This article updates earlier studies by Gloria Cline and Paul Metz on the characteristics of authorship of articles published in *College & Research Libraries*, focusing on gender, institutional affiliation, and extent of collaboration. Between 1989 and 1994, representation by academic librarians and authors affiliated with library schools increased, collaboration became predominant, and for the first time the number of primary women authors equaled that of men. Considering all coauthors, female authors outnumbered men. The largest proportion of authors were women academic librarians who coauthored articles. Women, however, were underrepresented among authors affiliated with library schools and among academic administrators.

In the fortieth anniversary of *College & Research Libraries* (*C&RL*), Gloria Cline examined various characteristics of articles published in journal volumes 1 through 39 (1939-79), as well as characteristics of the citations from those articles. Among the various characteristics of *C&RL* articles she examined were the author's sex, institutional affiliation, and extent of collaboration as measured by coauthorship. Cline presented the data in five-year intervals to detail changes and trends in publication and to compensate for anomalies from year to year.

Ten years later, on the fiftieth anniversary of *C&RL*, Paul Metz selectively updated Cline's work, examining the above-mentioned variables and the extent of quantitative methodologies used in articles published in volumes 40 through 49 (1980-88). One of the most significant findings in Metz's study was the dramatic increase in the representation of women authors in *C&RL* since 1979. In the journal's first forty years of publication, male authors consistently averaged around 80 percent. Between 1980 and 1984, the percentage dropped to 65, and between 1985 and 1988, to 56 percent. Metz predicted that if the trend continued, within the next five-year period a balance in the gender of authors should be reached. Overlapping and extending Metz's data, Peter Hernon and Mary Bailey Croxen report that between 1980 and 1991, 53 percent of articles ac-
cepted for publication in C&RL were authored by men.3

Although no anniversary is in the offing, the next five-year period has passed since Metz presented his data. This study will provide an update to Cline and Metz's evaluation of authorship in C&RL, focusing on gender, institutional affiliation, and collaboration for the years 1989–94.

**Gender Studies of Authorship**

A number of studies have examined gender differences in library publishing. The methods employed and the particular populations studied have varied, making direct comparisons difficult. Nevertheless, the studies reveal broad trends and relevant variables that help explain gender differences.

Several studies examined gender differences in publication productivity among library administrators and educators. In a study of publications by academicians, male authors were still predominant, accounting for 56.3 percent of all articles published, in two of the journals women authors were actually in the majority.

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Although male authors were still predominant, accounting for 56.3 percent of all articles published, in two of the journals women authors were actually in the majority. Women authors contributed 56.9 percent of the articles in the *Bulletin of the Medical Library Association* and 59.3 percent of the articles in *Online Review*. Thus, the particular type of library journal appears to make a difference.

Lois Buttlar's study of sixteen journals, from January 1987 through June 1989, representing the wide range of library types and interests, supports Adamson and Zamora's findings and provides some points of comparison for examining C&RL. The majority (52.17%) of the total authors were women.

Equally significant was the wide range of differential publication by gender among the different journals. For example, more than 75 percent of the authors of articles in *Libraries & Culture* were men, whereas more than 78 percent of the authors in the *School Library Media Quarterly* were women. By way of comparison, the study reported that 45.5 percent of the authors in C&RL were women. Buttlar also found that academic librarians published more than 61 percent of
To examine more closely the nature of authorship, cross-tabulations are made of gender with institutional affiliation, collaboration, and academic administrators. In addition, total counts are made of all authors (single authors and coauthors). Cline and Metz assumed that the first-named, or primary, author is the major contributor to a coauthored article and, therefore, “secondary” authors are not represented in the data collected for gender and institutional affiliation. However, there is no reason to make this assumption. The ordering of names of coauthors may be alphabetical, based on relative prestige of the contributors, or may even be arbitrary. There is a considerable body of literature that addresses the issues of multiple authorship and collaboration in the publication of scholarly works. However, there appears to be no consensus on how to count or assign credit relative to name order. Normative standards for name ordering vary across disciplines. The American Psychological Association, for example, explicitly states that multiple authors in psychology publications should be ordered according to the degree of contribution to the publication. Mathematicians, statisticians, and physicists prefer alphabetical name order. Because there are no clear norms in the field of librarianship, disregarding coauthors misrepresents the extent and nature of authorship. This is particularly the case given the increasing proportion of coauthored as opposed to single-authored articles found across disciplines.

