

Higher Standards and Unnoticed Preference - the Impact of Editor-in-Chief on Collaborators

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Abstract

Understanding the influence of Editors-in-Chiefs (EiCs) on their collaborators provides valuable insights into the complex interplay between editorial leadership and academic collaboration, shedding light on how such dynamics shape publication practices and journal quality. This study investigated the influence of EiCs' appointment on their collaborators' publishing behaviors in computer science journals listed on ScienceDirect. By employing the Wilcoxon Signed Rank test and T-tests, we analyzed submission Willingness, Share, and Academic Value (of published papers) across three author categories, i.e., Listed Authors, Core Authors, and Other Authors. Results revealed a stable submission willingness but a decline in publication share for Listed and Core Authors post-appointment. Trends in the academic value of articles were mixed: Core Authors showed improvement under stricter standards, while Other Authors experienced a decline (statistically significant at the 90% confidence level). These findings highlight the EiCs' role in balancing editorial rigor and collaborative dynamics, but further research across disciplines is needed due to sample size and research field limitations.

Introduction

Scientific journals serve as critical platforms for scholars to engage in academic exchanges and disseminate their findings, and they gather the original and innovative contributions of science and have a profound social and academic impact (Mauleón et al., 2013).

Editorial Board Members (EBMs) are generally regarded as distinguished researchers with exceptional publication and citation records (Schubert, 2017). As the “gatekeepers of science” (Mauleón et al., 2013; Helgesson et al., 2022; Scarlato et al., 2024), EBMs play a pivotal role in shaping the journal's academic quality. Their primary responsibilities include assessing manuscripts for suitability for the journal (Hames, 2001) and selecting papers with excellent scientific content (Tokić, B. 2017). Moreover, the impact of editorial bias on authors' satisfaction and motivation can influence the types of manuscripts submitted to journals (García et al., 2015).

However, EBMs are not only gatekeepers but also contributors to the research ecosystem, often participating as authors and collaborators themselves. This dual role can lead to potential conflicts of interest, including perceived or actual biases involving close collaborators, research partners, or co-authors (ICMJE, 2024; COPE, 2024; CSE, 2024). “Publication bias” remains a broadly perceived preconception (Mani et al., 2013). To address these issues, several studies had explored the

influence of EBMs' co-authorship on journal outcomes (Colussi, 2018; Ductor & Visser, 2022).

Considering that Editors-in-Chief (EiCs) are the top decision-makers of journals, many scholars have embarked on an exploration of the "self-publishing" phenomenon associated with EiCs (Liu et al., 2023; Nourmand et al., 2024). It has been observed that some EiCs have self-publishing rates that are relatively elevated in comparison to those of other editors (Liu et al., 2023). Additionally, within the context of several dental journals, a substantially increased number of self-publications has been detected, which consequently engenders potential conflicts of interest for EiCs (Nourmand et al., 2024). Meanwhile, the potential conflicts of interest arising from the collaborative relationships of EiCs have yet to be fully explored.

In this paper, aiming to explore the impact of the EiCs on collaborators, we selected collaborators based on the frequency of previous co-authorships, classified the author types in the article, and analyzed changes in their publication willingness, share, and academic value before and after the EiCs' appointment, to investigate whether there are potential conflicts of interest between the EiCs and their collaborators before and after the EiCs' appointment.

The remainder of this paper is as follows. *Related work* introduces previous research related to our study. *Data and methods* describes the process of dataset construction and the definition of observation indicators. *Results* shows the results of analysis and *Discussion* give some discussions.

Related work

The Editor-in-Chief (EiC), or an equivalent with a similar title, is the top decision-maker in academic journals (Schubert, 2017), and holds substantial influence over the journal's editorial policies, submission practices, and overall quality. EiCs are responsible for both maintaining high standards of excellence and overseeing journal operations (Nourmand et al., 2024), as well as improving the quality and impact of the journals they edit. Previous studies can be primarily divided into two types, one incorporates EiCs into the scope of editorial board members (EBMs) for research purposes, the other conducts research on EiCs as a distinct cohort.

