Description

In December 2016, Elsevier introduced a new metric for journals called CiteScore™ which is a part of Scopus—the world's largest abstract and citation database of peer-reviewed literature. By adding this feature, the scholarly community now has free access to the metrics covering journals from over 5,000 publishers. CiteScore is intended as an alternative to Clarivate Analytics' (formerly Thomson-Reuters) Impact Factor. The primary function of both systems is to analyze the number of times a journal article is cited in other works. This information is important to librarians as they make decisions regarding journal subscriptions, to journal editors, as they determine what sort of articles yield the most readers, and to authors, as they build a case for their work.

A critical component of CiteScore is its formula. This takes into account not only articles or reviews but also conference papers, letters, editorials etc. In order to calculate a CiteScore value, a very simple calculation is done where the numerator amounts to all the documents issued in the current year and the denominator comprises of all the documents published in the previous three years. Thus, it all comes down to the placement of the front matter in the equation. Impact Factor includes front matter in the numerator, but not the denominator, while CiteScore includes it in both.

Carl T. Bergstrom and Jevin West from EigenFactor.org summarized the comparison between CiteScore and Impact factor as follows:

By neglecting to count the front matter in its denominator, Impact Factor creates incentives for publishers to multiply their front matter. By counting front matter fully in the denominator, CiteScore does the reverse.

Advantages of CiteScore

The main advantages of the CiteScore metrics are:

- *Expansive Range of Journals/Documents*
  As mentioned above, its database comprises of peer-reviewed literature from more than 5,000 publishers
- *Transparency*
  CiteScore's algorithm is clearly defined—there are no hidden calculations behind the results.
- *Current*
  Through the CiteScore Tracker, it is possible to check citation rates on a monthly basis. Previously, these numbers were only available annually. (Annual calculations are also offered.)
- *No Cost*
  Access to CiteScore metrics is free of charge.

These four assets may be of great benefit to smaller journals and the researchers who publish in them as they may not be included in the Impact Factor metric. However, such inclusion may provide legitimacy that was previously not available to these smaller journals.

Disadvantages of CiteScore and Conflict of Interest

The disadvantages of CiteScore come down to three factors.

1. The vast quantity of journals included in CiteScore's analytics may dilute the quality of its outcomes.
2. CiteScore metrics skew against journals with a lot of front matter, in particular, the Nature family of journals.
3. CiteScore metrics seem to favor journals that fall under the Elsevier umbrella, as well as Emerald, which claimed to assist in CiteScore's development.

The potential dilution of quality as a result of including journals from more than 5,000 publishers is debatable. However, on selecting data from CiteScore, one can easily consider the number of journals included and realize that both the lesser-known journals as well as the well-established journals are receiving equal weight. In fact, as previously stated, being included with the big players might be of some advantage to the smaller publishers. As for the front matter issue, quoting again from the EigenFactor blog, we can see that CiteScore's algorithm is potentially problematic for journals with a lot of front matter and, therefore, for publishing in general:

Should CiteScore ever reach the level of prominence that Impact Factor currently holds, journals will face strong incentives to reduce or eliminate the news and editorials [front matter] *that appeal many readers. It would be a great shame to see this content shrink or disappear.*

Not only does front matter appeal to many readers, it may be the primary source of information for general news outlets, thereby increasing readership of these journals. In addition to skewing against journals with an abundance of front matter, CiteScore data clearly show an advantage to the majority of journals published by Elsevier (and Emerald). While there doesn't seem to be any manipulation of the data to produce this advantage, the question is, was there a conscious decision by Elsevier (and Emerald) to design a system from which they would benefit?

Ultimately, this boils down to whether or not a publishing company should be in the business of measuring publishing outcomes. No matter how transparent or beneficial the metric is, the question of ethical practice will always loom, potentially undermining the legitimacy of its use.

The Nitty Gritty

Is the CiteScore formula legitimate or is it a promotional tool? While making claims of transparency for its data and analytics, further transparency regarding the design of its algorithm is warranted. Scopus/Elsevier will have to account for the discrepancy between the ratings of Nature's journals in

CiteScore's data versus that of the Impact Factor. It will also have to account for the clear benefit its algorithm seems to have for its own publications.

Researchers, publishers, and journal editors should be paying very close attention to the development and progress of this maturing citation metrics tool, as its use and authority will have an impact on each.

References:

Hans Zijlstra and Rachel McCullough (2016, December 8) CiteScore: a new metric to help you track journal performance and make decisions. Retrieved from https://www.elsevier.com/editors-update/story/journal-metrics/citescore-a-new-metric-to-help-you-choose-the-right-journal

Carl T. Bergstrom and Jevin West (2016, December 8) Comparing Impact Factor and Scopus CiteScore. Retrieved from http://eigenfactor.org/projects/posts/citescore.php

Category

1. Reference Management
2. Reporting Research

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