Indian Journal of 
LIBRARY & INFORMATION SCIENCE

Vol. 1  No.2  Reg.No. : M2 - 37215/00

A bi-annual of
Indian Library and Information Science Association (ILISA)

ILISA HQ., Uzhavoor, Kottayam
Kerala, India - 686 634
e-mail : editor@ijlis.com

Printed and Published by C. John, on behalf of ILISA, at Chalithanya Uzhavoor.
CONTENTS

1. Message  
2. From the Editor’s Desk  
3. Editorial  
4. Global Knowledge Management and National Cultural Development  
   - Bill Crowley & T.K. Srikantiah  
5. All about Indian Publishers An Interview with D.N. Malhotra - Suresh Chatterjee  
6. IFLA in the New Millenium - An Interview with Ross Shimmon - Marian Koren  
7. All about ILISA - Felix Mathew  
8. Impact of I.T. and Democracy in Central Europen Libraries - Maria A. Jankowska  
9. Influence of Electronic Media in Education and Reference - T. Mathew Byju  
10. In Demand of Right to Information - George Simon  
11. College Libraries in Kerala by - Dr. C.V. Thomas  
12. Collecting, Storing and Preserving Internet Resources - Carol Casey  
13. Health Education Library for People - Dr. Aniruddha Malpani  
14. Literacy Project in Rajasthan Faces Challenge - Babu P. Simon  
15. Reducing Negative Attention - Seeking workplace behaviours among Library Staff  
   - Linda Marie Golian  
16. Classics in your Library - P.M. Mathew  
17. Changing Paradigm of Library Professionals in the New Millenium - T. Ashok Babu  
18. Defining a Good Dictionary - An Interview with Sally Whemier - Aneesh Mohan  
19. Misuse of Information - Mathew Joy  
20. Guidelines to Contributors  
21. Comparisons of Faculty Publication between Library / Archival Sciences and other major Academic Fields - Xue-Ming Bao  
22. All for the Service of Transalation  
23. A General View on Library and Information Science Profession - J.P. Sen  
24. Digital Libraries and Dialogic Classrooms - Donald Beagle  
25. Subscription Information
Comparisons of Faculty Publication between Library/Archival Sciences and other Major Academic Fields

Xue-Ming Bao
Assistant Professor/Librarian
Seton Hall University Library, U.S.A.

This study compares three types of faculty publication: 
a) articles in refereed professional or trade journals, 
b) reviews of books, articles, or creative works, 
c) monographs, books, textbooks or chapters in edited volumes between faculty in library and archival sciences and faculty in other academic fields. The findings reflect an unique characteristic of the librarian profession as information evaluator, selector, and provider. The study shows that more faculty members in library and archival sciences should become more involved in publishing articles in refereed professional or trade journals.

Introduction
Library science journals have published many articles concerning librarians' publishing activity. Articles on publication by academic librarians have been linked to faculty status. A recent article by W. Bede Mitchell and Mary Reichel examined the influence of scholarly requirements on librarians' ability to earn tenure or enjoy continuous employment. Articles on librarians' publication have been studied mainly within the library science field itself. Donald E. Riggs noted in an editorial: "Due to their increasing work pressures, many academic librarians believe they have less time for research and reflection for publishing the findings of research." This observation raises an interesting question, which is "How are faculty members in other academic disciplines doing in their research and publishing activity?"

The current study goes beyond the field of library science and attempts to compare the publishing activity of faculty in library and archival sciences with that of faculty in other academic disciplines. The research question for this study is "Are there any differences in publication between faculty in library and archival sciences and faculty in other academic fields?" The study compares three types of faculty publication: a) articles in refereed professional or trade journals, b) reviews of books, articles, or creative works, c) monographs, books, textbooks or chapters in edited volumes between faculty in library and archival sciences and faculty in other academic fields. The study compares faculty publication by academic fields from the following four perspectives:

a) Mean publication
b) Percentage of faculty who publish
c) Faculty in library and archival sciences
d) Faculty in other academic fields

The significance of this comparison is that it will provide an indication on how well faculty in library and archival sciences do in the scholarship of research and publication comparing with faculty in other academic fields. The faculty population in study includes four categories of faculty and instructional staff:
1) tenured,
2) on tenure track,
3) not on tenure track, and
4) no tenure system.