The phenomenon of self-publishing by EiCs has been extensively studied, revealing its contentious nature and significant variation across disciplines. Helgesson et al. (2022) highlighted the heterogeneity of editorial influence reflected in differing self-publishing rates among journals. Zdeněk (2018) found that the share of articles authored by editorial board members (EBMs) in their own journals is positively correlated with the gap between impact factor and impact factor without Journal Self Cites, and negatively correlated with the Article Influence Score. Similarly, Zdeněk and Lososová (2018) observed that in agricultural economics journals, higher self-publishing rates among EBMs inversely correlated with bibliometric indicators such as uncited articles.

In contrast, Walters (2015) reported that 64% of EBMs in library and information science journals published fewer articles than expected, potentially reflecting efforts to avoid conflicts of interest. Scanff et al. (2021) identified editorial bias through

analysis of prolific authors and Gini indices in biomedical journals, where 26% of the most prolific authors were EiCs. Liu et al. (2023) examined 81,000 editors over five decades across 15 disciplines, finding that EiCs tend to self-publish at higher rates. Furthermore, Nourmand et al. (2024) quantified self-publications in dental journals and reported a significant increase in potential conflicts of interest. These studies collectively underscore the complex dynamics and implications of self-publishing by EiCs.

Beyond their own publishing habits, EiCs also influence the publication outcomes of collaborators. Research has demonstrated how personal and professional connections between authors and EBMs can influence publication decisions. Colussi (2018) explored how different types of connections—such as shared faculty membership, common PhD advisors, or co-authorship history—affect the quality of published papers. And the findings suggest that connections ultimately improve the quality of published papers, the share of Co-authors connected papers is around 8%. In the view of co-authors, there is no obvious increase in their publication outcomes when this editor is in charge of a journal. Ductor & Visser (2022) investigated the situation when a coauthor joins an editorial board. They found when the coauthor joins an editorial board of an economics journal, the scholar publishes more articles in the coauthor's journal, and point that more editorial power over submissions means larger increases.

Further study by Sarigöl et al. (2017) showed that prior co-authorship with an editor can significantly reduce manuscript handling times, demonstrating that personal relationships can expedite the editorial decision-making process. Trieschmann et al. (2000) and Brogaard et al. (2014) also showed that faculty members at universities with faculty serving as editors tend to have increased publication output. Trieschmann et al. (2000) found that business schools with faculty holding editorial positions in journals saw improved research performance, while Brogaard et al. (2014) observed that faculty at the editor's university published twice as many papers during the editor's tenure compared to when the faculty member was not serving as editor.

The impact of EBMs' personal relationships with authors has been the subject of some discussion. Some scholars have contended that such practices may improve the efficiency of the academic publishing process. Laband and Piette (1994) suggested that what many consider "favoritism" might actually serve to enhance efficiency in the market for scientific knowledge. By favoring collaborations with established researchers, editors may streamline the editorial process and improve the quality of publications. Colussi (2018) also found that the social connections ultimately improve the quality of published papers. Therefore, while personal relationships in editorial decisions may appear biased, they can also contribute to better journal quality and greater research dissemination.

The existing body of research emphasizes the multifaceted influence of EiCs on academic publishing, particularly concerning self-publishing practices, editorial bias, and their impact on collaborators. These studies offer valuable insights into the editorial dynamics and underscore the dual role of EiCs as gatekeepers and contributors to the research ecosystem. However, while prior research has primarily

focused on the prevalence of self-publishing and general trends in editorial influence, the nuanced effects of an EiC's appointment on collaborators' publishing behaviors, including their willingness to submit, publication share, and the academic value of their papers, have not been sufficiently studied. This study aims to investigate these aspects through a focused analysis of computer science journals, employing rigorous statistical methods to reveal trends across different collaborator roles. By connecting these insights with broader editorial practices, this research not only complements the existing literature but also offers a novel perspective on the balance between editorial rigor and collaborative dynamics under the EiCs leadership.

