



Perceptions, Impact, and the State of Open Peer Review

by Alan Colin Arce | 3 July 2026 | English, Insights and Signals Reports



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At a Glance

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Summary

This insights and signals report provides an overview of recent open peer review policies and initiatives. Open peer review fosters greater openness throughout the review process: it could entail practices ranging from simply making reviewer identities known to authors to providing readers access to the identities of peer reviewers and their review reports. This practice is gaining traction to improve the transparency and equity in the peer review process. However, there are diverse models and considerations needed in the adoption of open peer review, such as unequal participation, reluctance to make reviewers' identities public, and inconclusive evidence of its benefits and possible downsides.

Open Peer Review: Definitions and Elements

Open peer review (OPR) is an umbrella term capturing many open scholarship practices that explore ways in which peer review models can be adapted in line with the aims of open science (Ross-Hellauer, 2017). The three core elements of OPR are *open identities* (the identities of the authors and reviewers are known to each other and to the readers), *open reports* (the review reports are openly available alongside the final publication), and *open participation* (the wider community can contribute to the review process). Different OPR models may prioritize one or more of these elements. Some reasons for incorporating OPR practices into journals or preprint servers are (Oliveira Henriques et al., 2025):

1. Making peer review more democratic and transparent.
2. Improving the quality and reproducibility of scholarly work.
3. Making peer review processes more equitable and inclusive by seeking to address reviewers' biases and increase the diversity of reviewers.
4. Improving peer review efficiency and giving recognition to reviewers' contributions.

OPR has been part of academic discussions since the mid 1990s, but its uptake has substantially increased in recent years. In 2020, over 600 journals had practiced OPR, with at least one article available with open identities or open reports (Wolfram et al., 2020). Based on these figures, researchers estimate that OPR is practiced as a formal policy in 1 to 5% of all journals (Ross-Hellauer & Horbach, 2024). Some of the publishers that operate OPR under various models are Frontiers, Nature Research, BMJ Group, and the recently launched [Open Research Europe](#). Some notable journals that have adopted OPR either optionally or by mandate are *Nature* (announcement from 2025 available [here](#)), *PLOS One*, and *eLife*.¹

There are at least 23 services that support open peer review of journal articles, preprints, and other scholarly outputs (Oliveira Henriques et al., 2025). While most services support all disciplines, some are focused on specific ones, mostly biomedical and life sciences or physical sciences. These services have different approaches to OPR and the different elements they make public. Some general OPR initiatives include [Episciences](#), [Peer Community in](#), [PREreview](#), [PubPeer](#), [Qeios](#), and [Researchers.one](#).

Community Concerns and Open Identities

While OPR has risen in popularity in recent years, authors, reviewers, and editors still have concerns about such openness, especially as it relates to open identities; over half of 3,062 stakeholders in scholarly communication surveyed in 2016 remain sceptical of open identities, responding in surveys that peer review would be made “worse or much worse” because of it (Ross-Hellauer et al., 2017). More recent surveys summarized by Ross-Hellauer and Horbach (2024) found similar reluctance to making reviewer identities public, especially due to possibly exposing early career researchers and other vulnerable groups to undue influence and discouraging reviewers from reviewing.

Keeping this particular practice of OPR optional, at least until new studies and data have the chance to give us definitive insights into scholars' core concerns, may be

the most viable path forward, but, as an example, less than 6 percent of reviewers in *Functional Ecology* choose to make their identities known when given the option, and men are more than twice as likely as women to do so (Fox, 2021). Some OPR services, such as PRReview, propose as an alternative to allow reviews published under pseudonyms while privately keeping track of the review authors through their ORCID identifier. While this option provides protection for reviewers from potential reprisals, it has seen limited uptake in PRReview. According to Daniela Saderi (PRReview Co-founder and Executive Director), around ~85% (1250 of 1473) of people who have published at least one review on PRReview.org have done so using their public name as opposed to their unique pseudonym. PRReview also keeps reviewers accountable through a [Code of Conduct](#) to maintain an open environment and a harassment-free experience for their users.

