

Journey of a researcher: From citation to 'h-index'

Often it is asked by the researcher which is more important? Is it publication or citation?

This is a very tricky question because the scholarly performance of a researcher depends on both. As we know, research evaluation process of a researcher by the competent authorities like University Grants Commission (UGC), National Assessment and Accreditation Council (NAAC) or National Biodiversity Authority (NBA) considers both publication and citation as the part of metrics. Scientific publication is direct and tangible products of scientific activity. Therefore, the idea of measure of scientific performance based on the publication is sound and straight forward. Although various other parameters like mentoring abilities, online page hits, prestigious award and fellowship, international visiting fellowship or professorship are also considered as tools for researcher's career performance.

Regarding citation, Professor Eugene Garfield, the founder of Thomson-Reuter's Corporation, credited more on citation than publication. Citations reflect the performance of a researcher through productivity, quality, relevance, visibility, reputation, training, and overall scientific impact of a scientist or scholar. Citations are fundamentally important because, each citation indicates an influence on another and hence the accumulated number of citation to a particular presentation provides a measure of its total influence.^[1] Interestingly, evaluation using citation not only covers individual researcher, but also its influence extend to the evaluation of a research journal and even research institution or university itself.^[2] Hence, it may be stated that both individual as a researcher or as an author and their institution or university need to pay increasing attention to citations and adopt strategies aim to enhance it.

It has also been observed that ranking of world universities is highly being credited with published research paper with citation (20% of total weight). Even for evaluation of world ranking of universities citation/faculty/year is considered as an important metrics. As for example, University of Cambridge (world ranking 5) is having 69 citation/faculty/year as score, whereas Harvard University (world ranking 2)

is having 80 citation/faculty/year as score.^[3] Citation is greatly influenced by long sustained research career of an individual, which may be influenced by weight of university and institutions with great publishing features. High collaborative research works or great international research networking of a scientist or his/her institution makes significant influence of citation metrics. It should be the goal of a researcher to see whether, his/her research is read. Currently, Thomson Reuters is using citation data to study the relative impact of scientific journals, the impact and quality of the research of individuals and institutions, and the specialty structure of science.^[4]

We know number of publication with high citation, influences the "h-index" of the researcher. While accessing the credibility of the faculty member or a scientist or even an institution or university "h-index" is the ultimate yardstick accepted by NAAC, UGC, NBA or any international accreditation bodies. Simply by large number of publications or high citations of less number of articles will not enhance "h-index" of an individual. Hence, both number of publications and number of citation should be taken into consideration to improve the quality or scholastic research of a researcher.

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REFERENCES

1. Garfield E. Citation indexes for science. A new dimension in documentation through association of ideas 1955. *Int J Epidemiol* 2006;35:1123-7.
2. Garfield E, Sher IH. New factors in the evaluation of scientific literature through citation indexing. *Am Doc* 1963;14:195-201.
3. The World University Ranking. Times Higher Education 2014-2015. Published by Thomson Reuters. Available from: <http://www.timeshighereducation.co.uk/world-university-rankings/2014-15/world-ranking>. [Last retrieved on 2015 Mar 14].
4. Garfield E. Citation analysis as a tool in journal evaluation. *Science* 1972;178:471-9.

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