Data and methods

This study aims to analyze the potential changes in the collaborators' publishing practices before and after the appointment of the corresponding EiCs. For this purpose, the bibliographic data of EiCs and their collaborates was collected and analyzed. Fig. 1 gives the framework of the work, which includes data collection, variable definition and statistical analysis.

Data collection

The first thing is to determine the research object, i.e., EiCs and collaborators, based on which the bibliographic data can be collected. The determination of the EiCs is subject to 2 criteria. First, data accessibility. We need to collect the EiCs' names, affiliations and appointment periods, which are crucial for subsequent analysis. After reviewing various journal platforms, we finally chose the ScienceDirect database for its extensive and openly accessible editorial board information. Typically, editorial board details, including the EiCs' name, affiliation and position, can be found in the front matter of journal issues. ScienceDirect provides the information for most journals as free-access PDF files, which can be easily downloaded for the analysis. Second, time restrictions. According to Colussi (2018), a six-year window is well-suited for observing the bibliometric changes related to the appointment of EiCs. Our analysis also used the six-year window, three years before and three years after the EiCs' appointment, to examine the potential changes. That makes the appointment year of an EiC should not be later than 2019 (the initial data collection time is 2024.6).

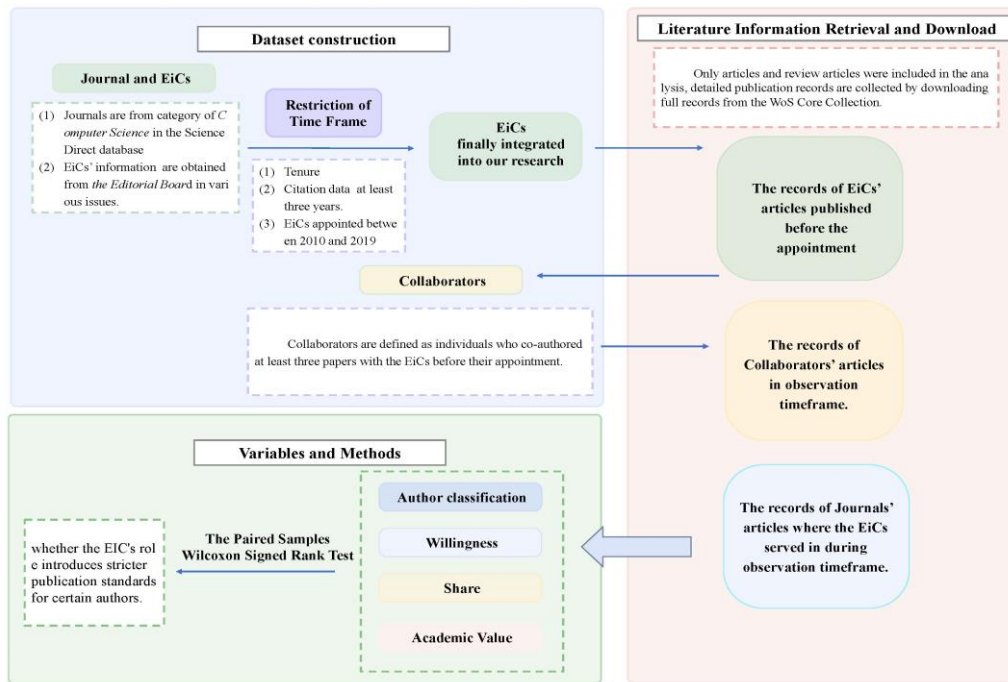


Figure 1. Research framework.

Moreover, to further enhance the comparability of the EiCs we limited the time frame to after 2010 (to reduce differences brought by time) and select EiCs from the same field (to avoid differences brought by the field, in this paper the field of computer science) for analysis. This results in a total of 48 EiCs from 40 journals.

