

The Journal Impact Factor Paradox: Good Editorial Practices or Good Readers

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Over the past 60 years, the Journal Impact Factor (JIF) has exerted a growing influence on the global scientific and academic research community. This system, like any other, is not without its flaws, and it's crucial to acknowledge its limitations. While it can enhance a journal's reputation as a leading platform for scientific and academic publications, it has also paved the way for unethical, predatory publishing practices that exploit impact factors to gauge journal quality. This underscores the need for a more nuanced approach to evaluating scholarly impact, considering the quality and relevance of research, not just its popularity. This shift in perspective can open new avenues for understanding and appreciating scholarly work.¹

Approximately 30,000 medical journals are currently published worldwide.² Yet, only a few of these journals earn esteem and trust in healthcare. Research publication practices face ongoing examination and monitoring, with academia mindful of the possible dangers associated with self-promotion, pursuit of fame, advancement incentives, and securing research funding. It's essential for the journal editorial teams, researchers, and readers to be cautious of these factors, as they can adversely influence academic research and research projects. Motivated by academic interest or commercial incentives, these publications consistently strive for high acceptance rates among journal readers, resulting in the infiltration of biases into medical research and potentially introducing covert biases. Researchers' and readers' awareness of these issues is crucial in maintaining the integrity and quality of scholarly publishing.³

Understanding the historical context of the Journal Impact Factor (JIF) is crucial for a comprehensive view of scholarly publishing. More than half a century ago, the efforts of Prof Eugene Garfield caught the attention of researchers keen to standardize or quantify publication quality in reproducible ways. Eugene Garfield and Irving Sher conceived and published the idea in the Science Citation Index in 1961. The Journal Citation Report (JCR) began its publication in 1975 by the Institute for Scientific Information (ISI), currently Thomson Scientific. The JCR

used to provide the Journal Impact Factor (JIF) until Clarivate Inc. took over this responsibility as a commercial concern and monitored the impact factor surveillance and yearly declarations of impact factors. Therefore, the JIF is now part of the Clarivate Analytics Web of Science (WoS) database. This historical journey highlights the evolution and significance of JIF in scholarly publishing.⁴

Since the inception of the JIF, scientific and academic publications have been influenced by undue focus on impact factors, adversely affecting researchers and scholars engaged in academic research and scientific communications. Professional academic organizations and journals use the impact factor as a performance index when hiring or evaluating individuals. The scientometric factors categorizing authors and researchers for their research profiles include the total number of peer-reviewed articles published in medical journals and the citations received by their published articles.⁵

This led to the birth of the 'h-index' of individual researchers and scholars, proposed by Jorge E. Hirsch in 2005, hence the name Hirsch index or h-index. It calculates the author's publications' productivity and citation impact. Unfortunately, though a helpful metric, it added pressure on researchers to publish in high-impact factor journals to boost their h-index, productivity, and number of citations. However, the h-index does not consider the number of authors in the publication and gives full credit to all the authors. Thus, the ethically improper trend for multiauthor publications and gift authorship came into vogue to increase authorship without contributing to research.⁶

Furthermore, predatory journals exploit researchers' desire for more publications by falsely claiming a high impact factor. They misuse the shift to open-access journals and electronic publications to prey on researchers for financial profits. Moreover, the lure of quick publications in journals with shorter submission-to-publication times blinds researchers to the fact that

these publishers often bypass quality control to expedite publications, often at the cost of high publication fees.⁷

Due to lax or non-existent peer review processes, quality control is particularly jeopardized by journals involved in unethical research practices, allowing publications with insignificant research findings, fake research, and plagiarized manuscripts to be published without proper scrutiny. Unethical editors skew publications by selecting topics expected to get more citations rather than sound quality research, creating selection biases as only articles on frequently cited topics are published. In contrast, many essential types of research fail to be published and disseminated as scientific communications. Such poor-quality publications undermine readers' trust in academic integrity and the reliability of scientific and academic research.⁸

Misusing impact factors and journal ranking metrics leaves gaps in the quality of publications and research integrity. Establishing the quality of academic and scientific research is paramount for readers and the healthcare field. Poor-quality scientific inquiries must not be credited as well-cited papers or for good writing skills. The findings of fake or poor-quality research are detrimental to readers, particularly when researchers cite these findings in future publications.

In conclusion, our country, a low-middle-income country, needs to improve its research culture and readership. Editorial efforts can improve journal quality once good-quality research is conducted and honest readers' feedback is available. A good quality and ethical journal can only hope to earn a good JIF once it catches the attention of active readers willing to cite what they have read. Finally, research integrity must always be maintained by demonstrating intellect, transparency, and integrity to journal editors, researchers, and readers.

Albert Einstein was once asked how we can make our children smarter. His answer was simple and wise.

"If you want your children to be smart, he said, read them fairy tales. If you want them to be even smarter, read more fairytales to them. He understood the value of reading and imagination."⁹

REFERENCES

1. Lariviere V, Sugimoto CR. The journal impact factor: A brief history, critique, and discussion of adverse effects. Springer handbook of science and technology indicators. 2019;3-24.
2. Hussain FN, Husnain A. Impact factor: is it an essential tool to assess a medical journal?. Journal of the College of Physicians and Surgeons--pakistan: JCPSP. 2007 Jun 1;17(6):382-3.
3. Rushforth A, de Rijcke S. Accounting for impact? The journal impact factor and the making of biomedical research in the Netherlands. Minerva. 2015 Jun;53(2):117-39.
4. Garfield E. The history and meaning of the journal impact factor. jama. 2006 Jan 4;295(1):90-3.
5. Mingers J, Leydesdorff L. A review of theory and practice in scientometrics. European journal of operational research. 2015 Oct 1;246(1):1-9.
6. Bi HH. Four problems of the h-index for assessing the research productivity and impact of individual authors. Scientometrics. 2023 May;128(5):2677-91.
7. Sarfraz Z, Sarfraz A, Anwer A, Nadeem Z, Bano S, Tareen S. Predatory journals: A literature review. Pakistan Journal of Surgery and Medicine. 2020;1(1):42-51.
8. Xie Y, Wang K, Kong Y. Prevalence of research misconduct and questionable research practices: A systematic review and meta-analysis. Science and engineering ethics. 2021 Aug;27(4):41.
9. Jill Ling, Ong Sill Ling; Exploring English Language Reading Habits of University Foundation Students: Borneo Journal of Social Science & Humanities; DOI:<https://doi.org/10.35370/bjssh.2021.3.2-05>