

May 2024

Working Group 5: Facilitate dialogue between stakeholders

Feedback

We welcome feedback on this initial draft. Please email feedback to United2Act at <u>contact@united2act.org</u>. We will take this into consideration for a revised version to follow later in 2024.

Statement on incentive/reward systems

Across the research ecosystem stakeholders are both being evaluated as well as making evaluations based on quantitative measures such as number of publications and citation counts.

A growing emphasis on research accountability, increased globalisation of research activity, and heightened competition for funding has seen the introduction of formal research assessment in many parts of the world. Quantitative performance indicators such as publication and citation counts, and bibliometric indicators derived from these counts, were introduced to complement expert qualitative review and meet the demand to allocate resources more efficiently, effectively, and with greater objectivity.

The over-reliance on bibliometric indicators – in some cases supplanting expert review – as proxy measures for research quality during research assessment exercises, and by tenure and promotion committees, places pressure on researchers to bolster their publication output and citation performance. Increasing publication and citation counts also benefits other stakeholders within the scholarly ecosystem – as detailed below – creating a permissive environment for fraudulent entities such as paper mills to exploit the pressure to publish and be cited.

Researchers are under pressure to increase publication output, particularly in prestigious journals, and to achieve higher citation counts to improve their chances of career advancement and securing grant funding.

Journals are under pressure to maintain or grow publication numbers and therefore need to be attractive to authors by improving attributes such as citation metrics and time to publication.

Publishers are under pressure to build a portfolio of successful journals to ensure their profitability and long-term sustainability. This includes increasing publication volumes, particularly when using business models, for example charging article processing charges for gold OA, where there is a direct link between revenue and volume.

Scholarly societies are under pressure to generate revenue through their journal programmes to sustain their wider activities and membership base.

Research institutions, including universities and hospitals are under pressure to improve their standing in rankings – calculations of which often include publication/citation measures – to help attract students, first-rate faculty and funding opportunities.

Research-funding bodies are under pressure to demonstrate high-impact outcomes of their investments, often relying (in part) on bibliometric indicators to measure impact.

Government agencies are under pressure to build and invest in productive research systems that demonstrate political, economic, technical, public health and cultural advantages. Bibliometric indicators are often used to help measure these impacts.

In addition, **Database and analytics providers** have a responsibility to produce reliable metrics, indicators and analytical tools using transparent and rigorous methodology from clearly defined, trustworthy content sets and promote their responsible use.

The misuse of bibliometric indicators as proxy measures for research quality has created perverse incentives where increasing the number of publications and/or citations has become a goal in itself. There is increasing recognition that changes in research assessment and reward frameworks are urgently needed and several recommendations have been published over the last decade outlining improvements that include the responsible use of metrics [1-6]. Removing the incentive to publish and be cited as a goal in itself – for example through research assessment reform – would be an effective way to tackle paper mills as it would eliminate the demand for paper mills as an easy route to gaining an unfair advantage.

Furthermore, the incentives that are currently driving bad actors to increase publication and/or citation counts through misconduct are currently stronger and more widespread than established disincentives. United2Act supports efforts to reform research assessment and aims to facilitate dialogue between stakeholders to foster collaboration and intelligence sharing and actively disincentivise misconduct to address the systematic manipulation of the publication process and resulting pollution of the scholarly record.



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