Position: Closed, private peer review vs. Open, public peer review

Peer review is an important step of academic publishing that affects both the actual and perceived quality of academic literature. Readers, authors, reviewers and editors each have different relationships with peer review that should be considered when determining if peer review should be private and occur prior to publication, or public and take place after publication. Additionally, peer review changes in different academic disciplines and communities. Based on these aspects of peer review, it should be open, public and post-publication. The existing issues within peer review, including distrust and bias, would not be solved by keeping peer review silent and without accountability. Instead, these issues should be resolved within respective academic disciplines with transparency among the scholars, reviewers and publishers, who actively shape the peer review process.

First, it is important to define both types of peer review. Closed, private peer review is a process in which reviewers disclose their reviews to the author only, and all changes to the content of the academic literature are made prior to publication. The reader will find a statement that a piece of academic literature is peer reviewed, but will not be able to determine which changes were made as a result of peer review (Rowley & Sbaffi, 2017). In contrast, open and public peer review is a process in which reviews of academic literature are conducted after publication (Jackson, 2018). Open and public peer review enables transparency among scholars, and creates a space for public input on academic literature and its reviews. These two types of peer review, open and closed, directly oppose each other.

Next, it is important to understand what academic publishing entails, where peer review fits in academic publishing, and how this changes between different academic disciplines. Peer review is an important aspect of academic publishing. Academic publishing functions differently across academic disciplines, but functions to showcase ongoing academic research and new findings. Peer review is conducted by experts in various academic fields and serves multiple purposes in the publishing community: first, to ensure that the literature and research published is high-quality, and second, to encourage healthy questioning and debate among academics (Jackson, 2018).

Transparency in peer review has the potential to expose negative habits and behaviors present in academic publishing. According to Sikdar et al., the likelihood of a paper's popularity or circulation was found to correlate with an author's acceptance or rejection history: scientific authors with high acceptance rates tend to have more widely cited articles in the scientific community, and vice versa (2020, p. 102). These behavioral patterns could be explained by peer review, writing quality, research budget, or academic department, among other factors.

Regardless, the main issue presented by Sikdar et al. is that bias can be observed and measured in scientific literature peer review. By making reviews of academic literature publicly available, biased reviews would not be able to silently weaken the academic publishing process. Bringing these reviews out into the public eye allows researchers, authors, and publishing personnel to address the problem openly, and raises the standard of reviews.

By allowing peer review to occur after publication, academic publishers change the element of control present in the publication system. Li (2019) provides a clear explanation of the advantages observed in various publishing companies, including *Springer* and *BioMed*Central, who had to retract published papers after exposing faulty peer review practices within

their respective companies (87). Li illustrates the "problem" in peer review effectively with this statement: "These authors and/or agencies acted as both a player and the referee" (88). By allowing academic publishing companies to release content prior to peer review, this step no longer stops literature from being published, and effectively removes the control of a referee. The referee instead addresses the quality of published literature and suggests changes for the sake of ensuring quality literature and research within their academic community. Using Li's analogy, authors could still be "players" and "referees," just without power over other players.

In opposition to open and public peer review, Rowley & Sbaffi (2017) observe questionable patterns of bias within the scientific community's peer review system. Rowley & Sbaffi (2017) investigated authors', reviewers' and editors' reception of peer review effectiveness in scientific literature. In discussion with their study subjects, they found that the best received peer review model was "double-blind peer review," and that subjects with more experience in peer review "have less confidence in its ability to deliver on both benefits and ethics" (p. 655). The perception of peer review is important to the perception of the literature it helps publish. It is essential to ask why those involved would prefer double-blind peer review. A lack of confidence could potentially fuel academics' desire to make peer review increasingly closed and private. However, this would only serve as a superficial attempt to make peer review appear to be a better process than it currently is.

Peer review should be open, public and post-publication in order to begin resolving its observed issues in academic publishing. Researchers note that peer review suffers from distrust, bias and control. If made transparent and less easily controlled by existing in the public realm, peer review could be analyzed more openly among different academic communities and disciplines. There are still issues with public peer review, but it would initiate important change.

## Citations

- Jackson, L., Peters, M.A., Benade, L., Devine, N., Arndt, S., Forster, D., Gibbons, A., Grierson, E., Jandrić, P., Lazaroiu, G., Locke, K., Mihaila, P., Stewart, G., Tesar, M., Roberts, P. & Ozoliņš, J. (2018). Is peer review in academic publishing still working? *Open Review of Educational Research* 5(1), p. 95-112. https://doi.org/10.1080/23265507.2018.1479139
- Li, Shiying. (2019). Quality control of the peer-review process by *Forensic Sciences Research*.

  Forensic Sciences Research 5(1), 87-88. DOI:

  <a href="https://doi-org.libaccess.sjlibrary.org/10.1080/20961790.2019.1700886">https://doi-org.libaccess.sjlibrary.org/10.1080/20961790.2019.1700886</a>
- Rowley & Sbaffi (2017). Academics' attitudes toward peer review in scholarly journals and the effect of role and discipline. *Journal of Information Science 44*(5), p. 644-657. https://doi.org/10.1177/0165551517740821
- Sikdar, S., Tehria, P., Marsii, M., Niloy, G., & Mukherjee, A. (2020). On the effectiveness of the scientific peer-review system: a case study of the Journal of High Energy Physics. *International Journal on Digital Libraries 21*, 93-107.

  <a href="https://doi.org/10.1007/s00799-018-0247-9">https://doi.org/10.1007/s00799-018-0247-9</a>