

## Authorship in Five Library Periodicals

*Authorship data for five major library science journals covering a ten-year period were reviewed. Information was tabulated to determine if publication trends suggest a bias on the basis of sex, occupation, or geographic location of the author. Results indicate that a higher than expected number of male authors were published and that a higher than average number of authors were located in the Northeast and Midwest regions of the United States. Occupational trends were also investigated, and recommendations for future research are discussed.*

THE STOCK IN TRADE OF LIBRARIANSHIP is communication and the transfer of information; yet little is known about the communication of ideas within our own profession. Librarianship is sadly behind the disciplines of economics, psychology, and the sciences in determining the bibliometric nature of the professional literature. This field of inquiry has become a topic of interest beginning with studies by Masse Bloomfield and Paula De Simone Watson concerning the characteristics of publishing librarians.<sup>1,2</sup> More recently O'Connor and Van Orden undertook a survey of publishing policies of major library journals, and Kim and Kim followed with a study of methodological changes in the literature.<sup>3,4</sup>

The purpose of this study is to explore further the foundations of professional communication in the field of librarianship, by examining several aspects of authorship from selected library science journals. Specific areas of inquiry include possible publication bias on the basis of sex, occupation, and geographic location of the author.

### METHOD

Five major journals were selected for this study: *College & Research Libraries (C&RL)* volumes 29-38, *Library Journal (LJ)* vol-

umes 93-102; *Library Quarterly (LQ)* volumes 38-47; *Library Trends (LT)* volumes 16-25; and *RQ* volumes 7-16. To be selected for inclusion in the study, the journal must have been in existence for at least ten years, use an article format, and be recognized as a nationally known journal of library science. The five journals cited above met these qualifications. These journals were also considered to have a major impact on librarianship and exhibit common trends in publishing.<sup>5</sup>

All authored articles in these journals during the past ten years were used as data entries. Book reviews and letters were excluded. Each author was equivalent to one data entry; thus, multiple authorship articles were given multiple data entries. Each data entry consisted of the sex of the author, geographic location, and occupation. For the data entry, only the current information listed in the article byline was used; no additional or contrary information was added.

To determine the sex of an author, an analysis of first names was undertaken in conjunction with the following rules: (1) First names that could be of either gender or that were not recognizable as being attributable to either gender were listed as indeterminable; and (2) first names of authors represented only by initials were listed as indeterminable.

In analyzing the occupation of an author, the following guidelines were used: (1) If two occupations were listed as current, both

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*John N. Olsgaard is documents librarian and archivist, I. D. Weeks Library, and Jane Kinch Olsgaard is head of reference, Lommen Health Sciences Library, both at the University of South Dakota at Vermillion.*

positions received full data value; and (2) for an author to be listed as a professional librarian, the individual must be a working professional with a specific title in an area of specialization. (For example, if an author was represented as "working at a library," the author was not listed as a librarian since the specific status could not be determined.)

Geographic location was entered by individual state and then subgrouped into the following regions:

1. Northeast: Connecticut, Delaware, Washington, D.C., Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont.

2. Southeast: Alabama, Florida, Georgia, Kentucky, North Carolina, South Carolina, Tennessee, Virginia, West Virginia.

3. Midwest: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin.

4. Southwest: Arizona, Arkansas, Louisiana, Mississippi, New Mexico, Oklahoma, Texas.

5. West: Alaska, California, Colorado, Hawaii, Idaho, Montana, Nevada, Oregon, Utah, Washington, Wyoming.

These regional delineations are based on the designations made by the 1978 ALA Committee on Accreditation of graduate library school programs and are used in order to make the resulting data compatible with other research.

Distributions on the basis of sex and occupation were derived using the formula  $X = a/(N - d)$ , where  $X$  equals the representative percentage of specific data entries,  $a$  equals the number of specific data entries in a journal,  $N$  equals the total number of entries in the journal, and  $d$  equals the

number of entries for which data could not be determined. The formula was slightly altered in the case of geographic distribution by including entries that were not from the United States in  $d$ .

#### PUBLICATION ON THE BASIS OF SEX

Several levels of quantitative analysis were employed to derive an accurate distribution. The first level of consideration dealt with the distribution by gender for data entries in a given journal (see table 1). A norm was generated for all librarians in the United States with regard to gender and data then gathered by gender for each of the five journals. The normative distribution for all women publishing should be 84 percent to match their share of the general library population. All five journals failed to achieve the percentage, with *RQ* having the highest women publishing percentage with 41.3 percent and *LQ* having the lowest with 21.2 percent.

The second level of analysis was distribution of publishing women academic librarians (see table 2). The normal level for women among the total population of academic librarians was 61.5 percent. A similar study seems to verify this value by obtaining a distribution ratio of 61.9 percent for women librarians in colleges and universities.<sup>6</sup> Women academic librarians failed to publish up to the normal level in all five journals. *C&RL* published the highest percent with 39.6 percent. *LT* (24.7 percent) had the lowest percentage.