There are also cultural considerations regarding open identities, as reviewers from “developing” countries are more likely to identify as review authors (Ross-Hellauer and Horbach 2024). Therefore, it is possible that, if Western methodologies become less dominant, there will also be more openness to open identities within OPR.

Community Attitudes toward Open Reports

Stakeholders express fewer reservations about open reports than open identities: nearly 60 percent of respondents believe “publishing reports would be an improvement in peer review processes” and less than a quarter stated “it would make things worse” (Ross-Hellauer et al., 2017). Moreover, over 60 percent of respondents believe both that open reports would be valuable to readers and increase the quality of review submissions. Yet, as with open identities, there are also concerns that making reports open might prevent reviewers from “making strong criticisms” or even “agreeing to review” (Ross-Hellauer and Horbach 2024). However, these perceptions do not align with reality, as most studies suggest that reviewers are neither reluctant to review nor is there any negative impact on reviewer behavior (Ross-Hellauer and Horbach 2024). A 2026 study even found that published peer review reports contain more informative content than unpublished reports, with more suggestions to improve the manuscript (Álvarez-García et al., 2026).

In short, concerns over open reports are largely unfounded, and the limited studies that are available on open reports suggest a potential increase in citation rates and detailed review reports without any negative effects.

Open Review of Preprints

OPR tends to supplement the work of preprint servers—platforms that make new research publicly available before it undergoes peer review (Ryan, 2026)—as they provide a dedicated space for feedback and comments on preprints before undergoing the publication process in a journal. Preprints are particularly poised for supporting OPR because they already have an expectation of community feedback and they allow for multiple versions to be posted before their final publication. Therefore, it is possible to revise the preprint based on the open reviews.

According to Avissar-Whiting et al. (2024), preprint review is a specific type of preprint feedback that includes the three following points, although these features also apply to open reviews of other research outputs:

- Discussion of the rigor and validity of the research.
- Declaration and verification of competing interests of reviewers.
- Disclosure and verification of reviewer identity (e.g., by an editor or service coordinator, or ORCID login).

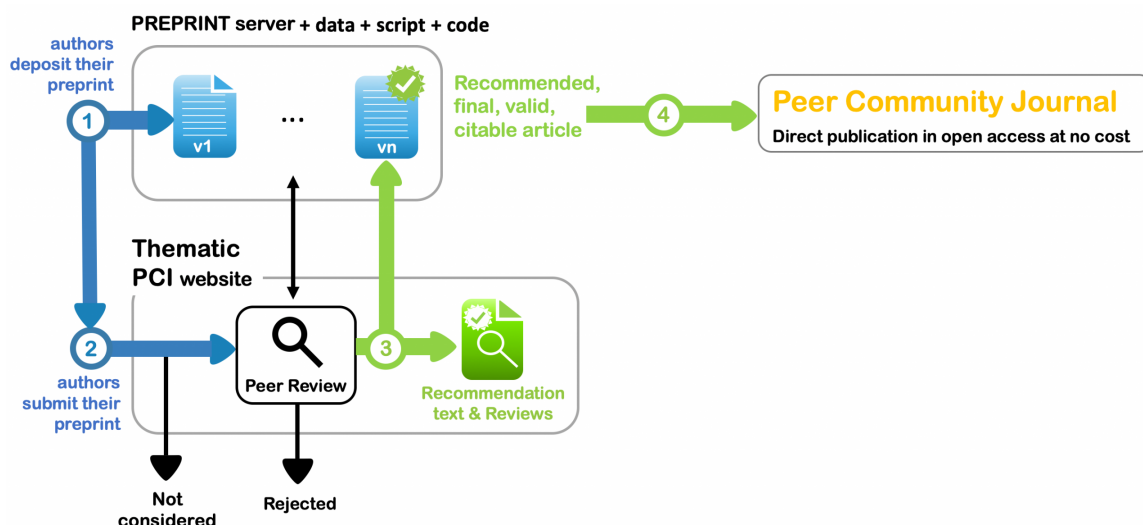
Preprint review services have different models. Some are relatively simple, offering the possibility of rating papers or having a general comments section that allows discussion among readers. Others are more complex and seek to provide training to early career researchers in peer review and in-depth formal reviews (Avissar-Whiting et al., 2024).

