

Viewpoint

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Reducing the risk of bias in academic publishing

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Abstract

The risk of bias in academic publishing is present from the first stages of the publishing process when the author creates an account and submits the manuscript, which becomes subject to the rights and power of journal editors. The author's disclosure of certain personal information risks exposing him/her to biases for or against certain groups of authors. To reduce these potential biases, reviewers and editors involved in the assessment of author works should be prevented from accessing authors' information until the final decision regarding publication has been made. Some information, such as authors' ORCID details, can be requested after the article is accepted for publication. Standardizing appeal procedures and establishing protocols for handling author appeals is a necessary step in the effort to reduce publication bias. Regulations for the cover letter to editor should also be put in place to ensure that authors' personal information is not disclosed, either explicitly or implicitly.

Keywords:

Academic publishing, authors, bias, editors, reviewers

Introduction

The presence of bias in academic publishing is a problem that has been confirmed in several studies. For instance, Fanelli,¹ in a study of more than 4600 publications from various countries and disciplines from 1990 to 2007, provides strong evidence for a steady and considerable rise in bias in academic publishing over the years. In an analysis of the bibliographic information of publications in the *New England Journal of Medicine* (NEJM) from 2000 to 2019, Zhu² found that research by American authors 'are favoured by the NEJM and a home country bias may exist in the publication process of the journal.

Editors and publishers are making efforts to reduce publication bias. For instance, global companies like Springer Nature, Taylor & Francis, Elsevier, and SAGE Publishing have joined the Joint Commitment for Action on Inclusion and Diversity in Publishing by the Royal Society of Chemistry for reducing bias in publishing with various promises, such as scrutinizing their own publishing processes as well as taking 'action to achieve a minimum standard for inclusion in publishing.'³ Diversity and inclusion efforts by *The Lancet* is one concrete example.⁴ Journals also make pledges to diversify their editorial boards. For instance, SAGE journals state, 'We pledge to publish a diverse range of perspectives within our journals, including BIPOC/BAME, different gender groups, LGBTQIA+, and people with disabilities, in order to invigorate academic discourse and improve literature. We aim to increase ethnic, gender, and geographical diversity on our editorial boards, in peer review, and in our author base.'⁵ *The Journal of Controlled Release* – published by Elsevier – also 'pledges its commitment to increase the

diversity of our editorial team and to ensure equity and inclusion are embedded in all aspects of the journal.'⁶

The demographic information that can create distinctions between authors is provided in the very first stages of journal submission, when authors create an account and submit their manuscript. In studying the publication processes of different journals, such as those published by SAGE, Springer, and Taylor & Francis, it is apparent that some steps requested for submission may result in the risk of unfairness for certain authors. This risk of bias is also associated with the rights and power of editors – those conducting an initial non-blind assessment of a manuscript before making a decision on whether to send it to reviewers^{7,8} and those determining the destiny of the author's work after peer review. Editors have been described as 'holding a lot of gatekeeping and discipline-shaping power'⁹ as well as having 'the sole authority to make the decision to accept or reject the manuscript.'⁸

What is the problem?

Bias occurs when an author's personal information, such as their institution, faculty, or country (which are categorized as required information by most journals), unrelated to quality and scientific content, influences an editor's decision on whether to send a paper for peer review or to publish it. Undeniably, it is necessary to know who the real authors of the manuscript are for consistency in the authorship of the paper. At the same time, such demands raise concerns about academic fairness. As Rojo¹⁰ noted, 'Many researchers in academia often feel judged, are treated unfairly and are even degraded based on their place of origin, social position. . .' (p. 177).

Specifically, the provision of personal information accessible to editors can create many types of publication bias. One is gender bias: some research reveals the high likelihood that female scholars face more hindrances in having their work advance through the review process in comparison with their male counterparts.¹¹ Until recently, journals have not required authors to provide information on gender and often names do not reveal this aspect. As some journals now begin to ask authors to self-report their gender, this opens up the risk of gender-based discrimination. Bias concerning institutional affiliation is another possibility. Scholars from leading universities often receive more favour in getting published.^{9,12} Furthermore, Reingewertz et al.¹³ reported that journals published by specific higher education institutions may have slightly lower requirements for those either working at or earning a doctorate degree from the relevant institution. Other studies have found geographical bias, which denotes the prejudice that Western academic journals impose on studies by authors with backgrounds of 'low economic status, a difficult socio-political context, a lack of academic freedom and advanced research skills, poor language skills, limited access to scientific resources, the absence of organised research centres and problematic self-efficacy.'⁸ In short, this type of bias occurs when editors or peer reviewers reject research by a scholar 'whose name does not sound like their own (usually European).'¹⁴ Bias might also be introduced through authors sharing information on their funding. There is no guarantee that research funded by major foundations will not receive priority because of the 'brand values' of the

funding organization. Another type of bias implies a conflict of interest when an editor is working on the board of an enterprise which subsidizes the research submitted to a journal.¹⁵