For the third level of inquiry into publication on the basis of sex, only the data entries for faculty in schools of library science were used (see table 3). Again the trend for all five journals showed that women library

TABLE 1  
GENDER FOR ALL ENTRIES

Journal	Women (Percent)	Men (Percent)	N =	d =*	N - d =
<i>C&amp;RL</i>	30.5	69.5	495	49	446
<i>Lj</i>	37.5	62.5	937	65	872
<i>LQ</i>	21.2	78.8	257	16	241
<i>LT</i>	32.7	67.3	463	41	422
<i>RQ</i>	41.3	58.7	445	21	424
National Average†	84.0	16.0			

\* $d$  is the number of entries for which data could not be determined.

†Represents the percentage of librarianship as a whole. U.S. Department of Labor, Bureau of Labor Statistics, *Library Manpower: A Study of Demand and Supply* (Washington, D.C.: Govt. Print. Off., 1975), p. 12.

TABLE 2  
GENDER OF PUBLISHING ACADEMIC LIBRARIANS

Journal	Women (Percent)	Men (Percent)	N =	d = *	N - d =
<i>C&amp;RL</i>	39.6	60.4	249	24	225
<i>LJ</i>	25.1	74.9	169	6	163
<i>LQ</i>	31.1	68.9	48	3	45
<i>LT</i>	24.7	75.3	107	6	101
<i>RQ</i>	35.4	64.6	158	11	147
National Average†	61.5	38.5			

\*d is the number of entries for which data could not be determined.

†Represents the percentage of all U.S. academic librarians. Association of College and Research Libraries, *Salary Structures of Librarians in Higher Education for the Academic Year 1975-1976* (Chicago: American Library Assn., 1976), p. 6-12.

TABLE 3  
GENDER OF PUBLISHING LIBRARY SCIENCE FACULTY

Journal	Women (Percent)	Men (Percent)	N =	d = *	N - d =
<i>C&amp;RL</i>	12.5	87.5	80	8	72
<i>LJ</i>	32.3	67.7	175	11	164
<i>LQ</i>	19.2	80.8	77	4	77
<i>LT</i>	29.2	70.8	96	7	89
<i>RQ</i>	33.9	66.1	61	2	59
National Average†	40.8	59.2			

\*\*d is the number of entries for which data could not be determined.

†Represents the percentage of all U.S. library science faculty. Russell E. Bidlack, "Faculty Salaries of 62 Library Schools, 1977-78," *Journal of Education for Librarianship* 18:260 (Spring 1978).

science faculty did not publish up to their normal level of the population (40.8 percent). The leader among the journals for publishing articles by women library science faculty was *RQ* with 33.9 percent.

#### PUBLICATION BY OCCUPATION

An objective of this study was to learn the occupation of the contributors to the five journals (see table 4). Although each journal has a unique makeup, several trends can be discerned by comparison. All of the journals, with the exception of *LQ*, had a substantial number of articles by practicing librarians. The most notable example was *RQ*

where 62.9 percent of all authors were professional librarians.

Also of importance was the strength of the distribution of library science faculty, which ranged from 16.6 percent in *C&RL* to 30.4 percent in *LQ*. The prolific publishing rate of library science faculty is more significant when examined in light of various numeric relationships. A study by Russell E. Bidlack found 609 library science professors in ALA-accredited United States library schools,<sup>7</sup> while the ACRL 1976 salary study recorded more than 13,000 academic librarians.<sup>8</sup> Although the numeric ratio of academic librarians to library science faculty

TABLE 4  
OCCUPATIONS OF AUTHORS

Journal	Academic Librarian (Percent)	Public Librarian (Percent)	Other Librarian (Percent)	Library Science Faculty (Percent)	Library Science Student (Percent)	Other Faculty (Percent)	Nonlibrarian Nonacademic (Percent)	N =	d = *	N - d =
<i>C&amp;RL</i>	51.6	1.7	2.5	16.6	2.9	8.3	16.6	495	12	483
<i>LJ</i>	18.9	16.3	8.7	19.6	3.2	4.4	28.9	937	43	894
<i>LQ</i>	19.0	4.4	4.0	30.4	4.0	17.0	21.3	257	4	253
<i>LT</i>	23.9	10.1	9.4	21.5	0.5	7.8	26.9	463	16	447
<i>RQ</i>	44.8	9.6	8.5	17.3	4.0	4.5	11.3	445	92	353

\*d is the number of entries for which data could not be determined.

is approximately twenty-one to one, the publication rates for both groups are at the highest with four to one in *C&RL* and at the lowest with a ratio of one to two favoring library science faculty in *LQ*. In all cases, library science faculty carried a much higher percentage of publication than their population would indicate.

A third area of importance deals with a significantly large number of authors who do not work in academia or any type of library setting. *LJ* published the highest percentage of these authors with 28.9 percent and *C&RL* the lowest with 16.6 percent.

