The Characteristics of Journal Editorial Boards in Library and Information Science

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ABSTRACT

A study of the members of the editorial boards of 16 leading LIS journals shows that the boards vary markedly in size, in diversity (in terms of both gender and nationality) and in the experience and publication/citation profiles (based on Web of Science data) of their board-members. A typical editorial board member will be male, work in the USA, have published their first LIS article in 1995, and have 9.5 publications and 39 non-self citations to those publications, with the publication/citation profiles differing significantly from those of non-board-member contributors to the 16 journals.

1. Introduction

Academic journals provide the principal means of communication for the presentation of novel research findings in many disciplines. A journal will typically have an editorial or advisory board that is recruited to assist the journal's editor(s) in maintaining, or (ideally) enhancing, the standard of the journals in three major ways. First, the editorial board members (hereafter EBMs) can promote the journal both explicitly by encouraging their peers to submit articles and implicitly by their presence on the board, since EBMs typically have high profiles in the journal's target academic community; indeed, being invited to join the board of a prestigious journal is an important form of academic recognition. Second, EBMs are obvious referees when articles are submitted for review, although the number and subject-breadth of submissions to many journals means that much refereeing is carried out beyond the board (with these external reviewers often being suggested by EBMs). Third, the board can provide advice relevant to the journal and its development; examples of tactical and strategic advice might be forthcoming conferences where it would be appropriate to distribute publicity material, and an extension to, or change in, the precise subject focus of the journal, respectively. The board of a peer-reviewed journal hence plays an important role in ensuring the quality of the journal and, consequently, in the development of its parent discipline (Hames, 2001; Parker, 2007).

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The important role played by EBMs has led to them being referred to as “gatekeepers”, occupying powerful strategic positions in the scholarly debate that characterizes an active academic discipline (Barzilai-Nahon, 2009; Braun & Diospatonyi, 2005; Fogarty & Liao, 2009; Glogoff, 1988). Given the importance of EBMs, it is natural to consider what characteristics they might be expected to possess, and there have been several studies that have addressed this question from the points of view of variables such as nationality, gender and research standing. This work, which is summarized in Section 2 below, has ranged across a wide range of disciplines, many of them with a strong professional basis such as accountancy, management and medicine. Focussing on library and information science (LIS), there have been several studies of the degree of inter-connectedness of journal editorial boards (e.g., Baccini & Barabesi, 2010/2011; Cronin, 2009; Ni & Ding, 2010; Ni, Sugimoto & Cronin, 2012) and many studies of individual LIS journals or of the LIS literature as a whole (e.g., Bonnevie, 2003; Jarvelin & Vakkari, 1990; Lariviere, Sugimoto & Cronin, 2012; Tsay, 2011). However, Uzun (2004) seems to have been the only person to date to discuss the characteristics of the individual EBMs, noting that the proportion of foreign-authored articles in a set of five information science and scientometric journals was highly correlated with the proportion of foreign EBMs for those journals. The study of LIS EBMs reported here was hence undertaken to fill this apparent gap, with the aim of providing insights into the characteristics of individual EBMs and individual journals, the relationships between journals and their boards, and the relationships between journals as reflected by those boards.

2. Literature Review

Three main types of characteristic - nationality, gender and research standing - have been suggested in the literature as being of importance (potential or actual) in the membership of an editorial board.

Studies of the nationalities of EBMs have considered the boards of journals in anaesthesia and critical care (Boldt & Maleck, 2000), chemistry (Braun & Diospatonyi, 2006), information systems (Cabanac, 2012), management (Harzing & Metz, 2012; Ozbilgin, 2004), and medical education (Tutarel, 2004) inter alia. These, and other multi-disciplinary studies (Braun & Diospatonyi, 2005; Garcia-Carpintero, Granadino, & Plaza, 2010), are at one in emphasising the predominance of EBMs from the USA, with the UK coming a distant second, though a longitudinal study of the boards of 57 management journals suggested that the USA representation is decreasing slowly, at least for that discipline (Harzing & Metz, 2012). In related work, Nisonger (2002) correlated the international composition of editorial boards with impact factor and citation data for their journals, Calver et al. (2010) discussed variables that could be used to quantify the international natures of 39 journals in conservation biology, and there have been several studies suggesting that it is not only specific countries but also specific academic institutions within those countries that dominate journal editorial boards (Fogarty & Liao, 2009; Hodgson & Rothman, 1999; McNamee & Willis, 1994; Rosenstreich & Wooliscroft, 2006; Willis & McNamee, 1990). The reader should note that all the reports cited here have involved English-language international journals and different results might well be obtained.
were this not the case.

Studies of the gender of EBMs in, e.g., information systems (Cabanac, 2012), medicine (Amrein, Langmann, Fahrleitner-Pammer, Piber, & Zollner-Schwetz, 2011; Jagsi, Tarbell, Renault, Chang, & Hylek, 2008; Kennedy, Lin, & Dickstein, 2001; Morton & Sonnad, 2007) and management (Burgess & Shaw, 2010; Harzing & Metz, 2011; Metz & Harzing, 2009), show a marked level of female under-representation on journal editorial boards. Fong et al. (2009) suggest that this situation is improving slowly in the boards of educational psychology journals, and Humphreys and Stauffer (2000) draw a similar conclusion from a longitudinal study of a musical education journal.

