

About academic productivity

Academic productivity metrics are commonly considered for career development and promotion decisions, and by funding agencies when allocating research funding. Commonly used indexes of academic productivity of individual scientist include the total number of research papers and Hirsch index.

However, the commonly used indexes of academic productivity are based on the total number of (co-)authored research papers published in indexed peer-reviewed journals and do not account for individual author's contribution, because all listed authors are considered equally irrespectively of their position on the authors' list. It is generally accepted that the first author is usually someone who contributed the most to the research papers, while the last (or senior) author is usually the scientist who came up with the study idea/concept, secured research funding and supervised critical steps of implementation of the research study and guided drafting of the manuscript. Other co-authors are usually researchers/students who substantially contributed to the successful implementation of the research and critically revised the manuscript. Hence, it is generally expected that the author's position within the author's list correlates strongly and positively with the intellectual contribution to the publication and time efforts devoted to the development of study idea, implementation of research protocol, data analysis/interpretation and manuscript writing.

Collaboration between scientist is critical for research advances, and for high-quality and impactful research. Hence, the number of multi-authored research papers is constantly growing. However, while research indexing databases (Scopus, Clarivate Analytics, Google scholar etc.) populate authors' academic productivity indexes that based on the total number of publications, but they do not take into account one's position in the author list. Hence, it is challenging to accurately disentangle individual academic impact based on the number of first or last authored research papers.

Consideration of author's contribution to a research study/ paper is becoming increasingly important. For example, in some institution the position within the author list is strongly emphasized for promotion decision. Also, a certain number of first authored papers is a requirement to successfully defend a PhD degree in some countries. While not explicitly documented nor mandated at institutional, national nor international levels, but adherence to (in most instances) universally accepted rules that define the requirements for individual author's position in the journal article author list is important to maintain transparency within the research community and to appropriately acknowledge everyone's academic contribution.

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