As for collaborators, we included scholars who had at least three collaborations with the EiCs before their appointment, to ensure that the collaborators had a substantial academic relationship with the EiCs (Fu et al., 2014). The collaborations were determined based on the WoS database. The WoS interface provides author profiles and hyperlinks, which we used to count co-authorship occurrences before the EiCs' appointment. Few scholars in WoS have multiple profiles, likely due to changes in email addresses, research fields, or publication timing. We conducted manual checks using name and affiliation searches to address this issue. The process results in 603 collaborators.

After the EiCs and the collaborators are determined, their bibliographic data was also collected from the WoS database for further analysis.

Variable definition

This paper aims to analyze whether, after the appointment of the EiCs, (1) a collaborator's inclination to publish in a particular journal, (2) a collaborator's contributions to the journal, and (3) the academic value of a collaborator's papers are subject to any change.

Willingness will be used to measure a scholar's inclination to publish in a particular journal. Intuitively, for a given author, the higher the proportion of articles published in a specific journal relative to the total publications, the stronger his/her willingness

to contribute to that journal. Specifically, we defined $W_{ij} = N_{ij}/N_i$, where N_{ij} was the number of articles published by author i in journal j , and N_i was the total number of articles published by the collaborator i . *Share* will be used to measure a scholar's contributions to a specific journal. Share was defined as $S_{ij} = N_{ij}/N_j$, where N_{ij} was the number of articles published by collaborator i in journal j , and N_j was the total number of articles published in journal j .

Further, Journal Normalized Citation Impact (JNCI) will be used to characterize the *Academic Value* of a research paper. Academic citations, commonly used to measure influence, provide a bibliometric means of assessing academic value (note that academic value does not equate to quality, as even incomplete or imperfect papers can have academic merit). Since papers may be published in different journals and years, raw citation counts may not be directly comparable. We used the Journal Normalized Citation Impact (JNCI) to mitigate these differences. For a given paper k , $JNCI_k = c_k/E$, where c_k was the number of citations of paper k , and E was the average number of citations for papers published in the same journal and year as k .

Statistical Analysis

Based on the bibliographic data of the EiCs and the collaborators, we calculated the Willingness, Share, and Academic Value of collaborators before and after the EiCs' appointment. Changes in these indicators were analyzed using the Paired Samples Wilcoxon Signed Rank Test (if the paired sample differences do not follow a normal distribution) or the Paired Samples T-test (if normality is satisfied). The normality of the data is assessed using the Shapiro-Wilk test for sample sizes less than 50 and the Kolmogorov-Smirnov test for larger samples.

Considering authors may not contribute equally to the research presented in a paper (Hilário et al., 2023, Costas & Bordon, 2011), we classify authors as different categories for analysis. Typically, co-authors are listed in descending order of contribution, with the first author recognized for their major role. The corresponding author, who manages communication with the journal and often organizes the research, is also considered as the key contributor, even if his/her name appears last in the author list (Hu, 2009; Mattsson et al., 2011; ICMJE, 2024; Wang et al., 2013). Hence, we categorized authors into three types: Listed Author (any scholar whose name appears in the author list), Core Author (the first author or corresponding author, or both), and Other Author (authors who are listed but not as core authors). In the following analysis, we will examine the data based on these author identities. Let W_{ij}^{before} , W_{ij}^{after} , S_{ij}^{before} , S_{ij}^{after} , V_{ij}^{before} , V_{ij}^{after} represent the Willingness, Share, and Academic Value before and after the appointment time frame. The paired samples Wilcoxon signed-rank test and the Paired Samples T-test evaluate whether there is a statistically significant difference between matched pairs of values before and after an event. Ideally, the tests capture the extent of the relative changes between these paired indicators.