Methodology

This study analyzed the data in the 1993 National Study of Postsecondary Faculty (NSOPF-93). According to the Methodology Report, the NSOPF-93 was designed to provide a national profile of faculty in two-year, four-year (and above), doctoral-granting, public and private non-proprietary institutions, and to gather information on the backgrounds, responsibilities, workloads, salaries, benefits, and attitudes of both full- and part-time faculty. The NSOPF-93 was conducted by the National Opinion Research Center (NORC), a social science research center at the University of Chicago. The NSOPF-93 was sponsored by the National Center for Education Statistics (NCES), with additional support from two co-sponsoring agencies, the National Endowment for the Humanities (NEH) and the National Science Foundation (NSF).

According to the Methodology Report, the faculty sample was selected from 817 institutions. In 1993, questionnaires that asked primarily about the 1992 Fall term were mailed to institutions and faculty. The target sample for the faculty survey consisted of 31,354 faculty selected from 817 participating institutions. Of these, 1,590 were found to be ineligible. Of the 29,764 eligible faculty, 25,780 (87 percent) completed questionnaires either by self-administration or by a computer-assisted telephone interview (CATI).

The NSOPF-93 data is available through a Data Analysis System (DAS), which can be accessed through the Internet on NCES' World Wide Web site at <http://www.ed.gov/NCES>. The current study selected the following variables for analyses:

Categorical variable:
- Faculty Academic Fields (A12A - variable name):
  1. Agriculture/home economics
  2. Business
  3. Education
  4. Engineering
  5. Fine arts

Continuous variables:
- Career articles in refereed professional or trade journals (B20A1)
- Career reviews of books, articles or creative works (B20A5)
- Career total monographs, books, textbooks, or chapters in edited volumes (X02B20)
- Recent articles in refereed professional or trade journals (last two years) (B20B1)
- Recent reviews of books, articles or creative works (last two years) (B20B5)
- Recent total monographs, books, textbooks or chapters in edited volumes (last two years) (X09B20)

The comparisons noted in this study are significant at the .05 level. The standard errors are used to calculate confidence intervals around each estimate and to compare two or more estimates if the observed differences are statistically significant. For example, Table 1 in this report show that the mean of career articles in refereed journals by all faculty is 8.01. The standard error of that estimate is 0.37. The 95 percent confidence interval for the statistic extends from 7.28 [8.01 - (1.96 x 0.37)] to 8.74 [8.01 + (1.96 x 0.37)], or 7.28 to 8.74. By using the same procedure, the confidence interval for the mean of career articles in refereed journals by faculty in library and archival sciences is from 0.74 to 2.04. If these two confidence intervals do not overlap, the differences in mean publication of articles in refereed journals during the career are statistically significant at .05 level between all faculty population and faculty in library and archival sciences.

Results

Table 1 shows that the estimated total population of faculty and instructional staff in postsecondary education of the United States during the 1992 Fall-term is 1,033,970. The estimated faculty population of library and archival sciences is 6,410 (or 0.62%), which
does not include librarians who do not have instructional responsibilities during the Fall, 1992. The NSOPF-93 questionnaire lists twenty-seven major fields of study and 141 academic disciplines. "Library and Archival Sciences" was listed as a major field of study. The author regrouped the other major fields of study by using the categories listed in The NCES Statistical Analysis Report: 1993 National Study of Postsecondary Faculty (NSOPF-93): Instructional Faculty and Staff in Higher Education Institutions: Fall 1987 and Fall 1992.

