

Preprints can improve publishing

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Publications are academic currency; they provide a means to advance knowledge and enhance researcher's careers. In recent years, concerns regarding academic publishing have increased exponentially. These include publication bias¹, the profitability of publishing houses², inequality in research access³, the voluntary labour of peer-review and its associated quality^{4,5}, the disconnect between journal prestige and research reliability⁶, predatory journals⁷, poor error correction⁸, and inconsistent policies and procedures⁹.

Harnessing the utility of preprints may solve many of these issues in academic publishing. Preprints are defined broadly as research documents made freely available via a public server (e.g., arXiv; PsyArXiv) before publication in a journal. They accelerate dissemination of research, allow researchers to gain early feedback, and increase access. With many concerns surrounding their use unfounded (e.g., scooping^{10,11}), preprints can reduce publication bias by permitting researchers to deposit their work regardless of its publication 'success'. Through not-for-profit preprint servers, financially supported through institutions, organisations or donations, preprints fulfil the criteria of green open access detached from the typically large profit margins of gold open access publishing, which charge either a subscription fee to readers or an article processing charge to authors¹². From this perspective, preprints can also create a more equitable and diverse research landscape, aiding better access and discoverability of research for those in developing countries (e.g., AfriArXiv; although additional support for such preprint servers is required¹³). Ranking systems do not exist with each preprint server aligned with its discipline and quality control maintained through version tracking, moderation, and community feedback (including error detection)¹⁴. Services such as 'Review Commons' and 'Peer Community In' offer a platform for independent peer-review of preprints, facilitating author-directed submission of refereed preprints to affiliate journals. Such in-house oversight protects the community from predatory journals and ensures homogeneous policies and procedures. Furthermore, the offshoot of 'PCI Registered Reports' promotes rigour, reproducibility and replication by reviewing and recommending Registered Report preprints¹⁵.

Problems associated with academic publishing signal a strong incentive for change. Preprints can mitigate many of these concerns by reimagining traditional publication and research evaluation processes and progressing a more equitable, open access future. Journals should not see preprint servers as a threat but rather an aide to an improved research landscape.

Conflicts of interest: Charlotte Pennington is a 'Recommender' for Peer Community In Registered Reports. The views expressed in this commentary are her own.

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