From the formulas for Willingness and Share, it is evident that notable disparities may exist between a scholar's publication capacity and a journal's publication volume, potentially leading to wide variability in the distributions of these metrics. As a result, numerical changes in Willingness and Share might not accurately reflect

the true degree of change. For example, one scholar's Willingness might increase from 0.1 to 0.15, while another's shifts from 0.01 to 0.06. Although both exhibit identical absolute changes, the relative degrees of change differ significantly. A similar issue arises with Academic Value that is measured using the average *JNCI*. To address these discrepancies, we normalized the paired values for Willingness, Share, and Academic Value, obtaining adjusted indicators for the paired test. For instance, given W_{ij}^{before} and W_{ij}^{after} , the adjusted values were calculated as follows: Adjusted $W_{ij}^{before} = W_{ij}^{before} / (W_{ij}^{before} + W_{ij}^{after})$, Adjusted $W_{ij}^{after} = W_{ij}^{after} / (W_{ij}^{before} + W_{ij}^{after})$. For the example mentioned earlier, where one scholar's Willingness increases from 0.1 to 0.15 and another's shifts from 0.01 to 0.06, the adjusted values for the first case are 0.4 and 0.6, respectively, while for the second case, they are 0.14 and 0.86. These adjusted values more accurately capture the relative degrees of change, emphasizing the disparity between the two scenarios. The same normalization is applied to S_{ij}^{before} , S_{ij}^{after} , V_{ij}^{before} and V_{ij}^{after} .

It is to be noted that, during the normalization process, there are several special cases that require additional attention, particularly when collaborators have not published any articles before and/or after the EiCs' appointment. For the indicators of Willingness and Share, if no articles are published before or after the appointment, the normalized values for W_{ij}^{before} and W_{ij}^{after} will be (0, 1) or (1, 0), which effectively capture the change of Willingness and Share. In cases where no articles are published both before and after the appointment, W_{ij}^{before} and W_{ij}^{after} will be defined as 0.5, reflecting that there has been no change in Willingness or Share. Regarding Academic Value, it is not possible to compute V_{ij} for articles that were not published. Therefore, we consider two issues: (1) For collaborators who did not publish articles in the corresponding journal before the EiCs' appointment, but did so afterward, how does the academic value of their post-appointment publications compare to the journal's average value during the same period; (2) For collaborators who have published articles both before and after the appointment, how does the academic value of their post-appointment publications compare to those published prior to the appointment.

Results

Willingness

To ensure analytical rigor, only scholars with publications during both the pre- and post-appointment periods were included in the study. This resulted in a total of 502 Listed Authors, 311 Core Authors, and 440 Other Authors being analyzed. Note that a collaborator of an EiC can be classified as either a Core Author or an Other Author, which explains why the total number of Listed Authors does not equal the sum of Core Authors and Other Authors.

The Kolmogorov-Smirnov Test was conducted on the W_{ij} values for collaborators as Listed Author, Core Author, and Other Author, and the null hypothesis of normality was rejected in all cases (p-value < 0.05). This indicated that the data do not follow a normal distribution. Therefore, the Paired Samples Wilcoxon Signed-Rank Test was applied for further analysis.

Table 1. Rank distribution of $W_{ij}^{after} - W_{ij}^{before}$ between collaborators' W_{ij} .

<i>Author Identity</i>	<i>Rank Type</i>	<i>Case Number</i>	<i>Sum of Ranks</i>
Listed Author	Negative Ranks	102	9751
	Positive Ranks	86	8015
	Zero Differences	314	
Core Author	Negative Ranks	47	1925.50
	Positive Ranks	34	1395.50
	Zero Differences	230	
Other Author	Negative Ranks	74	5127.50
	Positive Ranks	68	5025.50
	Zero Differences	86	8015

Table 2. The Paired Samples Wilcoxon Signed Rank Test results of collaborators' W_{ij} .

<i>Author Identity</i>	<i>Z</i>	<i>p-value</i>
Listed Author	-1.195	0.232
Core Author	-1.311	0.190
Other Author	-0.109	0.914

Table 1 presents the rank distribution of differences in scholars' W_{ij} values ($W_{ij}^{after} - W_{ij}^{before}$) across different authorial identities, and Table 2 shows the results of the Paired Samples Wilcoxon Signed Rank Test.