For the entire faculty and instructional staff population, the mean publication of articles in refereed journals during the career is 8.01, and it is 1.19 in the last two years. The mean publication of reviews of books during the career is 2.04, and it is 0.31 in the last two years. The mean publication of monographs/books/textbooks/chapters during the career is 1.66, and it is 0.41 in the last two years.

For faculty in library and archival sciences, the mean publication of articles in refereed journals during the career is 1.39, and it is 0.42 in the last two years. The mean publication of reviews of books during the career is 8.05, and it is 0.88 in the last two years. The mean publication of monographs/books/textbooks/chapters during the career is 1.47, and it is 0.39 in the last two years.

The confidence intervals calculated by using standard errors illustrate the following comparisons:

The means of articles in refereed journals and reviews of books during the career and in the last two years (Y for "statistically different" and N for "not statistically different"):

- Y: All faculty population v. (versus) faculty in library and archival sciences

The means of monographs/books/textbooks/chapters during the career and in the last two years:

- N: All faculty population v. faculty in library and archival sciences

The following are the comparisons between library and archival sciences and other major academic fields of study respectively:

The means of articles in refereed journals during the career:

- Y: Library and archival sciences v. other major fields of study except fine arts.

The means of reviews of books during the career:

- Y: Library and archival sciences v. other major fields of study except fine arts and social sciences.

The means of monographs/books/textbooks/chapters during the career and in the last two years:

- N: Library and archival sciences v. all other major fields of study.

The means of articles in refereed journals in the last two years:

- Y: Library and archival sciences v. academic fields of agriculture/home economics, engineering, natural sciences, and social sciences

- N: Library and archival sciences v. academic fields of business, education, fine arts, health sciences, and humanities.

The means of reviews of books in the last two years:

- Y: Library and archival sciences v. academic fields of business, education, engineering, health sciences, and natural sciences

- N: Library and archival sciences v. academic fields of agriculture/home economics, fine arts, humanities, and social sciences.

Table 2 shows the percentages of faculty who published by academic fields. For the entire faculty and instructional staff population, the percentage of faculty who published articles in refereed journals during the career is 42.28%, and 28.46% in the last two years. The percentage of faculty who
Table 1. Mean Publication by Academic Fields

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Mean</th>
<th>Mean</th>
<th>Mean</th>
<th>Mean</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,033,970</td>
<td>Y 8.01</td>
<td>Y 2.04</td>
<td>N 1.66</td>
<td>Y 1.19</td>
<td>Y 0.31</td>
</tr>
<tr>
<td><strong>Principal academic fields</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture/home economics</td>
<td>18,970 (1.83%)</td>
<td>Y 7.80</td>
<td>Y 1.64</td>
<td>N 1.96</td>
<td>Y 2.10</td>
<td>N 0.32</td>
</tr>
<tr>
<td>Business</td>
<td>80,460 (7.78%)</td>
<td>Y 3.78</td>
<td>Y 0.87</td>
<td>N 1.12</td>
<td>N 0.77</td>
<td>Y 0.17</td>
</tr>
<tr>
<td>Education</td>
<td>78,730 (7.61%)</td>
<td>Y 3.74</td>
<td>Y 1.16</td>
<td>N 1.45</td>
<td>N 0.59</td>
<td>Y 0.23</td>
</tr>
<tr>
<td>Engineering</td>
<td>38,950 (3.77%)</td>
<td>Y 15.22</td>
<td>Y 1.18</td>
<td>N 1.50</td>
<td>Y 2.30</td>
<td>Y 0.22</td>
</tr>
<tr>
<td>Fine arts</td>
<td>70,070 (6.78%)</td>
<td>N 1.38</td>
<td>N 2.83</td>
<td>N 0.73</td>
<td>N 0.27</td>
<td>N 0.42</td>
</tr>
<tr>
<td>Health sciences</td>
<td>146,610 (14.18%)</td>
<td>Y 13.01</td>
<td>Y 1.01</td>
<td>N 2.20</td>
<td>N 1.97</td>
<td>Y 0.20</td>
</tr>
<tr>
<td>Humanities</td>
<td>155,100 (15.00%)</td>
<td>Y 3.60</td>
<td>Y 4.74</td>
<td>N 1.86</td>
<td>N 0.62</td>
<td>N 0.60</td>
</tr>
<tr>
<td>Library and archival sciences</td>
<td>6,410 (0.62%)</td>
<td>1.39</td>
<td>8.05</td>
<td>1.47</td>
<td>0.42</td>
<td>0.88</td>
</tr>
<tr>
<td>Natural sciences</td>
<td>178,600 (17.27%)</td>
<td>Y 15.36</td>
<td>Y 1.25</td>
<td>N 1.51</td>
<td>Y 1.99</td>
<td>Y 0.22</td>
</tr>
<tr>
<td>Social sciences</td>
<td>105,280 (10.18%)</td>
<td>Y 7.91</td>
<td>N 3.17</td>
<td>N 2.90</td>
<td>Y 1.25</td>
<td>N 0.48</td>
</tr>
<tr>
<td>Other</td>
<td>117,750 (11.39%)</td>
<td>Y 2.74</td>
<td>Y 1.24</td>
<td>N 1.14</td>
<td>N 0.52</td>
<td>Y 0.20</td>
</tr>
<tr>
<td>Missing, legit skip, etc.</td>
<td>37,050 (3.58%)</td>
<td>Y 7.64</td>
<td>Y 0.94</td>
<td>N 0.95</td>
<td>Y 1.17</td>
<td>Y 0.14</td>
</tr>
</tbody>
</table>

