What is peer review?

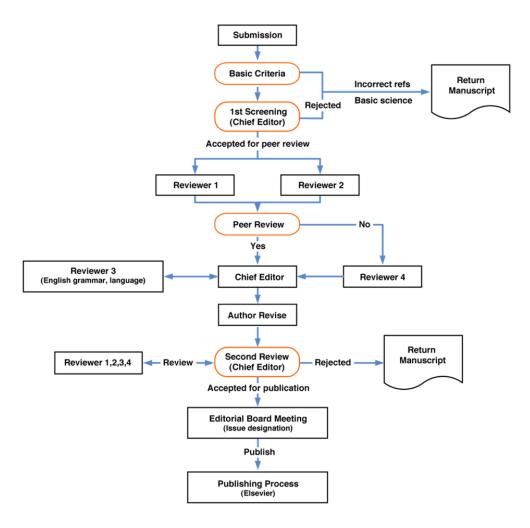
Reviewers play a central role in scholarly publishing. Peer review helps validate research, establish a method by which it can be evaluated, and increase networking possibilities within research communities. Despite criticisms, peer review is still the only widely accepted method for research validation.

Elsevier relies on the peer review process to uphold the quality and validity of individual articles and the journals that publish them.

Peer review has been a formal part of scientific communication since the first scientific journals appeared more than 300 years ago. *The Philosophical Transactions of the Royal Society* is thought to be the first journal to formalize the peer review process.

In September 2009, Elsevier partnered with <u>Sense About Science</u>, an independent NGO working to promote the public's understanding of 'sound science', to launch the <u>2009 Peer Review Study</u> – the largest survey ever international survey of authors and reviewers.

The peer review process



Types of peer review

Single Blind Review

The names of the reviewers are hidden from the author. This is the traditional method of reviewing and

is the most common type by far.

• Reviewer anonymity allows for impartial decisions – the reviewers will not be influenced by the

authors.

Authors may be concerned that reviewers in their field could delay publication, giving the

reviewers a chance to publish first.

Reviewers may use their anonymity as justification for being unnecessarily critical or harsh when

commenting on the authors' work.

Double Blind Review

Both the reviewer and the author are anonymous.

• Author anonymity prevents any reviewer bias, for example based on an author's country of

origin or previous controversial work.

• Articles written by prestigious or renowned authors are considered on the basis of the content

of their papers, rather than their reputation.

Reviewers can often identify the author through their writing style, subject matter or self-

citation.

Open Review

Reviewer and author are known to each other.

• Some believe this is the best way to prevent malicious comments, stop plagiarism, prevent

reviewers from following their own agenda, and encourage open, honest reviewing.

Others see open review as a less honest process, in which politeness or fear of retribution may

cause a reviewer to withhold or tone down criticism.

More transparent peer review

Reviewers play a vital role in academic publishing, yet their contributions are often hidden. Three

Elsevier journals now publish supplementary review files alongside the articles on ScienceDirect.

• Acknowledges the important role of reviewers

• Enriches published articles and improves the reading experience

ORCD RCR Series: Scientific Peer Reviewers February 14, 2018