Among Listed Authors, there were 102 instances of negative ranks, 86 instances of positive ranks, and 314 cases with no differences. The sum of negative ranks (9751) slightly exceeded that of positive ranks (8015). For Core Authors, 47 negative ranks and 34 positive ranks were observed, alongside 230 cases with no differences. The cumulative sum of negative ranks (1925.5) was higher than that of positive ranks (1395.5). In the case of Other Authors, 74 negative ranks, 68 positive ranks, and 298 cases with no differences were recorded. The summed negative ranks (5127.5) slightly surpassed the summed positive ranks (5025.5).

In summary, the Paired Samples Wilcoxon Signed Rank Test showed no statistically significant changes in W_{ij} values before and after the EiCs' appointment across all three categories. The p-values for Listed Authors (0.232), Core Authors (0.190), and Other Authors (0.914) exceeded the significance threshold of 0.05, indicating after the EiCs' appointment, a slight but statistically insignificant decline in scholars' inclination to publish in the journals where the EiCs served.

Share

Share refers to the proportion of collaborators' articles published in journals edited by the respective EiCs. In the calculation of S_{ij} , a total of 603 samples were included. The results of the Kolmogorov-Smirnov test (p-value<0.05) indicated that the differences in S_{ij} as Listed Author, Core Author and Other Author did not follow a normal distribution.

Table 3 presents the rank distribution of differences in S_{ij} values ($S_{ij}^{after} - S_{ij}^{before}$) across different authorial identities (with a different number of samples), and Table 4 summarizes the results of the Paired Samples Wilcoxon Signed Rank Test.

Table 3. Rank distribution of $S_{ij}^{after} - S_{ij}^{before}$ between collaborators' S_{ij} .

<i>Author Identity</i>	<i>Rank Type</i>	<i>Case Number</i>	<i>Sum of Ranks</i>
Listed Author	Negative Ranks	125	13293
	Positive Ranks	85	8862
	Zero Differences	393	
Core Author	Negative Ranks	67	3505
	Positive Ranks	37	1955
	Zero Differences	499	
Other Author	Negative Ranks	93	7132
	Positive Ranks	71	6398
	Zero Differences	439	

Table 4. The Paired Samples Wilcoxon Signed Rank Test results of collaborators' S_{ij} .

<i>Author Identity</i>	<i>Z</i>	<i>p-value</i>
Listed Author	-2.589	0.010
Core Author	-2.655	0.008
Other Author	-0.633	0.527

For Listed Authors, 125 cases showed a decrease in S_{ij} , while 85 cases show an increase. The sum of negative ranks (13,293) was higher than that of positive ranks (8,862), and the test result (p-value = 0.010) indicated a statistically significant decline in Share after the EiCs’ appointment.

For Core Authors, 67 cases exhibited a decrease in S_{ij} , while 37 cases displayed an increase. The sum of negative ranks (3,505) also surpassed that of positive ranks (1,955), with a p-value of 0.008 confirming a significant reduction in Share.

For Other Authors, 93 cases showed a decrease in S_{ij} and 71 cases an increase. Although the sum of negative ranks (7,132) exceeded that of positive ranks (6,398), the test result (p-value = 0.527) suggested no statistically significant change in Share for this category.

In summary, the Share of articles had significantly declined for both Listed and Core Authors following the EiCs’ appointment, while no significant changes were observed for Other Authors.

Academic Value

As the situation we mentioned at subsection *Statistical Analysis*, we discussed two scenarios: (1) collaborators who published articles in the EiCs’ affiliated journal after the appointment but had not published there prior to it; (2) collaborators who published articles in the same journal both before and after the appointment.

For the first scenario, we performed a descriptive analysis, with results presented in Table 5. Regardless of author identity, the mean values of *JNCI* (of collaborators

who published articles in the EiCs' affiliated journal after the appointment) were all above 1, and there were few outliers visible in Figure 1, indicating that these articles exceed the journal's average value. Although the median values were below 1, no significant differences were observed.

Table 5. Statistics of JNCIs of authors with different identities in the first scenario.

