some developments of journal peer review

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set of values

Communalism
Universalism
Disinterestedness
Organized Skepticism
The Wheel of Peer Review

1. Heart
2. Bee
3. The pedant
5. Turtle
6. Stick figure
7. Branch
8. Angel

peer evaluation in science
THE ROYAL SOCIETY AND THE PREHISTORY OF PEER REVIEW, 1665–1965*

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AND

AILEEN FYFE
School of History, University of St Andrews

ABSTRACT. Despite being coined only in the early 1970s, ‘peer review’ has become a powerful rhetorical concept in modern academic discourse, tasked with ensuring the reliability and reputation of scholarly research. Its origins have commonly been dated to the foundation of the Philosophical Transactions in 1665, or to early learned societies more generally, with little consideration of the intervening historical development. It is clear from our analysis of the Royal Society’s editorial practices from the seventeenth to the twentieth centuries that the function of refereeing, and the social and intellectual meaning associated with scholarly publication, has historically been quite different from the function and meaning now associated with peer review. Refereeing emerged as part of the social practices associated with arranging the meetings and publications of gentlemanly learned societies in the late eighteenth and nineteenth centuries. Such societies had particular needs for processes that, at various times, could create collective editorial responsibility, protect institutional finances, and guard the award of prestige. The mismatch between that context and the world of modern, professional, international science, helps to explain some of the accusations now being levelled against peer review as not being ‘fit for purpose’. 
who are the judges?

graphical representation:
- editor-in-chief
- editorial committee
  - referee 1
  - referee 2
  - referee 3
embracing or rejecting reviewers

Einstein Versus the Physical Review

A great scientist can benefit from peer review, even while refusing to have anything to do with it.

Dear Sir,

We (Mr. Rosen and I) had sent you our manuscript for publication and had not authorized you to show it to specialists before it is printed. I see no reason to address the—in any case erroneous—comments of your anonymous expert. On the basis of this incident I prefer to publish the paper elsewhere.

Respectfully,

P.S. Mr. Rosen, who has left for the Soviet Union, has authorized me to represent him in this matter.

NOTICE TO CONTRIBUTORS

Preparation of Articles

As an experiment in the evaluation of articles, all papers will now be circulated to the assistant editors and judged without name or institutional identification. It will be helpful if contributors to the Review will attach a cover page giving the title, author’s name and institutional affiliation. The first page of the paper should bear the title as a means of identification, but not name and institution.

Moody L. Coffman suggests that articles be sent to reviewers anonymously. This is an excellent idea and has been proposed many times. Unfortunately it is impossible. Removing the name and affiliation of the author does not make a manuscript anonymous. A competent reviewer can tell at a glance where the work was done and by whom or under whose guidance. One must also remove all references to previous work by the same author, all descriptions of special equipment and other significant parts of the paper. Nothing worth judging or publishing would be left.

S. A. Goudsmit
Managing Editor,
American Physical Society

Despite removal of author and institutional affiliation from a manuscript, no phenomenal deductive powers are required, for example, to guess the authorship of an article that begins, “Earlier work (Coffman, 1962, Coffman and Moody, 1965) has shown . . .” The Journal of Speech and Hearing Research, for which I occasionally review, indeed experimented with this scheme last year but quickly abandoned it.

W. Dixon Ward
University of Minnesota

Rights, wrongs and referees

Anonymity in the refereeing of scientific papers is difficult to justify. Greater openness would have many merits—not least in curbing the abuses that are encouraged by the present system.

anonymous reviewers as guardians

In defence of the anonymous referee

protection

strong criticisms

readability

constructive

ethical

advisor
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<thead>
<tr>
<th>Auteurs</th>
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<tbody>
<tr>
<td>anonymized</td>
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<td>“double blind”</td>
</tr>
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<tr>
<td>anonymized</td>
<td>“single blind”</td>
<td>“open peer review”</td>
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who are the judges?

compny

editor-in-chief

editorial committee

referee 1

referee 2

referee 3
The "revolution" of peer review

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<tr>
<th>Date</th>
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<td>2009</td>
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<tr>
<td>2009</td>
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<tr>
<td>2010</td>
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<td>2016</td>
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<td>2016</td>
<td>ScienceOpen introduces peer review by endorsement</td>
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[https://dgraziotin.shinyapps.io/peerreviewtimeline/](https://dgraziotin.shinyapps.io/peerreviewtimeline/)
Major approaches in early diagnostics of common variable immunodeficiency in adults in Moscow [version 1; referees: 2 approved, 1 not approved]

Alexander V Karaulov, Irina V Sidorenko, Anna S Kapustina

Grant information: The author(s) declared that no grants were involved in supporting this work.