Author information may be disclosed simply through the author's email address when the person uses an institution's email or when the email contains the country's domain name, ORCID, cover letters to editors, and the cover page of the manuscript. Some journals consider the provision of ORCID when creating an author account and submitting a manuscript optional, while others require authors to provide an ORCID. As a result, much personal information about an author, from work institutions to research history, becomes available to the journal. This is similar to the request that authors provide information about their social media handles for platforms such as Facebook, Twitter, or LinkedIn. The cover letter to editor usually contains author names and institutions. Even when this is not the case, the letter content (e.g., mentioning the importance of the research results to the author's institution and country) can contain information that helps the editor realize the identity of the author, where the author comes from or with whom the author is affiliated. Additionally, some journals require authors to include their name and affiliation not only in the account creation and submission process but also on the cover page of the manuscript.

Most journals require their editors to maintain quality, transparency, and integrity in publishing. However, there is usually no available information regarding what

personal information about authors can be accessed by editors. More transparent procedures are required. To ensure that ethical standards in publishing are maintained, nearly 14,000 publishers and journals follow the Committee on Publication Ethics (COPE) guidelines. The COPE Code of Conduct and Best Practice Guidelines for Journal Editors encourage that 'editors' decisions to accept or reject a paper for publication should be based on the paper's importance, originality and clarity, and the study's validity and its relevance to the remit of the journal.¹⁶ Nothing is specified about the proper degree of accessibility to authors' personal information. However, from the guideline for editors – 'judge each submission on its own merits and do not exclude authors based on their previous publication history' – it can be understood that editors might have access to quite detailed information about the author.⁸ How, then, can journals ensure that editors' decisions are not influenced by the personal information to which they are exposed? While the establishment of an appeals procedure for resolving conflicts between editors and authors is encouraged by COPE,¹⁷ in reality, many journals provide only general and unstandardized guidance in this regard, which makes it very challenging for authors to follow this procedure when necessary.^{15,18}

As scholars attempt to comply with all requests and requirements of the journal in the hope that their manuscript will be accepted, they may neglect the fact that personal information accessible to journal editors can put them at risk of bias and discrimination – especially those from

emerging countries. Alternatively, authors may be very aware of this danger but do not dare to raise their voice for fear that any non-compliance with journals' 'demands' for information might render their manuscripts more difficult to publish. For academics, international publishing, notably in Web of Science and Scopus indexed journals, has become 'the most valorised academic capital and the most relevant indicator for institutional evaluations worldwide' (p. 745).¹⁹ Thus, editors of academic journals should be aware of the journal-author power relations, which are heavily weighted towards the journal. Silence from authors does not mean that journals should not cease to review and continuously improve the implementation of principles and efforts towards reducing publication bias.

What can be done?

Given the importance of publications to academics, ensuring fairness for authors is integral to publication. Journals should take measures to anonymize all information obtained from the authors so that not only reviewers but also editors and those involved in the quality assessment of the manuscript cannot access the personal information of the author. In addition to the author's name, working agency, and email address, other information such as ORCID can be requested after the article is accepted for publication. This will limit the risk of (dis)favouring authors with certain backgrounds when deciding whether to accept a manuscript. Standardizing appeal procedures and establishing protocols for handling author appeals is also a necessary step in reducing publication bias. Journals should also implement regulations for the cover letter to editor, ensuring that personal information

relating to the author, both explicit and implicit, remains private. Furthermore, ethics guidelines relating to editorial roles, such as COPE recommendations, must also include specific and clear terms about who on the editorial board is entitled to access authors' personal information and when this access is allowed; journals should then disclose this information to authors for their consideration of whether to select the journal for publication. While journals are aware of the risk of publication bias and have taken various specific actions to facilitate fair treatment, they should not ignore the potential for this issue that may be present from the very first stages of the publishing process.

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