

Keeping Score of CiteScore

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Journal-based metrics can help determine the overall quality of a communication channel. A key metric for many years has been the Journal Impact Factor by Clarivate Analytics (formerly Thomson Reuters). In December 2016, Elsevier introduced a comparative metric called CiteScore, which is part of a family of journal-based metrics.

How is it calculated?

The 2015 CiteScore is calculated by dividing the total number of citations in 2015 to documents published in the 3 previous years, by the number of documents published in those same 3 years.



$$\text{CiteScore} = \frac{\text{Number of citations in 2015 from documents published 2012, 2013, 2014}}{\text{Number of documents published in 2012, 2013, 2014}} \quad (2015)$$

How does CiteScore differ from Journal Impact Factor?

Though CiteScore is similar to the Journal Impact Factor (JIF), the two differ in some key areas:

Timeframe. The JIF counts documents (in denominator) and citations (in numerator) over a 2 year period, whereas CiteScore uses a 3 year timeframe. Elsevier explains that the wider citation window allows for a fairer evaluation of all fields, including those that take longer to accumulate citations. Clarivate Analytics would point to their 5-Year Impact Factor in response to this, which is included in the Journal Citation Reports.

Citable items. Both the JIF and CiteScore cast a wide net for their numerator by counting all the citations made to a journal title. However, they differ greatly in what they include in the denominator. JIF counts only documents published in the journal that are considered substantive and scholarly – namely articles, reviews and proceedings papers. Whereas, CiteScore counts all document types in the denominator, including editorials, letters to the editor, etc. Journals that have more diversity in document types (i.e. fewer articles and reviews) are more likely to have a lower CiteScore when compared to JIF.

Comparison. Below is a side-by-side comparison of several top journals based on JIF. For example, the high impact

journal JAMA, has a JIF of 37.68, and a CiteScore of 6.75 in 2015.

JCR Rank	CiteScore Rank	Source Title	Journal Impact Factor 2015	CiteScore 2015
1	1	CA- A Cancer Journal for Clinicians	137.578	66.45
2	91	New England Journal of Medicine	59.558	12.50
3	168	Nature Reviews Drug Discovery	47.120	9.15
4	243	The Lancet	44.002	7.72
9	60	Nature	38.138	14.38
11	323	JAMA – Journal of the American Medical Association	37.684	6.75
16	80	Science	34.661	13.12
1880	1673	PLoS One	3.057	3.32

Timely Release. Both the JIF and CiteScore are based on data from the previous full year (i.e. we're currently working with 2015 data for both JIF and CiteScore). Official scores for 2016 for JIF will be released in the summer, and CiteScore in the spring. However, CiteScore keeps up a CiteScoreTracker which calculates the current year's scores (i.e. 2016) on a monthly basis prior to the official upcoming release.

Availability. CiteScore is made freely available, while Journal Citation Reports is available through subscription. Galter Health Sciences Library provides quick access to both from [our website](#).

Range. In 2015 there were almost twice as many journals with a CiteScore (22,044 journals) when compared to JIF (11,985 journals).

Review of Quality: Both Elsevier and Clarivate Analytics have an ongoing journal evaluation process (see Elsevier's [here](#), and Clarivate's [here](#) and [here](#)), though it's difficult to tell how much they differ in their methods.

Is there room for CiteScore?

Some have argued that CiteScore is subject to potential conflicts of interest because Elsevier also publishes a significant number of journals (approximately 1,462 journals) that are ranked by the metric. Others have suggested that including all document types in the denominator acts as a disincentive to journals in publishing a diversity of materials and lowers the quality of the metric. While these are appropriate concerns, there's also the practical need to measure journal quality. CiteScore's impressive range means that even more journals (which have gone through a quality selection process) receive a score that helps us evaluate their work.

Further Information

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