Do Editorial Board Members in Library and Information Science Publish Disproportionately in the Journals for Which They Serve as Board Members?

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This article investigates whether the board members of thirty well-known library and information science journals are especially likely to publish in the journals for which they serve as board members. It compares board member authors with all the authors who published in each journal from 2007 through 2012. Overall, only 36 per cent of board member authors published more articles in their own journals than might be expected based on the publication patterns of all the authors who published in each journal. That is, 64 per cent published fewer *articles than expected. This may reflect lower submission rates from board members (perhaps to avoid conflicts of interest), differences in the quality of submissions, or systematic bias in the review process.*

Keywords: authorship; direct standardization; editorial boards; library and information science; peer review

It is not uncommon for journals to publish papers written by the members of their editorial boards. For example, nearly three-quarters of the board members of the top accounting journals have published in the journals for which they serve as board members.[1] The situation is similar in finance, where successful publication in a particular journal is often regarded as a prerequisite for selection to the board.[2] This practice may be viewed favourably, as an indicator that board members are accomplished researchers well acquainted with the norms and expectations of their journals. There is a contrary view, however. Nearly 10 per cent of the board members at fifty-six accounting journals feel that board members should not be allowed to publish in their own journals during

their terms of office.[3] This negative outlook is based on the possibility of unfair bias in editorial decision making as well as the potential lack of diversity in the views and perspectives represented by authors and board members. Across disciplines, however, almost no journals have regulations or guidelines on 'self-publishing' of this type.[4]

This article assesses the extent to which editorial board members in the field of library and information science (LIS) publish in the journals for which they serve as board members, both generally and in comparison with all authors who have published in the same journals. It highlights the differences among thirty LIS journals using complete data for all board members and all articles published from 2007 through 2012.

PREVIOUS RESEARCH

Several papers have investigated the publication patterns of board members in the health sciences. For example, Jason Luty and associates examined the articles published by four journals in each of five medical specialty areas.[5] On average, 7.7 per cent of the articles were written by members of the journals' own boards. In contrast, just 2.8 per cent were written by members of competing journals' boards.

Adopting a different approach, Jens Mani and associates evaluated data for sixty-five board members at five high-impact journals in the field of urology.[6] Comparing publication counts before and after appointment to the board, they found that editorial board membership neither increased nor decreased the odds that an author would publish in a particular journal. Of course this may simply indicate that future board members — those most likely to be appointed to the board in the near future — share with board members the same greater (or lesser) tendency to publish in the journals to which they will be appointed. In dentistry (ten journals), the percentage of articles authored by one or more board members is higher than in medicine: about 30 per cent.[7] The percentage varies considerably among journals, however, from 4 per cent to 50 per cent.

Evaluating data for 269 board members of journals published or edited in Croatia (all disciplines), Lana Bošnjak and associates found that 55 per cent of board members had published one or more articles in their own journals from 2005 to 2008. Twenty-eight per cent had published two or more articles, and 10 per cent had published four or more. The authors conclude that the number of publications by board

members is not excessive and that most board members do not 'misuse their own journals for scientific publishing and academic promotion.'[8]

Only one study has examined whether articles by editorial board members are of lower or higher 'quality' (citation impact) than others. Using data for 359 articles in six top economics journals and controlling for a number of covariates, Marshall Medoff found that editorial board membership (in 1990) was directly related to citation impact (citations received from 1991 to 2000).[9] Articles by board members have an especially high impact, relative to otherwise similar articles, in the ten years after publication.

A related body of literature evaluates whether board members are especially likely to be cited in their own journals — whether submitting authors are especially likely to cite editors and board members, perhaps to gain an advantage during the review process. Studies in LIS and economics reveal little or no evidence of such an effect.[10] This research suggests that the relatively high citation impact of board members' contributions[11] cannot be attributed to flattery citations.

DATA AND METHODS

The results of the analyses are presented as cross-tabulations. Significance tests were not conducted, since the data include the entire population of interest.