| **Standard Errors Total** | 0.37 | 0.1 | 0.07 | 0.05 | 0.02 | 0.02 |
| **Principal teaching fields** |      |      |      |      |      |      |
| Agriculture/home economics | 2.79 | 0.55 | 0.38 | 0.21 | 0.09 | 0.09 |
| Business                 | 0.36 | 0.27 | 0.11 | 0.07 | 0.03 | 0.03 |
| Education                | 0.36 | 0.16 | 0.15 | 0.05 | 0.03 | 0.03 |
| Engineering              | 2.13 | 0.41 | 0.17 | 0.22 | 0.06 | 0.04 |
| Fine arts                | 0.19 | 0.67 | 0.11 | 0.05 | 0.11 | 0.02 |
| Health sciences          | 1.25 | 0.2 | 0.23 | 0.16 | 0.03 | 0.05 |
| Humanities               | 0.25 | 0.34 | 0.11 | 0.04 | 0.04 | 0.03 |
| Library and archival sciences | 0.33 | 2.42 | 0.47 | 0.14 | 0.26 | 0.09 |
| Natural sciences         | 1 | 0.15 | 0.11 | 0.13 | 0.03 | 0.02 |
| Social sciences          | 0.6 | 0.35 | 0.22 | 0.08 | 0.05 | 0.05 |
| Other                    | 0.27 | 0.15 | 0.09 | 0.04 | 0.03 | 0.03 |
| Missing, legit skip, etc. | 1.05 | 0.25 | 0.19 | 0.14 | 0.04 | 0.05 |

Note: "Y" indicates a statistical significance at .05 level in comparison with the mean publication by faculty in library & archival sciences. "N" indicates no statistical significance at .05 level.
published reviews of books during the career is 20.19%, and 10.61% in the last two years. The percentage of faculty who published monographs/books/textbooks/chapters during the career is 31.14%, and 18.24% in the last two years.

For faculty in library and archival sciences, the percentage of faculty who published articles in refereed journals during the career is 22.53%, and 12.71% in the last two years. The percentage of faculty who published reviews of books during the career is 25.74%, and 18.84% in the last two years. The percentage of faculty who published monographs/books/textbooks/chapters during the career is 28.19%, and 20.93% in the last two years.

