

Thoughts on the Impact Factor

To the Editor: In reference to the letter by Granda-Orive et al, published in your journal, I would like to voice my disagreement with the statements it contains, without wishing to incite controversy, but with the aim of discovering the real significance of the impact factor.

While the impact factor is the best known bibliometric indicator, it is the most poorly employed as it measures the impact factor of the journals where scientific articles are published and not of what really matters: the real value of those articles,² The question regarding true scientific production and its importance is whether what is measured is the value of the article or of where it is published.

The impact factor is, by its very definition,³ an annual index of the scientific literature in the database of the Institute for Scientific Information. This is not an exhaustive index

as it does not include all the journals published throughout the world and is thus too selective (and biased): there are currently only 58 selected journals while many of great value are not taken into consideration, such as the *Annales de l'Institut Pasteur*. This evident bias is almost discriminatory of other scientific publications, as pointed out by Seglen⁴ in 1997. Golder⁵ added that publications in languages other than English should not be discriminated against in favor of other journals whose only factor of impact is in relation to the use of the English language.

Therefore, if the impact factor deceives us regarding the merit of an article and if Garfield himself has admitted that its value lies in its use as a tool for managing library journal collections, it should be remembered that the impact factor should now include the impact of the readership as well as the scientific discipline, the influence of the journal analyzed, the immediacy index, or the citation half-life. We therefore propose a new bibliometric indicator called the specific contribution impact, which would characterize the true contribution of an article or journal in the overall impact of all articles or journals⁶: we would know which reference article it is essential to consult and could thus measure its true value.

Purely in order to shed a little light on this fascinating subject that distracts everyone—readers, authors, and publishers—from the true value of a scientific article, I would like to point out the usefulness of the kind of reflections found in letters such as that of Granda-Orive et al. It is more important to analyze the content (as with a fine wine) than the packaging in order to appreciate its quality.

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- Granda-Orive JI, Benavent RA, Villanueva Serrano S. ¿Qué significa para una revista científica disponer de factor de impacto? Arch Bronconeumol. 2005;41:404-5.
- Arribalzaga EB. El factor de impacto o el impacto de factores. Rev Chil Cir. 2005; 57:269-74.
- Coelho PMZ, Antunes CMF, Costa HMA, et al. The use and misuse of the impact factor as a parameter for evaluation of scientific publication quality: a proposal to rationalize its application. Braz J Med Biol Res. 2003;36:1605-12.
- 4. Seglen PO. Why the impact factors of journals should not be used for evaluating research. BMJ. 1997;314:497-503.
- Golder W. The impact factor: a critical analysis. Rofo Fortschr Geb Rontgenstr Neuen Bildgeb Verfahr. 1998;169:220-6.
- Vinkler P. Characterization of the impact of sets of scientific papers: the Garfield (impact) factor. J Am Soc Inform Science Technol. 2003;55:431-5.