The thirty journals included in the study are those that met five criteria: currently published; peer reviewed; among the top seventy, by impact factor, of the eighty-three journals in the Information Science & Library Science category of *Journal Citation Reports* (*JCR*);[12] among the top seventy of eighty-nine journals rated by American LIS faculty in a recent survey;[13] and among the journals that regularly publish work by LIS faculty and librarians — those for which the two groups together contributed at least 5 per cent of the articles published in the journal from 2007 through 2012. Together, these criteria ensure that all thirty journals meet both objective and subjective standards of impact and reputation. The last two criteria also address a common concern — that the *JCR*'s Information Science & Library Science category includes some journals that are not central to the discipline of LIS.[14]

Board members were identified as those who served on the editorial boards of one or more of the journals at any time from January 2007 through December 2012. Although relatively few board members served

for the entire six-year period, the inclusion of board members about to serve (or who recently served) is consistent with research that shows no difference in the contributions of current and soon-to-be board members.[15] Information on the composition of each board was compiled from journal issues; the websites of journals, publishers, and sponsoring societies; archived websites available through the Internet Archive Wayback Machine;[16] and lists supplied by the journals' editorial staff.

Data on research productivity were compiled through an examination of every article published from 2007 through 2012 in each of the journals listed in Table 1. Although some previous investigations have relied on Web of Science data, the direct examination of source documents is likely to be more reliable.[17] Basic bibliographic information was recorded, along with each author's name, country, disciplinary affiliation, and place in the author list (sole author, first of two authors, second of two, first of three, second of three, and so on). All peer-reviewed contributions—research articles, research notes, review articles, and theoretical/conceptual papers—were included in the authors' publication counts.

Harmonic weighting was used to assign credit for coauthored articles. With this method, the credit assigned to each author is $1/i$ divided by $(1/1 + 1/2 + 1/3 + \ldots + 1/N)$, where N is the number of authors and i is the author's place in the byline (*1* for first author, *2* for second author, and so on). For example, the first author of a paper with two authors received 0.667 credits; the second author received 0.333 credits. As Nils Hagen has demonstrated, authorship credits calculated in this manner correspond closely to scholars' subjective assessments.[18] Although many studies have used whole counting (giving full credit to each author) or fractional counting (assigning a value of *1* divided by the number of authors), these methods are problematic for a variety of reasons. In particular, whole counting inflates the value of articles with more than one author, while fractional counting ignores the fact that authors who appear earlier in the byline often make greater contributions than those listed later.[19]

RESULTS AND DISCUSSION

Table 1 shows the percentage of the articles in each journal that were written by the journal's own editorial board. Although the average of the thirty values, 8 per cent, is identical to the average reported for medical specialty journals,[20] substantial variation can be seen. Thirteen

TABLE 1. Descriptive Data for Thirty LIS Journals, 2007–12

Journal	Number of board members	Number of articles	% of articles written by board members
All journals	1079	8346	17
Average for 30 journals	42	278	8
Library Quarterly	75	102	25
Journal of Informetrics	40	292	25
Knowledge Organization	42	159	19
Serials Review	46	155	18
Scientometrics	90	1125	15
Government Information Quarterly	35	319	13
Journal of the Medical Library Association	96	289	11
Libraries & the Cultural Record	39	120	11
Library Resources & Technical Services	51	118	10
Library & Information Science Research	40	185	10
Health Information and Libraries Journal	35	212	8
Information Research	48	324	8
Journal of the Association for Information Science and Technology	72	1122	7
Information Society	62	162	7
Journal of Information Science	26	292	6
Journal of Scholarly Publishing	24	133	5
Journal of Documentation	9	254	5
Aslib Proceedings	36	224	4
Information Technology and Libraries	27	120	4
Information Processing & Management	58	473	4
Online Information Review	42	275	4
Portal: Libraries and the Academy	44	145	4
Journal of Librarianship and Information Science	37	114	4
Library Hi Tech	10	263	4
Electronic Library	14	345	3
Libri	31	161	3
Library Trends	23	269	2
Journal of Academic Librarianship	34	320	2
Library Collections, Acquisitions, & Technical Services	24	91	2
College & Research Libraries	46	183	1

journals have values lower than 5 per cent, while four have values ranging from 18 per cent to 25 per cent.