<i>Author Identity</i>	<i>mean</i>	<i>variance</i>	<i>median</i>	<i>Q1</i>	<i>Q3</i>
Listed Author	1.20	0.98	0.85	0.47	1.83
Core Author	1.19	0.88	0.95	0.47	1.53
Other Author	1.42	1.53	0.94	0.51	2.13

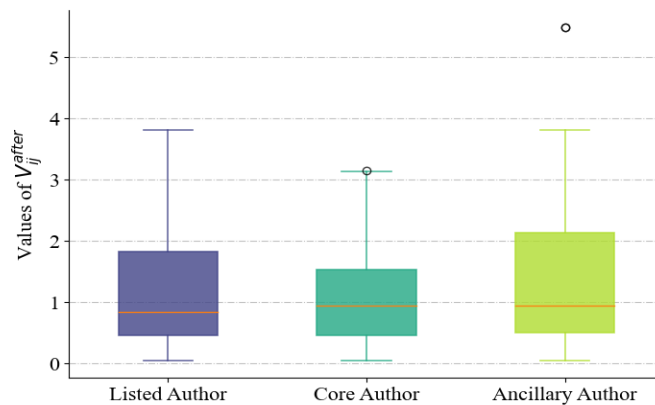


Figure 2. Boxplot of the non-optimized V_{ij}^{after} in the first scenario.

For the second scenario, we applied the Paired Samples Wilcoxon Signed Rank Test to examine changes in the value of articles published in the journals where the EiCs served. The sample included 81 Listed Authors, 26 Core Authors, and 45 Other Authors who meet the criteria. The number of Listed Authors exceeds the sum of Core Authors and Other Authors because not all Listed Authors published as Core Authors or Other Authors in both the pre- and post-appointment periods. Based on the sample size, the Kolmogorov-Smirnov test was used for the identity of Listed Author, while the Shapiro-Wilk test was applied for Core Author and Other Author. According to the test results (Listed Author, p-value = 0.94; Core Author, p-value = 0.76, Other Author, p-value = 0.30), appropriate Paired-Samples T Test was selected for further analysis.

Table 6 presents the differences of Academic Value (V_{ij}) of articles published by these scholars before and after the Editor-in-Chief's appointment, and Table 7 shows the results of Paired-Samples T-Test.

Among Listed Authors, although the sum of negative ranks exceeded that of positive ranks and the mean of $(V_{ij}^{after} - V_{ij}^{before})$ was less than zero, the test showed no significant changes (p-value = 0.655, greater than 0.05). For Core Authors, the sum of positive ranks exceeded the negative ranks and the mean of $(V_{ij}^{after} - V_{ij}^{before})$ exceeded zero, but the increase in value was not significant (p-value = 0.485, greater than 0.05).

For Other Authors, while the negative ranks slightly outnumbered the positive ranks and the mean of $V_{ij}^{after} - V_{ij}^{before}$ with a value of 0.12, the results of the Paired Samples Wilcoxon Signed Rank Test (p-value = 0.092) indicated a decrease in value, which was statistically significant at the 90% confidence level.

Table 6. Rank distribution of $V_{ij}^{after} - V_{ij}^{before}$ in the second scenario.

<i>Author Identity</i>	<i>Rank Type</i>	<i>Case Number</i>	<i>Involved Article Number</i>	<i>Sum of Ranks</i>
Listed Author	Negative Ranks	40	126	1769
	Positive Ranks	41	148	1552
	Zero Differences	0	-	
Core Author	Negative Ranks	12	41	148
	Positive Ranks	14	48	203
	Zero Differences	0	-	
Other Author	Negative Ranks	29	68	687
	Positive Ranks	16	64	348
	Zero Differences	0	-	

Table 7. The Paired-Samples t-Test results of collaborators' V_{ij} as Listed Author in the second scenario.