PREreview is one of the preprint review services that has the goal of bringing “more equity and transparency to scholarly peer review by supporting and empowering communities of researchers, particularly those at early stages of their career (ECRs) and historically excluded, to review preprints in a process that is rewarding to them” (PREreview, n.d.). This focus on equity and training redefines who counts as a peer and whose expertise is valuable in assessing a manuscript. To align with this goal, PREreview has training and Champions programs that seek to promote open peer review of preprints and address the inequalities behind traditional peer review. PREreview has also partnered with journals to develop preprint review clubs where researchers meet online to work on collaborative reviews.

Daniela Saderi (PREreview’s Co-founder and Executive Director) says,

At PREreview, we believe expertise is broader than traditional academic gatekeeping often recognizes. Rather than deciding who is qualified to contribute, we trust communities to share their knowledge and lived experience, and provide the infrastructure, guidance, and safeguards needed to make that feedback visible, citable, discoverable, and constructive. For us, openness and equity are inseparable values: simply making peer review open does not automatically make it more trustworthy, inclusive, or fair. Lasting change comes from cultivating a culture of accountability, respect, reciprocity, and care—one where diverse forms of expertise are welcomed, recognized, and empowered to strengthen research together.

Peer Community in (PCI) is another preprint review service that offers peer review for journals. If reviews are positive, the validated preprints can be published in diamond open access, either at the [Peer Community Journal](#) or to a [list of journals](#) that are associated with PCI. This process increases the efficiency of the peer review process because the preprint reviews are carried over to a journal to support in the decision of whether or not to accept a paper, potentially reducing rounds of re-reviews. However, they only publish positive reports and reviewer identities can be anonymous. The following image illustrates the publication process at the Peer Community Journal (n.d.).



Publish-Review-Curate Model

An alternative publishing model that is gaining popularity thanks to advancements in OPR is the publish-review-curate model, which breaks the publishing process down into three stages (Corker et al., 2024):

1. **Publish:** A research artifact (such as an article, dataset, or study registration) is made public by a researcher. The artifact should have a persistent identifier, machine-readable, freely accessible, and openly licensed. Artifacts can be published in preprint servers, institutional repositories, data repositories, or study registries.
2. **Review:** Reviewers openly evaluate the research artifact and provide feedback. These reviews can be invited or volunteered. Reviews should also be assigned a persistent identifier, be machine-readable, and openly licensed. Review services such as PREreview or Peer Community In can be used in this step.
3. **Curate:** Research artifacts are compiled into collections, with optional summary judgments or evaluations. These collections can be created by topic or by quality of the research artifacts. Multiple researchers or organizations can create different collections for different purposes.

The Publish-Review-Curate model supports decentralized publishing, as this model can happen in distinct platforms or services (Corker et al., 2024). This process is also initiated and controlled by authors rather than journals or editors. Examples of organizations that apply this model include [ASAPbio](#) and [MetaROR](#). While this model has existed since the early 2000s, the development of preprint services and open review services makes it possible to test this model at a larger scale.

Open Peer Review in Canadian Journals

The [Circé Network](#) conducted a survey among 134 Canadian journals about their peer review processes and found limited uptake of open peer review practices. For example, 69% of journals do not allow any interaction between authors and reviewers, 76% do not publicly disclose their reviewers, 83% do not publish review reports, and 97% do not share the reviewers' identities with the authors (Michaud et al., 2026). The survey also found that 40 journals are currently considering modifying their peer review processes.

Therefore, most Canadian journals do not currently enable the major components of

OPR (open identities, open reports, and open participation). In the final [report](#) accompanying the findings of the survey, the authors recommend that journals test open review practices in gradual and flexible processes in a single issue or article and get feedback from authors and reviewers. Another recommendation is that journals consider that OPR requires a reconfiguration of the roles involved in the editorial chain, so journals must support participants through the reconfiguration by drafting guidelines for reviewers and authors, selecting a system for recognizing peer review work, and planning the preservation of data related to the review process.