The confidence intervals calculated by using standard errors illustrate the following comparisons:

The percentages of faculty who published articles in refereed journals during the career and in the last two years (Y for "statistically different" and N for "not statistically different"):  

- Y: All faculty population v. faculty in library and archival sciences.

The percentages of faculty who published reviews of books:

- Y: All faculty population v. faculty in library and archival sciences in the last two years
- N: All faculty population v. faculty in library and archival sciences during the career.

The percentages of faculty who published monographs/books/textbooks/chapters during the career and in the last two years:

- N: All faculty population v. faculty in library and archival sciences.

The following are the comparisons between library and archival sciences and other major academic fields of study respectively:

The percentages of faculty who published articles in refereed journals during the career:

- Y: Library and archival sciences v. other major academic fields of study except business and fine arts.

The percentages of faculty who published reviews of books during the career:

- N: Library and archival sciences v. other major academic fields of study except business and natural sciences.

The percentages of faculty who published monographs/books/textbooks/chapters during the career:

- N: Library and archival sciences v. other major academic fields of study except engineering.

The percentages of faculty who published articles in refereed journals in the last two years:

- Y: Library and archival sciences v. academic fields of agriculture/home economics, business, engineering, health sciences, humanities, natural sciences, and social sciences respectively
- N: Library and archival sciences v. academic fields of education and fine arts.

The percentages of faculty who published reviews of books in the last two years:

- Y: Library and archival sciences v. academic fields of business, education, engineering, fine arts, health sciences, and natural sciences
- N: Library and archival sciences v. academic fields of agriculture/home economics, humanities, and social sciences.

The percentages of faculty who published monographs/books/textbooks/chapters in the last two years:

- N: Library and archival sciences v. other major academic fields respectively except fine arts.

Discussion

The data show that faculty in library and archival sciences published fewer articles in refereed journals in comparison with the whole faculty population and faculty in each major academic field during the career. As a
Table 2. Percentages of Faculty Who Publish by Academic Fields

<table>
<thead>
<tr>
<th>Category</th>
<th>Total</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimates Total</td>
<td>1,033,970</td>
<td>Y 42.28</td>
<td>N 20.19</td>
<td>N 31.14</td>
<td>Y 28.46</td>
<td>Y 10.61</td>
</tr>
<tr>
<td>Principal academic fields</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture/home economics</td>
<td>18,970 (1.83%)</td>
<td>Y 63.44</td>
<td>N 19.27</td>
<td>N 35.38</td>
<td>Y 49.82</td>
<td>N 14.25</td>
</tr>
<tr>
<td>Business</td>
<td>80,460 (7.78%)</td>
<td>N 31.40</td>
<td>Y 12.70</td>
<td>N 24.97</td>
<td>Y 22.38</td>
<td>Y 5.85</td>
</tr>
<tr>
<td>Education</td>
<td>78,730 (7.61%)</td>
<td>Y 34.76</td>
<td>N 17.37</td>
<td>N 28.16</td>
<td>N 20.95</td>
<td>Y 8.63</td>
</tr>
<tr>
<td>Engineering</td>
<td>38,950 (3.77%)</td>
<td>Y 58.33</td>
<td>N 14.04</td>
<td>Y 33.27</td>
<td>Y 43.71</td>
<td>Y 6.96</td>
</tr>
<tr>
<td>Fine arts</td>
<td>70,070 (6.78%)</td>
<td>N 20.38</td>
<td>N 18.78</td>
<td>N 17.87</td>
<td>N 9.58</td>
<td>Y 9.39</td>
</tr>
<tr>
<td>Health sciences</td>
<td>146,610 (14.18%)</td>
<td>Y 52.26</td>
<td>N 16.43</td>
<td>N 34.61</td>
<td>Y 38.46</td>
<td>Y 8.21</td>
</tr>
<tr>
<td>Humanities</td>
<td>155,100 (15.00%)</td>
<td>Y 36.91</td>
<td>N 32.15</td>
<td>N 36.01</td>
<td>Y 22.31</td>
<td>N 18.54</td>
</tr>
<tr>
<td>Library and archival sciences</td>
<td>6,410 (0.62%)</td>
<td>22.53</td>
<td>25.74</td>
<td>28.19</td>
<td>12.71</td>
<td>18.84</td>
</tr>
</tbody>
</table>

