

EDITORIAL

Editorial: What Is Peer Review?

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The first journal that formalized the peer review process is The Philosophical Transactions of the Royal Society, the first and longest-running journal launched in 1665 by Henry Oldenburg (1618- 1677) (1).

The review of a research paper starts with the 'Internal Review' process. All authors must read the article and reconcile their comments before submission. The external review process begins after article submission, and the editor assigns the paper to the outside reviewers unrelated to the work of the study. External reviewers evaluate the submitted article for quality, accuracy, and completeness based on the journal's requirements. Reviewers' feedback includes accepting, rejecting, or requesting a revision to the article. The editor determines the final decision, but the reviewers' comments and recommendations show if the article is amenable to improvement by revision.

The survey by Publishing Research Consortium in 2015 reports that 82% of the researchers agreed with the statement that "without peer review, there is no control in scientific communication" (2). There was no clear preference between single or double-blinded reviews. Researchers reported a modal number of 1-2 reviews per month with a median of 5 hours spent on a review (2).

Researchers expressed their preference for pre-publication review than post-publication (2). One of the post-publication ratings is the McMaster Online Rating of Evidence (MORE) <https://hiru.mcmaster.ca/MORE/>, which helps to provide the best research to support evidence-based practice (3).

Types of peer review

1. Open review: Both the reviewers' and the authors' names are presented to each other to increase transparency. The authors' names are mentioned to the

reviewing during the review process. The reviewer's names can be mentioned in different ways, such as printing the reviewers' name on the published article and publication of the review along with the published paper.

2. Single blinded (anonymized) review: this seems to be the most common type by far. The name of the reviewers is hidden from the authors. It avoids the influence of the authors and allows the reviewer to be harsh or critical. However, a disadvantage is that the reviewer might delay the review process to publish their work first.

3. Double-blinded (anonymized) review: both the reviewer and the authors are anonymized to each other. It eliminates reviewers' bias, and the reputation of the senior authors does not influence the publication.

4. Triple blinded (anonymized) review: the reviewers are anonymized to the authors, and the authors are anonymized to both the reviewers and the editor. It adds to the complexity but lessens the bias.

Reviewers' contribution is acknowledged by different means. Publons (<https://publons.com/>) is a free service to keep the record, verify, and showcase peer review and editorial activities. The service was launched in 2012 and has been owned by Clarivate Analytics since 2017 (4). Also, the Reviewer Hub by various publishers provides recognition and temporarily free access to the journal contents and discounted services.

The Archives of Bone and Joint Surgery review policy is the Tween Anonymized Review. The article is assigned to the Suggested Reviewers by the author in the first stage to receive a minimum of two recommendations. The article is given to the journal's reviewer if the suggested reviewers do not respond in due time. In recognition of the invaluable contribution, the list of the active reviewers of each year will be published on the journal's website.

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References

1. The Royal Society. UK: The Philosophical Transactions of the Royal Society; 1665. Available from: <https://royalsociety.org/journals/publishing-activities/publishing350/history-philosophical-transactions/>
2. Publishing Research Consortium Peer review survey 2015. [Place unknown]: Elsevier; 2015. Available from: [https://www.elsevier.com/data/assets/pdf_](https://www.elsevier.com/data/assets/pdf_file/0007/655756/PRC-peer-review-survey-report-Final-2016-05-19.pdf)
3. McMaster Online Rating of Evidence. [Place unknown]: HiRU McMaster University; [date unknown]. Available from: <https://hiru.mcmaster.ca/MORE/>
4. Publons. [Place unknown]: Clarivate; 2012. Available from: <https://publons.com/about/home/>