Key Questions and Considerations

OPR has been studied to better understand the impact of this practice. Among its benefits, OPR provides an opportunity to scrutinize the peer review process. For example, a study that analyzed peer review reports on Publons found that longer review reports (over 947 words) have a significant relationship with the citations articles receive ([Maddi & Miotti, 2024](#)). There is also evidence that OPR can lead to longer and more constructive reviews ([Ross-Hellauer & Horbach, 2024](#)).

OPR can increase the recognition of the time and labor researchers spend on peer review. It is estimated that researchers worldwide spend over 100 million hours conducting peer review every year, with an estimated monetary value of over 1 billion US dollars ([Aczel et al., 2021](#)). As the number of submissions to journals increases due to the pressure to publish ([Hanson et al., 2024](#)) and advances in AI technologies, these numbers are likely to rise. Therefore, OPR allows researchers to make visible their contributions to journals in their field and be recognized for their expertise and collegiality. However, these forms of writing are currently not valued in most research assessment processes despite their contribution to open scholarship and researchers' fields. This lack of recognition was identified as one of the main barriers for engagement with OPR in the report *Charting New Paths: The Promise of Alternative Publishing Practices*.

Among its limitations, the impact of OPR on article citations requires further research. For example, despite the Publons study mentioned above, [Ni et al. \(2021\)](#) found that articles that underwent OPR in the *Nature Communications* journal did not have an

increase in the number of citations compared to those that underwent traditional peer review. In contrast, (Wei et al., 2023) found a moderate increase in citations for articles that underwent OPR in *PLOS One*, but this increase depended on the database used to track citations. OPR articles had increases in the number of citations on Google Scholar and Dimensions, but not on Scopus or Web of Science citations. While there may not be a clear positive impact on citations, (Wei et al., 2023) found that OPR articles had higher page views, downloads, and shares across the web, increasing the visibility of the articles. A preprint also found that articles published in *PLOS One* with OPR were less likely to be retracted (Barnett & Spick, 2026). Therefore, OPR maintains transparency and traditional scholarly standards while reaching a broader audience.

Another limitation is that senior and male researchers are more likely to make their identities public when they write open reports (Ross-Hellauer & Horbach, 2024), which may reduce the potential of OPR for making the peer review process more equitable and inclusive. However, other demographic factors (such as geographic, ethnic, or linguistic origins) have not been found to influence the likelihood of performing OPR with open identities (Ross-Hellauer & Horbach, 2024).

Overall, there is a growing but inconclusive body of evidence showing the impacts and benefits of OPR. Open reports in particular seem to provide the greatest benefits, even though they may not provide an increase in citations. Open identities are a more divisive aspect of OPR, but different initiatives, including PREreview, are exploring alternatives, such as making identity disclosure optional or implementing trackable pseudonyms across reviews to protect reviewers from negative repercussions due to their reviews. While OPR cannot by itself fix all issues in journal publishing, it is a model worth exploring according to each journals' needs, resources. and context.

Disclaimer: Alan Colin-Arce is part of the 2026 PREreview Champions Cohort.

Notes

¹ eLife's publishing model faced backlash from Clarivate, as the Web of Science

removed the journal's impact factor because the review model did not meet Web of Science's journal standards (Brainard, 2024). eLife moved to a new publishing model in 2023 in which they publish all articles that have undergone peer review (and make the reports public), even if they had unfavorable reviews; a model known as "PRC: Publish, Review, Curate". This case shows that alternative review models can experience distrust from stakeholders.