The percentages of faculty who published reviews of books are similar between faculty in library and archival sciences and all faculty population during the career. A higher percentage of faculty in library and archival sciences published reviews of books than that of all faculty population in the last two years.

The percentages of faculty who published monographs, books, textbooks, and chapters in edited volumes are similar between faculty in library and archival sciences and all faculty population during the career and in the last two years. A higher percentage of faculty in engineering published monographs, books, textbooks, and chapters in edited volumes than that of library and archival sciences during the career. A higher percentage of faculty in library and archival sciences published monographs, books, textbooks, and chapters in edited volumes than that of faculty in fine arts in the last two years.

**Conclusion**

The phenomenon that faculty in library and archival sciences published significantly more...
reviews of books, articles, and creative works demonstrates an unique characteristic of the librarian profession as information evaluator, selector, and provider. The results showing that the percentages of faculty who published reviews of books, articles, and creative works are similar between faculty in library and archival sciences and all faculty population during the career could indicate that a small number of faculty in library and archival sciences published a high quantity. Faculty in library and archival sciences are equally productive in publishing monographs, books, textbooks, and edited chapters in volumes in comparison with all faculty population and faculty in other major academic fields, respectively. More faculty members in library and archival sciences should become more involved in publishing articles in refereed professional or trade journals.

Other types of faculty publication can be further studied through the NSOPF-93 data. These publication types include:
1) articles published in non-refereed professional or trade journals,
2) creative works published in juried media,
3) creative works published in non-juried media or in-house newsletters, research or technical reports disseminated internally or to clients, presentations at conferences, workshops, etc., exhibitions or performances in the fine or applied arts, patents or copyrights, and computer software products.

Acknowledgement

The author would like to thank the Association of Institution Research (AIR) and the National Center for Education Statistics (NCES) for sponsoring the Summer Institute on Data Resources of the National Center for Education Statistics in June 1999. The author wish to thank Linda J. Zimbler, NCES Project Officer for her specific advice and explanations on how to use the Data Analysis System for the NSOPF-93 data during and after the Summer Institute. The author would like to acknowledge the assistance of Arthur W. Häfner, Professor and Dean of Seton Hall University Libraries, for his critical reviews and helpful comments during the preparation of this article.

Notes and References


6 Ibid. pp. 3-4.

7 National Center For Education Statistics. *Statistical Analysis Report: 1993 National Study of Postsecondary Faculty (NSOPP93): Instructional Faculty and Staff in Higher Education Institutions: Fall 1987 and Fall 1992.* September 1997. Washington, D.C.: U.S. Department of Education, Office of Education Research and Improvement, (NCES 97-470): 107. “The standard error measures the variability of the sample estimator in repeated sampling, using the same sample design and sample size. It indicates the variability of a sample estimator that would be obtained from all possible samples of a given design and size. Standard errors are used to as a measure of the precision expected from a particular sample. If all possible samples were surveyed under similar conditions, intervals of 1.96 standard errors below to 1.96 standard errors above a mean or proportion would include the true population parameter in about 95 percent of the samples. In general, for large sample size (n greater than or equal to 30) and for estimates of the mean or the proportion, the intervals described above provide a 95 percent confidence interval. If sample sizes are too small, or if the parameters being estimated are not means or proportions, then these intervals may not correspond to the 95 percent confidence level.”

8 “refereed journals” stands for “refereed professional or trade journals” in the rest of the article.

9 “reviews of books” stands for “reviews of books, articles, or creative works” in the rest of the article.