#### PUBLICATION BY GEOGRAPHIC DISTRIBUTION

To put the geographic data into proper perspective, a three-level approach was again used. The first level of consideration was to plot the geographic distribution for all data entries (see table 5). The trend in publication seemed to show the Northeast and Midwest regions of the country with a positive ratio of contributors in relation to their national norm. The Southeast and Southwest regions showed a negative ratio, while the West approximately matched the

national average of publication for that region.

The second level of analysis, the geographic distribution for academic librarians, again showed a positive ratio of contributors in the Northeast and Midwest regions (see table 6). The West showed a positive ratio of contributors for three of the journals and almost a matching ratio for the other two. The Southeast had a negative ratio for all five journals. The Southwest matched for one journal, *RQ*, and had a very negative ratio for the other four journals.

The same ratio correlation holds true for the geographic distribution of library science faculty as it did for academic librarians (see table 7).

#### SUGGESTIONS FOR FUTURE RESEARCH

Journal literature makes up 71 percent of the intradisciplinary communication in librarianship according to Nicholas and Ritchie.<sup>9</sup> The ability to publish in them is one criterion for professional advancement, and so a study of publishing patterns in library science journals is merited.

While this study attempted to describe

TABLE 5  
GEOGRAPHIC DISTRIBUTION: ALL ENTRIES

Journal	Northeast (Percent)	Southeast (Percent)	Midwest (Percent)	Southwest (Percent)	West (Percent)	N =	d =*	N-d =
<i>C&amp;RL</i>	28.9	10.4	34.5	7.4	18.6	486	54	432
<i>LJ</i>	49.3	11.3	20.0	3.0	16.6	937	200	737
<i>LQ</i>	27.6	4.3	50.4	4.7	12.9	257	25	232
<i>LT</i>	38.0	9.4	32.8	5.7	14.1	464	59	405
<i>RQ</i>	37.5	12.4	28.8	8.2	13.2	445	42	403
Regional Average†	26.9	17.9	28.1	11.9	15.2			

\*d is the number of entries for which data could not be determined.

†Represents percentages of general U.S. population. Data derived from U.S. Bureau of the Census, *Statistical Abstract*, 99th ed. (Washington, D.C.: Govt. Print. Off., 1978), p.34.

TABLE 6  
GEOGRAPHIC DISTRIBUTION: ACADEMIC LIBRARIANS

Journal	Northeast (Percent)	Southeast (Percent)	Midwest (Percent)	Southwest (Percent)	West (Percent)	N =	d =*	N-d =
<i>C&amp;RL</i>	23.8	11.7	32.5	8.3	23.8	249	9	240
<i>LJ</i>	37.3	14.3	22.4	2.5	23.6	169	8	161
<i>LQ</i>	26.7	4.5	53.3	2.2	13.3	48	3	45
<i>LT</i>	35.0	9.0	26.0	7.0	23.0	107	7	100
<i>RQ</i>	35.5	11.8	27.0	11.2	14.5	158	6	152
Regional Average†	31.3	17.3	24.7	11.1	15.6			

\*d is the number of entries for which data could not be determined.

†Represents percentages of all U.S. academic librarians. Data derived from U.S. Department of Health, Education and Welfare. National Center for Education Statistics, *Library Statistics of Colleges and Universities, Fall 1975: Institutional Data* (Washington, D.C.: Govt. Print. Off., 1977), p.221-78.

TABLE 7  
GEOGRAPHIC DISTRIBUTION: LIBRARY SCIENCE FACULTY

Journal	Northeast (Percent)	Southeast (Percent)	Midwest (Percent)	Southwest (Percent)	West (Percent)	N =	d =*	N - d =
<i>C&amp;RL</i>	24.7	13.7	41.1	4.1	16.4	80	7	73
<i>LJ</i>	60.1	15.0	19.0	0.7	5.2	175	22	153
<i>LQ</i>	22.2	2.8	58.3	0.0	16.7	77	5	72
<i>LT</i>	26.7	11.1	43.3	6.7	12.2	96	6	90
<i>RQ</i>	41.1	12.1	31.0	3.5	12.4	61	3	58
Regional Average†	33.8	17.7	25.9	7.9	14.6			

\*d is the number of entries for which data could not be determined.

†Represents percentages of all U.S. library science faculty. Russell E. Bidlack, "Faculty Salaries of 62 Library Schools, 1977-78," *Journal of Education for Librarianship* 18:263 (Spring 1978).

the pattern of authorship in five journals, it is beyond its scope to speculate on the reasons why these patterns exist. Future researchers may wish to go to the journals and determine if the distribution ratios hold true for the collective body of submitted manuscripts, although, as O'Connor and Van

Orden describe it, precious little information is currently available in this area.<sup>10</sup> If we accept the truism that knowledge of the communication process itself will partially constitute the value we place on the information being conveyed, then research in bibliometrics is indispensable.

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5. It should be noted that *Library Quarterly* conference issues consist of commissioned articles only.
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9. David Nicholas and Maureen Ritchie, *Literature and Bibliometrics* (Hamden, Conn.: Linnet Books, 1978), p.62.
10. O'Connor and Van Orden, "Getting Into Print," p.389-96 passim.