Abstract

Common variable immunodeficiency (CVID) is a primary immunological disease characterized predominantly by hypogammaglobulinemia. The main clinical manifestations are severe recurrent infections that often lead to structural damage of affected organs. The early start of adequate intravenous immunoglobulin therapy has significantly improved the prognosis of this serious disorder. Patients with CVID are also predisposed to autoimmune and lymphoproliferative complications. This article deals with the features of this primary immunodeficiency in adults. Clinical manifestations, immunological features and treatment concepts were gathered during 21 years of observation of such patients in Moscow. The authors suggest early predictive clinical signs of CVID in adults.
No one can read everything. We rely on filters to make sense of the scholarly literature, but the narrow, traditional filters are being swamped. However, the growth of new, online scholarly tools allows us to make new filters; these altmetrics reflect the broad, rapid impact of scholarship in this burgeoning ecosystem. We call for more tools and research based on altmetrics.

As the volume of academic literature explodes, scholars rely on filters to select the most relevant and significant sources from the rest. Unfortunately, scholarship’s three main filters for importance are failing:
altmetrics

altmetrics: % 

No one can read everything. literature, but the narrow, trad of new, online scholarly tools the broad, rapid impact of sch tools and research based on al

As the volume of academic lit most relevant and significant st remain filters for importance and

Background

At PLOS, we believe that research articles should primarily be judged on their individual merits, rather than on the basis of the journal in which they were published. In March 2009, we inaugurated a program to provide “article-level metrics” on every article across all journals. This suite of related indicators of impact helps users determine the value of an article to them and to their scientific community. The regulatory updated data fall into the following categories:

- Viewed
- Cited
- Saved
- Discussed
- Recommended

They are described further in the sections below.

Article-Level Metrics (ALMs) leverage the acceleration of research communication made possible by the networked landscape of researcher tools and services. Also by incorporating the manifold ways in which research is disseminated, these article impact indicators are made available rapidly after publication and are continuously updated. It is important to note that the behavior of metrics varies by time (e.g., in the initial few months after publication vs. older articles). Further discussion of known limitations to individual metrics is detailed in the section below.

PLOS is committed to the open provision of these metrics; we encourage researchers to investigate and analyze them in new and interesting ways. Therefore, the entire dataset of all ALMs is made available as a summary Excel file. This file will be updated periodically. We also provide an API and accompanying documentation for the automatic retrieval of the full set of ALM data.

Article-Level Metrics Suite
article level metrics

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<th>PMC</th>
<th>ISI Web of Science</th>
<th>Europe PubMed Central</th>
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Search
article level metrics

Viewed

Total Article Views

36,587

Apr 21, 2010 (publication date) through Sep 29, 2015*

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<td>4,335</td>
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<tr>
<td>PMC</td>
<td>1,752</td>
<td>553</td>
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<tr>
<td>Totals</td>
<td>31,606</td>
<td>4,888</td>
<td>93</td>
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</tbody>
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15.47% of article views led to PDF downloads

Cumulative Views

Compare average usage for articles published in 2010 in the subject area:

Behavior

*Although we update our data on a daily basis, there may be a 48-hour delay before the most recent numbers are available. PMC data is posted on a monthly basis and will be made available once received.
article level metrics

Cited

Viewed

Total Articles: 36,587

April 21, 2010 through September

Saved

Mendeley

Individuals: 302
Groups: 13

315

Cumulative Views

Discussed

Wikipedia

Twitter

Comments

3

45

1

*Although we update these metrics on a monthly basis and will be made available once received.*
BEYOND FACT CHECKING: RECONSIDERING THE STATUS OF TRUTH OF PUBLISHED ARTICLES

David Pontille, Didier Torny

In the last twenty years, three ways of flagging articles have become commonly used by journals: expression of concern, correction, and retraction. These written acts enact peculiar forms of verification that occur alongside, even against, the traditional fact checking process in science. Designed to alert journal readership, they are not meant to test the accuracy of published articles like in usual scientific research or misconduct investigations. Rather, they perform a critical, public judgment about its validity and reliability.

In this context, "post-publication peer review" (PPPR) has often been lauded as a solution, its promoters valuing public debate over in-house validation by journals and the judgment of a crowd of readers over the ones of a few selected referees (Pontille and Torny 2015). Along those lines, the public voicing of concerns on a result, a method, a figure or an interpretation by readers, whistleblowers, academic institutions, public investigators or authors themselves have become common-
readers as judging instances
https://halshs.archives-ouvertes.fr/halshs-00981277v1

https://halshs.archives-ouvertes.fr/hal-01143310v1

https://halshs.archives-ouvertes.fr/halshs-01576348v1

Torny D., 2018, Pubpeer: vigilante science, journal club or alarm raiser? The controversies over anonymity in post-publication peer review, PEERE International Conference on Peer Review, March, Rome, Italy.
https://halshs.archives-ouvertes.fr/halshs-01700198v1