

Description

Most of the commonly used measures of a [research paper](#)'s importance rely on counting citations of the paper. Altmetric (derived from Article Level Metrics) is an alternative ranking algorithm that expands on this measure and includes many other indicators. Its use is controversial and some disparage it as the worst sort of popularity contest with no relevance to the real scientific importance of an article. However, I feel that Altmetric is a useful tool for many researchers and should not be ignored.

How Does Altmetric Measures a Paper's Worth?

Like impact factor, Altmetric uses number of citations in its calculation. Unlike impact factor, altmetric goes further, including, for example, the number of times a paper is viewed and bookmarked. I think this is a fine addition to an algorithm. I [publish few research papers](#) nowadays, but I read a great many, download a large number, and bookmark a few. The importance to which I assign papers increases in that proportion. Some way of weighting these actions—bookmark>download>view—would reflect the opinion of vastly more scientists than the relatively few that cite the paper in publications.

Is Altmetric a Popularity Contest?

Although I like the inclusion of view/save/bookmark I am leery of some of Altmetric's other measures of importance, particularly those that monitor and count the mentions of a paper on social media platforms such as Facebook, Twitter, and science blogs. Here we enter the territory of "popularized science" and there is a danger that Altmetric can become a mere popularity contest. I'm all in favor of popularizing science, but some types of science don't lend themselves to popularization, the hard sciences in particular. Evolution is easier to explain (and more interesting) to the general public than quantum mechanics. So, the buzz on social media platforms will tend to be heavily weighted towards certain branches of science, while overlooking others that are equally important.

Article vs. Journal Level Metrics

On its web page, Altmetric refers to social media buzz as "article level metrics" as distinguished from the "journal level metrics" based on citations. They claim that some important papers are less cited but much discussed in the blogosphere; therefore, the latter should be included along with the former to evaluate a publication's worth. This may be a valid argument. I read an article in the popular press a few years back on the power of the checklist to save lives during surgical operations. A scholarly article on a mundane topic such as this might generate few [citations](#) but produce a big buzz on social media. In this case the article level metrics would be a better indicator of the value of a paper.

Overall, Altmetric and similar ranking programs are interesting and potentially valuable measures of an article's perceived importance within a certain discipline. In short, we must compare apples to apples. Papers on quantum mechanics must be ranked along with other papers on the same subject, not with those on psychology or global warming.

Category

1. Publishing Research
2. Selecting Journals

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