions with the help of data from the Mendeley

reference manager. As our Mendeley investigation shows, we were only able to find

Mendeley counts for 11 expert opinions. Thus, a total of only 11 users have saved an expert

opinion in their reference manager.

Key words

Mendeley; Altmetrics; Peer Review

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Letter to the Editor

Dear Sir,

Even if the quantitative measurement of research performance is acquiring an evergreater importance in research evaluation, the peer review procedure can still be regarded as the most important evaluation procedure. However, this procedure has been subjected to wide-ranging criticism for years. One of the points of criticism concerns the fact that, while the expert may provide the authors of the paper assessed with valuable input, the expert does not receive any credits for this input. The peer review in journals is generally regarded as a closed procedure, where the report can only be seen by the editor and the authors of the paper assessed.

In order to provide the experts with credits for their input, a number of journals have changed over to publishing the expert opinions on manuscripts under the name of the expert. An example of such a journal is *Atmospheric Chemistry and Physics* – an interactive Open Access journal of the European Geosciences Union (http://www.atmos-chem-phys.net). This journal publishes the manuscripts submitted together with the reviewers comments (Bornmann, Schier, Marx, & Daniel, 2011). It has not yet become clear, however, whether the reviewers' published comments are actually received by the scientific community.

We have a data set from F1000Prime which we have used to investigate the reception of expert opinions in the scientific community. F1000Prime is a post-publication peer review system in which important literature from the biomedical area is read and assessed by selected scientists (Faculty members). Since the expert opinions of the Faculty members possess DOIs, we have searched for these opinions in Mendeley. Mendeley is an online reference manager which combines a social bookmarking service and reference management functionality on one platform (Li, Thelwall, & Giustini, 2012). Mendeley allows users to save and to organise

literature. Using the Mendeley application programming interface (API) between the 10^{th} and the 17^{th} of October 2014, we have investigated the Mendeley counts for all expert opinions (n_e =149,119), written by Faculty members on the n_p =114,582 papers.

As our Mendeley investigation shows, we were only able to find Mendeley counts for 11 expert opinions out of the total of 149,119. Only two of the 11 expert opinions were saved more than 10 times in Mendeley. Of course we can assume that Mendeley's coverage of the biomedical literature is not perfect. However, it turned out that we were able to find around 99% of the papers in our F1000 data set in Mendeley.

Our results on the Mendeley counts which we investigated for the post-publication reviews of the Faculty members raise doubts as to whether the expert opinions from a journal peer review procedure should be available in a transparent form (such as being provided with a DOI and the name of the reviewer). The interest of the scientific community in these expert opinions appears to be slight. As the F1000Prime data set covers only the biomedical literature, we consider it desirable to investigate the reception of expert opinions in other disciplines as well.

We would finally like to mention two limitations of our evaluation: (1) Mendeley users tend to be young people from the academic environment. We can imagine that senior researchers would pay more attention to expert opinions. (2) F1000Prime is a fee-based peer review system with a restricted access. However, "less than 18 months since Faculty of 1000 was launched, the reaction from scientists has been such that two-thirds of top institutions worldwide already subscribe, and it was the recipient of the Association of Learned and Professional Society Publishers (ALPSP) award for Publishing Innovation in 2002 (http://www.alpsp.org/about.htm)" (Wets, Weedon, & Velterop, 2003, p. 249). Of course, the number of subscribed institutions will have increased since then.

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