

Review of: "Measuring researchers' success more fairly: going beyond the H-index"

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Potential competing interests: No potential competing interests to declare.

General comments

While I have reservations about using citation-based metrics as the sole means of evaluating scientific research, I do acknowledge that it is a useful tool in measuring the impact of published works. That being said, it is important to recognize the limitations of these metrics and take a more comprehensive approach to evaluating research. Despite my reservations, I genuinely appreciate the extensive work and effort put into developing these metrics, which has undoubtedly provided invaluable insights into the scientific community's progress and achievements.

Abstract

Citation impact indicators play a relevant role in the evaluation of researchers' scientific production and can influence research funding and future research outputs. The H-index is widely used in this regard, in spite of several shortcomings such as not considering the actual contribution of each author, the number of authors, their overall scientific production and the scientific quality of citing articles. Several authors have highlighted some of these limits. **Alternative systems have been proposed but have gained less fortune (← any idea why? the oligopoly and profit-taking motives from large commercial publisher might be the cause).**

In order to show that fairer criteria to assess researchers' scientific impact can be achieved, a workable example is presented through a novel method, integrating the aforementioned elements by using information available in **bibliographic databases (← mention which database. i assuming scopus and wos)**

A better, merit-based proxy measure is warranted and can be achieved, although a perfect score without shortcomings is a chimera. Any proposal on a new measure would require clear reasoning, easy math and a consensus between publishers, considering researchers' and research funders' point of view. **In any case, the relevance of authors' scientific achievements cannot be adequately represented by a quantitative index only, and qualitative judgements are also necessary (← this is important). But the time is ripe to make decisions on a fairer, although proxy, measure of scientific outputs (← pls don't suggest we should stop looking for alternative ways 😊).**

Content

Let's make the example of an article with five authors. The article score would depend on the number of citations that article receives (**possibly weighted by the relevance of the citing articles**← **and how does the author propose to do this? might be using AI? eg: using a dedicated service, like: <https://scite.ai?>**).

$z = IF_1 + IF_2 + \dots + IF_n$, where $IF_{1,2 \dots n}$ are the impact factors of the journals (at the time of citation) where the citing articles 1,2...n are published. **Journal IF from past publications (e.g. before 1975, when the IF system started to be implemented) may not be attainable (← there are more journals don't have JIF than those which have, what do you suggest? or it's a limitation of the proposed method)**, but such weighting could be considered at least for research purposes (← **weighting needs consensus**).

The final equation in box 2 cannot be applied only when there is a single author: in that case the author's score would be equal to the number of citations or weighted citations. (← **Indonesia's way: single author gains 100% of the scores, multiple authors: first author gains 60% of the scores, co-authors gains 40% of the score then divided with the number of co-authors**). **The score comes from stratification of journals based on their indexing status (Scopus and WoS journals gains 40 marks)**.

It would be appropriate to assign the second best score to the last author, who is often the research group leader, going on with the subsequent scores starting from the second author onwards (← **there's no way we can investigate this, can we?**).

Researchers should advocate for fairer measures of their scientific achievements, even if some of them may see their profile losing some appeal (← **the only way to do this is to not proposing another citation-based metrics**)

The proposal in this paper provides a workable example of the main elements that may be considered in an updated, possibly improved scoring system, easily implementable in the era of artificial intelligence (which is for much higher things) (← **although i'm not the biggest fan of any citation-based metrics, but i sincerely appreciate this work. however, assuming that deeper process should be needed for local (university) level evaluation, i may also propose the combination between this quantitatively with qualitative checking of individual article. it may include: checking if reusable data is available, is there any further science communication has been done by the author/s, etc. i also agree that any of the methods would need a university-level consensus. therefore, i'm not suggesting "generic/global level citation-based metric". Each university should embrace its own vision**).