

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

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The quest for a suitable index to measure researchers' performances has been a hot-spot, after the invention of the H-index in 2005. So many indices have been put forward since then, such that Prof. Ludo Waltman deemed there is no need to create more indices unless a game-changer comes into being.

Regarding the present study, I would say that the main part is mostly about assigning values for authors taking into consideration of authors' rank, which is pragmatic in many scenarios such as individual evaluation by employers. I believe that most institutions and the like have their own scoring systems for measuring success of personnel, and this study can serve as a good reference for them, since it is more comprehensive and inclusive than the H-index by taking into consideration all articles including those with No. of citations lower than the H-index as well as all citations including those exceeding the H-index.

However, considering the prevalence of the usage of the H-index, I cannot see a bright future for the present scoring system to replace the H-index. The biggest reason is that it fails to address short-comings mentioned in the article about the H-index, such as the self-citation bias, and other drawbacks not mentioned in the article but constitute the essential deficiency of the H-index, such as the lack of normalization across research fields.

It should be mentioned here that the improved H-index, the Schreiber Hm-index, better addresses the problem of co-author adjustment; and the "Updated science-wide author databases of standardized citation indicators" provided by Stanford not only applied the Schreiber Hm-index in its analysis but also classified scientists into 22 scientific fields and 176 sub-fields to provide a field-specific perspective of researchers' performance, and according to feedback from scientists, the Stanford's list is more realistic than the normalized indicators based on highly cited publications as operated by the Essential Science Indicator. In summary, the normalization should be an essential issue to be studied in citation impact indicators.

Finally come back to the article, some minor revisions on the equations are needed. In Box 1, $[y_{n-(n-1)x}]$ should be changed into $[y_{-(n-1)x}]$; in Box 2, $x=2z(b-1)/n(n-1)$ should be changed into $x=2z(b-1)/[n(n-1)]$. Similar mistakes exist in Box 3.