<i>Author Identity</i>	<i>Mean of $V_{ij}^{after} - V_{ij}^{before}$</i>	<i>t</i>	<i>p-value</i>
Listed Author	-0.02	-0.448	0.655
Core Author	0.03	0.432	0.670
Other Author	-0.12	-1.724	0.092

Discussion

The results showed that overall, after the EiCs' appointment, the collaborators' willingness to publish did not change significantly, but their publication share experienced a decline with the identities of Listed Author and Core Author. Notably, collaborators who published in the EiCs' affiliated journal for the first time after their appointment had an average article academic value exceeding the journal's average. Furthermore, for collaborators who published in the journal both before and after the EiCs' appointment, the changes in Academic Value manifested in the articles published under different identities varied: the article academic impact improved for Core Authors; while the value for Listed Authors decreased slightly, driven by a significant decline in value among Other Authors (at a 90% confidence level).

Previous research has highlighted the limited benefits collaborators of EBMs gain from their appointment. For instance, Colussi (2018) found that co-authors of EBMs don't benefit from the editor's appointment in terms of number of published papers. Similarly, Ductor and Visser (2022) noted that these collaborators seem to reap benefits that outlive the editorial term. In line with these findings, our study showed that the publication share of collaborators declined after the EiCs' appointment, suggesting that prior associations with the EiCs do not translate into preferential treatment.

However, the willingness of collaborators to submit articles remained stable. This indicates that while collaborators may not experience tangible publication benefits, they are not deterred from submitting to the corresponding EiCs' journals. This stability in Willingness can be attributed to the EiCs' aspiration to enhance the level and status of the journal, rather than harsh treatment.

When examining article value, further nuances emerge. Collaborators publishing in the EiCs' journal for the first time after their appointment exhibited article value exceeding the journal's average. This suggests that the EiCs' influence may attract submissions from high-caliber scholars, thus elevating the overall value of new contributions. By contrast, for collaborators who published both before and after the EiCs' appointment, changes in article value varied depending on their role in the authorship. Core Authors demonstrated improved article value, likely reflecting the EiCs' heightened expectations and closer scrutiny of these key contributors. Listed Authors, however, experienced a slight decline in article value, driven primarily by a significant drop among Other Authors (at a 90% confidence level). By combining the significant decline in these collaborators' Share as Core Author and the stable Share as Other Author, this trend reveals the diverse levels of responsibility and influence that different collaborator roles possess in determining the final output.

The differential treatment of collaborators can be contextualized through the lens of academic collaboration and editorial responsibility. The quality of a scholar's coauthors acts as a signal of her hidden ability and ambition the quantity and quality of one's coauthors is correlated with (Ductor et al., 2014), it can be considered that the collaborators of EiCs often possess strong academic abilities. Editors may also develop a deeper understanding of collaborators' strengths and weaknesses through prior co-authorship, making repeated collaboration a practical and cost-effective strategy for maintaining journal quality (Ductor & Visser, 2022). Consequently, EiCs may impose more stringent quality standards on submissions from trusted collaborators, especially Core Authors, to align with their responsibility to uphold journal excellence (Nourmand et al., 2024).

Finally, our findings diverge from studies emphasizing the benefits of editorial appointments. While previous research has documented advantages such as increased publication output for university colleagues (Brogaard et al., 2014) and faster handling times for papers by prior co-authors (Sarigöl et al., 2017), our results suggest a more complex dynamic. Although collaborators' submission Share decreases, the EiCs' efforts to maintain high standards ensure that the journal continues to attract quality submissions. The nuanced interplay of these factors

demonstrates how editorial appointments influence collaboration dynamics, shaping not only the distribution of publications but also their quality.

Conclusion and Limitation

This study examines the impact of EiCs' appointment on the publication behavior and academic contributions of their collaborators. Findings indicate that while collaborators' submission willingness remains stable, their publication share declines, with varying trends in article value across author roles. These findings highlight the EiCs' role in balancing editorial rigor and collaborative dynamics. However, the reliance on a single academic field and a relatively small sample size constrains broader applicability. Future research should expand the dataset to encompass journals across various disciplines, offering a more comprehensive view of EiCs-related dynamics. Exploring the effects of diverse editorial policies and collaboration patterns could provide deeper insights into how editorial leadership shapes publication practices and journal quality.

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