Single journal bibliometric case studies

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Abstract

This study presents a comprehensive analysis bibliometric case studies published in the same journal they analyze — to explore their evolution, impact, and emerging ethical challenges. This work uses the OpenAlex database to identify 643 self-studies from 565 journals (1988-2024), offering the largest quantitative examination to date. Our methodology combines keyword filtering (e.g., journal titles in article titles, terms like "bibliom"" in abstracts) with manual validation to exclude non-relevant content (e.g., editorials, thematic subsets), ensuring a focused dataset. A key finding is the rising trend of self-studies authored by professional bibliometricians unaffiliated with the journal's core community, particularly post-2020. These externally produced papers, frequently published in high-impact journals, yield mutual benefits: authors gain visibility in prestigious venues, while journals enhance their citation metrics. Our findings show a dual reality: single journal self-studies offer valuable field-specific insights but are exploited for increasingly bibliometric gaming.

Introduction

Scientific journals serve as homogeneous collections of research output, united by shared disciplines, editorial policies, and publishing standards. These collections are critical for bibliometric analysis, particularly single journal bibliometric case studies, which provide insights into the intellectual evolution, editorial practices, and citation dynamics of individual journals. Such studies are often published within the analyzed journal itself, termed here as single journal bibliometric case studies or self-studies. While prior surveys by Tiew (1997) and Anyi, Zainab & Anuar (2009) categorized these studies qualitatively using small samples (102 and 82 papers, respectively), their analyses focused on periods ending in 2008, leaving recent trends underexplored.

Single journal self-studies vary in scope: some trace a journal's history (e.g., Arrow et al., 2011; Margo, 2011), others evaluate editorial performance (e.g., Zink, 1950), and many focus on citation-based bibliometrics. Historically, such studies were authored by members of the journal's community. However, recent years have seen a rise in contributions from external bibliometricians. raising questions about motivations and ethical practices. This study addresses these gaps by analyzing the largest dataset of single journal self-studies to date (1988-2024), examining their evolution, impact, and emerging ethical challenges.

Methodol ogy

We extracted data from OpenAlex using a search strategy targeting papers with journal titles in their article titles (including full titles, abbreviations, and variants which are available in OpenAlex). From an initial pool of 27 484 papers, we applied inclusion criteria: (1) keyword filtering ("bibliom*" or "scientom*" in abstracts) (1147 left after filtering); and (3) manual validation to exclude papers analyzing thematic subsets of a journal's output or several journals at the same time (e.g., Skop, Tonyan & Cassiday, 2019). The final dataset comprises 643 selfstudies from 565 journals. OpenAlex work_ids can be provided.

Results and Dataset Overview

The 643 self-studies span 1988–2024, with a sharp increase in 2018 (more than 66.7% of the papers were published from 2018 to 2024). Distribution is given in Figure 1.



Figure 1. Number of papers in the dataset for a given year.

There are 58 journals that have published more than 1 self-study. In Table 1 journals with 3 and more self-studies are given.

Self-studies are more popular among Social Science journals. At Figure 2 shares of different fields are given. Note, that two or fields can be attributed to one more publication.

Table 1. Journals with the highest number of self-studies.

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Journal name	pape
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Australasian Journal of	6
Educational Technology	
Scientometrics	6
	0
Information Sciences	5
Journal of Business Research	3
Journal of Craniofacial Surgery	3
Journal of Cross-Cultural	3
Psychology	
Journal of Product Innovation	3
Management	-
Library philosophy and practice	3
Enormy philosophy and practice	5
Medicine	3
	U
Naunyn-Schmiedebergs	3
Archives of Pharmacology	
Retos	3
1000	5



Figure 2. Fields Distribution.

Single journal bibliometric self-studies have significant influence. The average number of citations is 24 while the median is 5. The most cited paper in our database (Ramos-Rodríguez & Ruíz-Navarro 2004) has 1395 citations. Usually, single journal bibliometric selfstudies provide general overview of main trends in research field, comparison with related research areas. Because of deliberate development of science, some findings stay relevant for a long time.

Historically, such studies were authored by members of the journal's community. With advances bibliometric in research. development of bibliometric instruments, and scholars' engagement with bibliometric indicators the number of single journal case studies is increasing. The more interesting trend is that such papers are written by professional bibliometricians that do not belong to the journal's scientific community. The three most productive coauthors published 51, 29, and 22 correspondingly. Most of these papers are published between 2020 and 2024. Many of these papers have very good citation performance. They cite their own related research in different journals. Both journals and authors win from such strategy.

We have found only 79 papers that are written by coauthors of at least 10 single journal bibliometric self-studies. The share of these papers has significantly increased over the last 5 years, most papers are still authored by scholars with relatively small number of single journal bibliometric self-studies.

Discussion and conclusion

Single journal bibliometric self-studies serve dual roles: they provide valuable syntheses of disciplinary progress but are increasingly exploited for bibliometric gaming. While most studies remain ethically sound, the rise of templated papers highlights vulnerabilities in current bibliometric and editorial systems. Journals benefit from heightened visibility through these studies, yet risk enabling manipulative practices that distort impact metrics.

This research is still in progress. Future research should explore longitudinal citation patterns of self-studies and develop frameworks to balance their academic value with ethical safeguards.

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