However, the fact that many articles are written by the editorial board does not necessarily mean that most board members are contributing to

the journal. A high percentage may indicate an especially large board,[21] or it may represent the work of just a few very prolific board members. More generally, Table 1 does not provide any basis for comparing board members with the other authors who contributed to each journal. A hypothetical example can be used to illustrate this point. If ten board members each write two articles for a journal that publishes fifty articles, their total contribution (40 per cent) may seem high. However, if ten non-board authors account for the remaining 60 per cent, each board member author actually contributes fewer articles, on average, than a typical contributor to the journal.

The key question is not how much the board members contribute, but whether the board member authors contribute a higher proportion of their total published output to the journal than do all the authors who publish in the journal. A meaningful comparison must be insensitive to board size, must control for overall differences in scholarly productivity, and must compare the board members of a particular journal to the authors who publish in that same journal—not to the set of all LIS authors.

A form of direct standardization can be used to make this comparison.[22] The procedure is straightforward:

1. Identify all the individuals who served on the boards of the thirty journals from 2007 through 2012.
2. For each board member, calculate his or her total published output (within the thirty journals) during that period. Use harmonic weighting, as described in the Data and Methods section of this article.
3. Identify the authors, both board members and others, who published in each of the journals from 2007 through 2012.
4. For the set of all authors who published in a particular journal (for example, *Scientometrics*), calculate the proportion of their total published output (within the thirty journals) that appeared in that journal. Repeat this calculation for each journal.
5. For each board member, multiply the board member's total number of articles (from step 2) by the percentage of the contributing authors' total published output that appeared in the journal (from step 4).

This procedure results in an expected value (an expected number of articles) for each board member who published in the journal. For a member of the *Scientometrics* board, for instance, the expected value is the number of articles the board member would have contributed to *Scientometrics* if his or her published output were distributed among the thirty journals in accordance with the overall pattern established by the authors who published in *Scientometrics* from 2007 through 2012. By comparing each expected value with the actual number of articles published in the journal, we can see whether each board member contributed disproportionately to his or her own journal. Then, by noting the percentage of board members with actual values higher than their expected values, we can determine whether the board members as a group are especially likely to publish in each journal.

A comparison of the expected and actual values reveals that within this set of journals, board member authors are not especially likely to publish in the journals for which they serve as board members. (See Table 2.) Overall, just 36 per cent of the 1079 board member authors have actual values higher than their expected values; the rest are especially *unlikely* to publish in their own journals. The three rightmost columns of the table further support this general finding. For example, 45 per cent of board members have actual values lower than half their expected values, and the average ratio of *actual value* to *expected value* is 0.80.

Not every journal conforms to this pattern, however. In particular, there are five journals where the majority of board members have actual values higher than their expected values. These journals tend to be specialized, covering particular types of information (health information, government information) or particular aspects of LIS (scholarly publishing, serials). As noted earlier, this finding raises the possibility that the review process is biased in favour of board members at these five journals. Table 2 shows no evidence of major bias, however. Among the five journals, only one (*Serials Review*) has any board member with an actual value more than 1.5 times the expected value.

