Editing Practice

COMMENT

Diversifying the impact factor: Shifting from mere citations to true representation

Abdulqadir J. Nashwan[1,2,*]

[1]Nursing Department, Hamad Medical Corporation, Doha, Qatar
[2]Department of Public Health, College of Health Sciences, QU Health, Qatar University, Qatar

The journal impact factor (JIF) is a pivotal metric in academic publishing, offering a glimpse into a journal's relevance within its field by counting citations of recent articles.[1] Many scholars rely on the JIF when choosing where to submit their work, given the prestige associated with high-impact journals. However, this metric has notable shortcomings. It's vulnerable to skewing by outlier papers that garner unusually high or low citations, potentially misrepresenting a journal's overall impact.[2] Additionally, the JIF's emphasis on citations may overlook research with significant societal impacts but fewer academic citations.[3] Furthermore, the JIF doesn't factor in diversity and inclusivity, potentially sidelining journals that emphasize diverse perspectives.[4] Consequently, while JIF is essential, it should be considered alongside other evaluative tools to grasp academic research's comprehensive influence and value.

A recent study was published by Gallifant *et al.* where a "diversity factor (DF)" is proposed, encompassing dataset properties, author's country, gender, and departmental affiliation.[5] These elements are considered crucial and should be evaluated independently. The study extracted metadata from the OpenAlex database of papers published from 2000 to August 2022. With the help of natural language processing (NLP), individual elements were identified. A dashboard showed significant underrepresentation of low- or middle-income countries (LMICs) and female authors. These

findings did not correlate with the JIF. According to the authors, implementing the DF will provide deeper insights, highlight knowledge gaps, and ensure continuous measurement of diverse outcomes.

In my opinion, the proposition of the DF emerges as a refreshing and timely response to the evolving needs of the academic landscape. In an era with a rising cognizance of disparities and a burgeoning call for inclusivity in academia, the DF stands as a beacon that can spotlight areas yearning for change. Sole dependence on the JIF runs the risk of myopia, potentially neglecting the myriad facets that constitute the essence of a genuinely influential study or journal. This is especially pertinent when addressing global health, where diverse representation is beneficial and essential.

Integrating artificial intelligence (AI) supported data extraction techniques, such as NLP, augments the DF's credibility. Ensuring a more meticulous and thorough data collection amplifies the results' reliability. The revelations about the stark underrepresentation in the academic domain further underscore the pressing need for such a nuanced metric.

However, as with any novel endeavor, the DF's journey has potential hurdles. Operationalizing it poses intricacies, ensuring its four foundational elements are appraised independently. Such a meticulous approach may render the metric intricate and intimidating to some. Plus, lurking in the shadows are the ever-persistent challenges of biases in data extraction and the possibility of subjective colorations influencing the results. As we tread this promising path, it's imperative to tread vigilantly, ensuring that the DF remains robust and reflects its noble intentions.

In conclusion, while the DF is a significant step towards making academic publishing more inclusive, its implementation and interpretation should be cautiously approached. Collaboration with diverse author groups

*Corresponding Author:
Abdulqadir J. Nashwan, Department of Public Health, College of Health Sciences, QU Health, Qatar University, Doha, P.O. Box 2713, Qatar. Email: anashwan@hamad.qa; https://orcid.org/0000-0003-4845-4119

will be crucial to refining and harmonizing this metric.

DECLARATIONS

Author contributions
Nashwan AJ: Conceptualization, Writing—Original draft, Writing—Review and Editing.

Source of funding
This research received no external funding.

Conflict of interest
The author has no conflicts of interest to declare.

Data sharing
No additional data.

REFERENCES

1. Garfield E. Journal impact factor: a brief review. *CMAJ*. 1999;161(8):979–980.

2. Kurmis AP. Understanding the limitations of the journal impact factor. *J Bone Joint Surg Am*. 2003;85(12):2449–2454.

3. Garfield E. The history and meaning of the journal impact factor. *JAMA*. 2006;295(1):90–93.

4. Bornmann L, Marx W, Gasparyan AY, Kitas GD. Diversity, value and limitations of the journal impact factor and alternative metrics. *Rheumatol Int*. 2012;32(7):1861–1867.

5. Gallifant J, Zhang J, Whebell S, *et al*. A new tool for evaluating health equity in academic journals; the Diversity Factor. *PLoS Glob Public Health*. 2023;3(8):e0002252.