# 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.

Please, change the title to better represent the manuscript content, for a title such as "**Improving the H-index**".

The manuscript author´s Giulio Formoso presented in the paper entitled "Measuring researchers' success more fairly: going beyond the H-index" the limitations of the H-index with good objectivity and proposed a new evaluation method to improve the H-index in order to solve all the points appointed in the introduction. Despite this being the manuscript objective, the following point was not addressed: "Articles with number of citations lower than the H-index do not contribute to it, as well as citations exceeding the H-index. As for the latter: one author having few publications (e.g. 10) with lots of citations each (e.g. 100) will have the same H-index of a colleague having the same number of publications with much less citations each (e.g. 10)". That is, the objective proposed in the paper was not fully met.

The introduction of the article could be rewritten by adding a few more references to make possible a further understanding and validation of the article's proposal. A better grounding in the literature, adding more references enriches the content of the article and makes it clear to the readers that the problems pointed out by the author of the manuscript will be better recognized by the readers. Adding more references also helps in the discussion session, establishing a parallel between the results obtained and other existing research in the subject.

The author proposes that the distribution of the H-index score should depend on: "position in the list of authors (for those disciplines where authors are not listed alphabetically)". This consideration, however, may be valid, but it has its limitations. The author proposed linear reduction of the score for each subsequent author, this proposition can be questioned as the contribution may not be linear. In some scientific areas, first authors tend to have a higher contribution than later authors in a proportion that may be greater than linearity. A possible solution would be for the authors themselves to indicate the percentage contribution of each one when submitting the article. If it was the case, then always the authors should indicate at the submission of the manuscript to the editorial board of the journal the percent proportion of contribution of each co-author. But nowadays, the great majority of journals does not request such a proportion.

The exposition of mathematical equations is quite superficial and does not clearly address all the parameters involved. The author's manuscript could explain with more details facilitating the application of the proposed methodology. Including an example of the calculation of the H-index for a given researcher could help to facilitate the understanding of what was proposed by the author (Observation: no numerical example was present of the new H-index with the application of the proposed new method of calculus). Neither, any examples were presented regarding the author's proposal of calculating

the new H-index considering the reference's impact factor. The examples refer only to the distribution of citations, not the H-index itself. The author could improve the paper discussion with more examples.

The discussion proposed by the author is valid and should be deepened, but it could highlight the limitations of the proposed H-index. As the reviewers had access to the previous opinions and suggestions, I propose the author read all literature suggested, evaluating the possibility to include some in the reviewed manuscript.

Finally, please resubmit the manuscript, with the corrections and suggestions proposed, in order that the reviewers and the editorial board could evaluate whether to published.