References

- Aczel, B., Szaszi, B., & Holcombe, A. O. (2021). A billion-dollar donation: Estimating the cost of researchers' time spent on peer review. *Research Integrity and Peer Review*, 6(1), 14. <https://doi.org/10.1186/s41073-021-00118-2>
- Álvarez-García, E., García-Costa, D., Squazzoni, F., Malički, M., Mehmani, B., & Grimaldo, F. (2026). Published peer review reports have higher informative content than unpublished reports. *Journal of Informetrics*, 20(1), 101760. <https://doi.org/10.1016/j.joi.2025.101760>
- Avissar-Whiting, M., Belliard, F., Bertozzi, S. M., Brand, A., Brown, K., Clément-Stoneham, G., Dawson, S., Dey, G., Ecer, D., Edmunds, S. C., Farley, A., Fischer, T. D., Franko, M., Fraser, J. S., Funk, K., Ganier, C., Harrison, M., Hatch, A., Hazlett, H., ... Williams, M. (2024). Recommendations for accelerating open preprint peer review to improve the culture of science. *PLOS Biology*, 22(2), e3002502. <https://doi.org/10.1371/journal.pbio.3002502>
- Barnett, A., & Spick, M. (2026). *Who chooses open peer review and is it an indicator of article quality? An observational study of PLOS journals*. MetArXiv. https://doi.org/10.31222/osf.io/2b7z5_v1
- Brainard, J. (2024). Open-access journal elife will lose its 'impact factor' over controversial publishing model. *Science*. <https://doi.org/10.1126/science.zycyo78>
- Corker, K., Waltman, L., & Coates, J. (2024). *Understanding the Publish-Review-Curate (PRC) Model of Scholarly Communication*. https://osf.io/h7swt_v1
- Fox, C. W. (2021). Which peer reviewers voluntarily reveal their identity to authors? Insights into the consequences of open-identities peer review. *Proceedings of the*

Royal Society B: Biological Sciences, 288(1961), 20211399. <https://doi.org/10.1098/rspb.2021.1399>

Hanson, M. A., Barreiro, P. G., Crosetto, P., & Brockington, D. (2024). The strain on scientific publishing. *Quantitative Science Studies*, 5(4), 823–843. https://doi.org/10.1162/qss_a_00327

Maddi, A., & Miotti, L. (2024). On the peer review reports: Does size matter? *Scientometrics*, 129(10), 5893–5913. <https://doi.org/10.1007/s11192-024-04977-6>

Michaud, A., Savard-Arseneault, A., Céspedes, L., & Jia, A. (2026). *Rapport sur l'évaluation ouverte*. Zenodo. <https://doi.org/10.5281/zenodo.20167011>

Ni, J., Zhao, Z., Shao, Y., Liu, S., Li, W., Zhuang, Y., Qu, J., Cao, Y., Lian, N., & Li, J. (2021). The influence of opening up peer review on the citations of journal articles. *Scientometrics*, 126(12), 9393–9404. <https://doi.org/10.1007/s11192-021-04182-9>

Oliveira Henriques, S., Rzaeva, N., Pinfield, S., & Waltman, L. (2025). Preprint review services: Disrupting the scholarly communication landscape? *MetaROR*. https://doi.org/10.31235/osf.io/8c6xm_v3

Peer Community Journal. (n.d.). *About us*. Retrieved April 30, 2026, from <https://peercommunityjournal.org/page/about/>

PREreview. (n.d.). *About us*. Retrieved April 30, 2026, from <https://prereview.org/about>

Ross-Hellauer, T. (2017). What is open peer review? A systematic review. *F1000Research*, 6, 588. <https://doi.org/10.12688/f1000research.11369.2>

Ross-Hellauer, T., Deppe, A., & Schmidt, B. (2017). Survey on open peer review: Attitudes and experience amongst editors, authors and reviewers. *PLOS ONE*, 12(12), e0189311. <https://doi.org/10.1371/journal.pone.0189311>

Ross-Hellauer, T., & Horbach, S. P. J. M. (2024). Additional experiments required: A scoping review of recent evidence on key aspects of Open Peer Review. *Research Evaluation*, 33, rva004. <https://doi.org/10.1093/reseval/rva004>

Ryan, J. (2026). Why preprint servers are increasing moderation—And what that means for researchers. *Nature*. <https://doi.org/10.1038/d41586-026-01203-6>

Wei, C., Zhao, J., Ni, J., & Li, J. (2023). What does open peer review bring to scientific articles? Evidence from PLoS journals. *Scientometrics*, 128(5), 2763–2776. <https://doi.org/10.1007/s11192-023-04683-9>

Wolfram, D., Wang, P., Hembree, A., & Park, H. (2020). Open peer review: Promoting transparency in open science. *Scientometrics*, 125(2), 1033–1051. <https://doi.org/10.1007/s11192-020-03488-4>

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