A final note of caution is in order regarding data collection. Although the
Table 2 presents the gender of the total number of authors, including single and coauthors, who published articles between 1989 and 1994. Of the 381 total authors, 197 (51.7%) were women. Even if the two (.5%) authors of indeterminate gender were added to the men’s column, women authors would still outnumber men. Although the differences are not statistically significant, the data do indicate that the trend toward increased representation of women authors in C&RL continues.

Institutional Affiliation

Table 3, following Cline and Metz, presents data on the type of institutional affiliation of the primary authors. Academic librarians, as one might expect, have been consistently well represented in authorship in C&RL. However, since 1988, their proportion has increased nearly 14 percent. Similarly, authors affiliated with library schools increased nearly 8 percent. Between 1989 and 1994, academic librarians and library educators together accounted for 88 percent of all the published authors.

Table 4 details institutional affiliation by gender for both primary authors and total authors for the two major types of
institutions—academic librarians and library schools—for the 1989-94 period. Whether considering primary authors or total authors, men continue to be more highly represented among authors from library schools. However, the situation is reversed for authors from academic libraries. The largest number and proportion of total authors are women academic librarians.

Collaboration (Coauthorship)

Table 5, following Cline and Metz, presents data on the extent of collaborative authorship. In order to be consistent with Cline and Metz’s data presentation, the table presents the percentage of single authorship. As indicated earlier, the clear trend toward coauthorship continues in the 1989–94 period. This is consistent with publication trends in various disciplines.13

Table 6 details coauthorship by gender. More than half of all the coauthored articles were mixed in terms of gender. In other words, both men and women collaborated in producing the articles. Interestingly, 26 percent of the coauthored articles had only women collaborators, compared to 17 percent that were solely male collaborations. A far larger proportion of total collaborators were women—55 percent compared to 44 percent. The collaboration of women authors tips the balance in terms of the overall representation of women authors in C&RL. More than 67 percent of women authors collaborated in the production of articles.

Academic Administrators

Finally, table 7 presents gender differences in publishing by academic adminis.

Table 7

<table>
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<th>Gender of Academic Library Administrators, 1989–94</th>
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<tr>
<td>Total</td>
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<tr>
<td>-------</td>
</tr>
<tr>
<td>72</td>
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<td>(61%)</td>
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Table 6

<table>
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<th>Coauthored Articles Coauthors by Gender, 1989–94</th>
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<tr>
<td>Coauthored Articles</td>
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<tr>
<td>Male Only</td>
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<tr>
<td>-----------</td>
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<tr>
<td>17</td>
</tr>
<tr>
<td>(17%)</td>
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| Note: The gender of 2 coauthors (1%) could not be determined.
in this study, only 27 percent were top administrators, with men comprising 61 percent of these authors.

**Discussion**

The trend toward increasing representation of women authors in *C&RL* which Metz observed between 1980 and 1988 continued in the subsequent six-year period. For the first time, between 1989 and 1994, the number of primary women authors equaled that of men and the total of women authors outnumbered men. Considering the total population of women, women tend to be more heavily represented in, for example, journals specializing in library education or school librarianship.

Women tend to be more heavily represented in, for example, journals specializing in library education or school librarianship.

librarians (88% of all librarians), obviously women authors are still considerably underrepresented. But from an historical perspective, the increasing number of women who have published in *C&RL* is nothing short of dramatic.

Other studies have shown that gender differences in publication vary according to the particular subject area of the journal. Women tend to be more heavily represented in, for example, journals specializing in library education or school librarianship. Yet, there is evidence of a general increase in women authors across the range of library journals. In Buttlar’s study of sixteen journals between 1987 and 1988, four of the titles matched those in the Osuga study of the 1970s. In each journal, the proportion of women increased, ranging from 11 to 18 percent. Authorship in *C&RL* is clearly part of a general trend. The major difference between men and women authors in this study was the higher incidence of collaboration among women. And, somewhat surprisingly, women academic administrators were considerably underrepresented.

The obvious question not addressed in this study is: Why the change? Are demographic or organizational variables explanatory? Did the feminist movement, which exhorted women to be more involved in publishing and aspire to management, affect a change in motivation? Mary Biggs’s review of the literature of publishing by women academics in general revealed that women publish less because they “tend to cluster in the more teaching-oriented, less research-oriented schools and in the disciplines or interdisciplinary specialties least productive of publication.” Biggs suggests that this may be true of library school faculty, and by extension, academic librarians. Is this pattern true of women librarians? Is it changing? What is the significance of the higher incidence of collaboration among women authors found in this study? The literature is generally silent on these questions. However, the trends in authorship are becoming increasingly clear. Research now is needed to go beyond description to determine the explanatory variables related to these trends.

**Notes**


10. Ibid., 41.


12. Ibid., 326.

13. Ibid.


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