



Peer Review Process-Challenges to Research Integrity



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Introduction

Peer review is unanimous considered to be an essential part of scientific publication since its role is to evaluate, criticize and improve the quality of scientific research results preceding publication. A reviewer should strive to set the standards of the journal and of the field and to meet the standards of ethic.

The manner peer review is put into practice differs across journals or disciplines. The forms in which peer review can be accomplished are: Anonymous, Double blind and Open. For an effective peer review, some conditions are mandatory/ imposed. It has to be timely, thorough, constructive, free from personal bias, and respectful of the need for confidentiality [1].

The basic principle which reviewer should take into consideration along the review process are comprised in COPE Ethical Guidelines for Peer Reviewers [2,3]. Besides benefits, multiple downsides of the peer review have been evidenced. The non-standardized and idiosyncratic manner in which it is performed, along with its susceptibility bias led to to inaccuracy, inequity and a deficiency to confirm or attest research [4].

Another drawback refers to the fact that peer review is an expensive, requiring much time process that is unfortunately unrewarded and unrecognized. This can lead to long delays in the peer review process, but it has been also supposed that peer reviewers might be deliberately postpone publication to allow advancement of their own work. Other deficiencies are due to the anonymity of the reviewers and include low transparency and several forms of misconduct (stopping publication without consequences etc.) Subjects referring to the possibilities to improve peer review process and to find the best method of peer reviewing were addressed in several debates and studies [5].

Further the discussion focuses on the possibilities to improve and overcome some of the inconveniences and on the debate concerning the effectiveness of blind review versus open peer review on the quality of reviews.

Open peer review (OPR) is defined as a process in which the identities of both reviewer and author are known to each other.

According to literature [6], OPRs can be classified into several categories:

- Signed
- Disclosed
- Editor
- Transparent
- Crowd sourced
- Pre-publication
- Synchronous
- Post-publication

An example in this regard can be considered the multi-stage OPR. ACP Editor noted the advantages of a Multi-stage open peer review [7]:

1. Rapid dissemination of results and uncensored communication regarding said results.
2. A way to officially document controversy and discussions regarding the articles, as well as reducing the chance of plagiarism; a better chance of detecting an article's flaws.
3. A final product that is based both on the designated referees' reviews and on interested readers' comments.

Other benefits of the OPR include accountability, fairness and crediting reviewers for their efforts. The evidences suggest that open peer review leads to better quality reviews compared to those under closed systems [8]. In this regard, higher scores on questions relating to feedback on the methods (11% higher), constructiveness of the comments (5% higher), and the amount of evidence provided to substantiate the comments (9% higher) could be noticed [9].

In addition:

- i. Reviewers acquire public recognition for their hard work, with the results made available to the readers

ii. It overcomes the inconveniences of anonymous peer review like low transparency and different forms of misconduct.

The benefits of OPR cannot be denied, but some disadvantages have to be outlined:

- i. A decreased level of frank criticism
- ii. Favouritism
- iii. Can lead to implicit bias like gender bias (this view is supported by literature).
- iv. Young scientist can be intimidated.

What can be done improve the peer-review process?

The improvement of the peer review system envisages the quality of review based on constructive suggestions for the reviewed study. These can be achieved by:

- i. Online training for the reviewers and potential reviewers.
- ii. Introducing reward for reviewer's valuable and timely contributions:
 - a. In form of free of charge access to the entire database of publications for a specific period of time, it is adopted for some publishers.
 - b. To value their effort by getting credit and transform peer review into a measurable research service /product.
 - iii. Offering feedback on their performance so that they can learn and improve.

iv. Providing guidelines for authors to prepare their manuscripts and specific rules and evaluation tools for reviewers.

v. Promoting fair review assured by ethic review board.

vi. Adapting the OPR.

References

1. Steneck NH (2007) Introduction to the responsible conduct of research. Office of Research Integrity pp. 1-184.
2. (2013) COPE ethical guidelines for peer reviewers. COPE 1: 1-5.
3. Rockwell S (2011) Ethics of peer review: A guide for manuscript reviewers. pp. 1-19.
4. (2010) House of commons science and technology committee: inquiry into peer review submission from the uk research integrity office. UK Research Integrity Office pp. 1-6.
5. Peer review. Nature.
6. Ford E (2013) Defining and characterizing open peer review: a review of the literature. Journal of Scholarly Publishing 44 (4): 311-326.
7. Pöschl U (2012) Multi-stage open peer review: scientific evaluation integrating the strengths of traditional peer review with the virtues of transparency and self-regulation. Front Comput Neurosci 6: 33.
8. Rooyen S, Godlee F, Evans S, Black N, Smith R (1999) Effect of open peer review on quality of reviews and on reviewers' recommendations: a randomised trial. BMJ 318(7175): 23-27.
9. Daniel RS, Bjorn RO (2014) Opening of peer-review: the democracy of science. Journal of Negative Results in Biomedicine 13:2.



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