As shown in the bottom half of Table 2, quite a few journals are especially unlikely to publish articles by board members. At eleven journals, the majority of board members contributed fewer than half the expected number of articles. This can be seen most clearly for journals such as *Aslib*

TABLE 2. Percentage of Board Members Who Published More Than the Expected Number of Articles in Their Own Journals—The Percentage for which *Actual Value* (AV) is greater than *Expected Value* (EV)—and Related Indicators

Journal	% for which AV > EV	% for which AV > 1.5 EV	% for which AV < 0.5 EV	Average of (AV / EV) values
All board members	36	20	45	0.80
Average for 30 journals	37	19	46	0.78
Journal of Scholarly Publishing	100	0	0	1.28
Serials Review	94	82	6	1.47
Journal of the Medical Library Association	68	0	18	1.10
Government Information Quarterly	60	0	28	0.93
Health Information and Libraries Journal	53	0	33	0.88
Library Resources & Technical Services	50	45	35	1.04
Portal: Libraries and the Academy	50	38	50	0.93
Information Technology and Libraries	43	43	43	0.88
Information Society	41	0	52	0.66
Scientometrics	38	25	33	0.88
Journal of the Association for Information Science and Technology	38	30	45	0.84
Libri	36	9	55	0.59
Information Processing & Management	36	34	43	0.93
Journal of Documentation	33	22	44	0.86
Library Quarterly	33	25	49	0.85
Knowledge Organization	33	33	33	0.80
Electronic Library	33	11	44	0.73
Library Trends	30	20	50	0.65
College & Research Libraries	29	29	57	0.74
Journal of Academic Librarianship	27	20	67	0.61
Libraries & the Cultural Record	25	0	45	0.59
Journal of Informetrics	24	8	37	0.77
Information Research	22	22	61	0.70
Library Hi Tech	20	20	40	0.65
Online Information Review	20	16	56	0.65
Library & Information Science Research	20	14	71	0.49
Journal of Information Science	16	5	53	0.58
Aslib Proceedings	15	12	77	0.49
Library Collections, Acquisitions, & Technology Services	13	0	88	0.21
Journal of Librarianship and Information Science	10	10	70	0.50

Proceedings (now *Aslib Journal of Information Management*); *Library Collections, Acquisitions, & Technical Services*; and the *Journal of Librarianship and Information Science*.

CONCLUSION

This analysis is innovative in its subject coverage (LIS), its comparison of board members with other authors, its use of direct standardization methods, and its use of complete board and publication data for thirty journals over a six-year period. The results presented in Table 1 are generally consistent with previous research on board members' contributions. Board members in LIS publish in their own journals at a rate comparable to that of medicine but lower than that of dentistry.[23]

No previous study has compared actual and expected publication counts. Most authors, at least implicitly, interpret a relatively high number of board-authored articles as evidence that board members contribute disproportionately. Within this set of journals, however, board member authors are not especially likely to publish in their own journals. In fact, nearly two-thirds publish fewer than the expected number of articles in the journals for which they serve as board members.

As mentioned earlier, journals that publish disproportionately many articles by board members can be viewed in either a positive or negative light. High acceptance rates for board members may reflect the board's research and publishing experience, but they may also raise concerns about the potential for bias in the peer review process.[24] Despite the fact that most board members are less—not more—likely to publish in their own journals, the same potential for bias exists.

Three general questions come to mind. First, to what extent can board members' especially high or low rates of publication in their own journals be attributed to selective submission? It seems reasonable to assume that authors will send their papers to the journals that best match their interests, which are presumably the same journals for which they are most likely to serve as board members. At the same time, board members may avoid sending manuscripts to their own journals in order to avoid any real or perceived conflict of interest. The results presented here suggest that this may be the case. Second, to what extent do board/non-board differences reflect a higher or lower acceptance rate for articles submitted by board members? Finally, if articles by board members are especially likely or unlikely to be accepted, can this pattern be traced to

differences in research quality,[25] to authors' familiarity with the publishing process (for example, knowing what reviewers want to see in a revised manuscript), or to systematic bias? Unfortunately, the data presented here do not allow us to address these questions. As other authors have reported, the confidentiality of the manuscript review process is an understandable, yet substantial, barrier to research in this area.[26]

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ACKNOWLEDGEMENTS

I am grateful for the advice and assistance of Esther Isabelle Wilder, Eileen Breen, Maria Collins, John Gormley, Meghann Knowles, and the staff of the Association for Information Science and Technology.

NOTES

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