The academic reputation of a journal will be strongly influenced by the reputations of its EBMs, and it would hence appear mandatory for them to have a demonstrable track record of research, typically as demonstrated by high levels of publication, citation and funding. However, studies of leading journals in several professional subjects (accountancy (Lowe & van Fleet, 2009), counselling (Weinrach, Thomas, Pruett, & Chan, 2006), finance (Hardin, Liano, Chan, & Fok, 2008), management (Bedeian, van Fleet, & Hyman, 2009b), and social work (Pardeck, 1992)) suggest that this is not always the case, with some EBMs demonstrating levels of scholarly achievement notably less than might have been expected. Such studies are, hardly surprisingly, quite controversial (Bedeian, van Fleet, & Hyman, 2009a). Academic reputation is likely to be strongly correlated with a further variable, that of age, since in most disciplines (mathematics being a notable exception) it takes a considerable degree of time to build an academic reputation. It is hence to be expected that EBMs will typically have been working in their discipline for a considerable amount of time. That said, Parker (2007) suggests that young, emerging scholars can bring freshness and leading-edge knowledge of their fields to a board, thus complementing their seniors’ demonstrated expertise and knowledge of the discipline’s and the journal’s development over the years.

3. Methods

The boards of the set of 16 journals studied recently by Milojević et al. (2011) when investigating the cognitive structure of LIS have been chosen for study here. These journals (with the abbreviations that will be used for them in this paper in brackets) were as follows: Annual Review of Information Science and Technology (ARIST, which has now ceased publication, but which has been retained here for purposes of comparison with the study by Milojević et al.), College & Research Libraries (CRL), Information Processing & Management (IPM), Information Research (IR), Information Society (IS), Journal of Academic Librarianship (JAL), Journal of Documentation (JDOC), Journal of Information Science (JIS), Journal of the American Society for Information Science and Technology (JASIST), Library & Information Science Research (LISR), Library Quarterly (LQ), Library Resources and Technical Services (LRTS), Library Trends (LT), Online Information Review (OIR), Reference & User Services Quarterly (RUSQ), and Scientometrics (SCI).

The web home-page was consulted for each journal in turn to identify the current EBMs, where these were taken to include not just members but also the editor (himself or herself) and any associate editors; people listed as managing editor, publishing assistant etc. were excluded unless additionally
listed as a member of the editorial board. If not evident from the journal pages, the gender, current institution and institutional nationality of each EBM were then identified from their own home-page, from the home-page of their institution, or from their latest publication. If no current institution was available then the most recent that could be identified was used, e.g., for EBMs who have now retired. If two or more current institutions were listed, then the first was selected.

Further data were obtained from Web of Science searches that were carried out in early 2012 and that covered publications from all of the five constituent databases (Science Citation Index Expanded, Social Science Citation Index, Arts and Humanities Citation Index, Conference Proceedings Citation Index - Science, and Conference Proceedings Citation Index - Social Science & Humanities). The publications considered were those that were recorded as an article, proceedings paper or review and that had been assigned to the Information Science & Library Science subject category. The first constraint eliminated non-substantive content such as book reviews, editorial matters etc (all of which were quite frequent given the status of the authors that were being searched) and the second eliminated publications outside of the subject domain of the journal for which the author was an EBM (to the extent that the Web of Science subject categories accurately delimit subject domains). As a rather extreme example of these constraints, David Bawden, the JDOC editor, has 309 publications in Web of Science. Of these, 274 are in the Information Science & Library Science category, with the earliest in 1980; the remainder are from early in his professional career when he worked on computer-aided molecular design in the pharmaceutical industry. The great majority of the 274 are book reviews and editorials etc, leaving a total of 65 articles, proceedings papers and reviews. As another example, Helmet Apt, an EBM for SCI, has 8 Information Science & Library Science publications that have attracted 62 citations (excluding self-citations), numbers that are far outweighed by the 201 publications (and 5166 citations) in the Astronomy & Astrophysics subject category.

The Web of Science searches provided the following data for each EBM: year of first publication as a proxy for age (where the publications are those defined in the previous paragraph); number of publications; and number of non-self citations to those publications. Personal and institutional web-pages were used if necessary to confirm the identities of authors’ publications. In some cases where the journal homepage provided just an initial and no institution for an EBM (as with Scientometrics), then a judgement had to be made as to whether a specific publication should be credited to that EBM. Finally, the Journal Citation Reports database was used to provide the 2-year Impact Factor (IF) for each of the 16 journals.

In passing, it was noted during the data collection that the 16 journals studied here varied greatly in the amounts of information they provided about their boards. The most detailed information by far is that contained in IR, which provides a paragraph-length description of each EBM (at http://informationr.net/ir/editors.html). As a purely electronic journal, IR is not constrained by page-lengths and it is hardly reasonable to expect a comparable level of detail in printed journals; however, there seems no reason why such journals’ homepages could not be more forthcoming about their EBMs’ backgrounds than is currently the case.

Once this data had been collected, two types of variable were computed to characterize the editorial board of each of the 16 journals. Four of the variables described the journal as whole: the number
of board members; the fraction of the board that was male; the range of nationalities represented, which was expressed as the number of distinct institutional nationalities divided by the number of EBMs; and the impact factor. The other three variables described the bibliometric profile of the members of each journal’s board: the median year of first publication; the median number of publications; and the median number of non-self citations to those publications. The median was preferred to the arithmetic mean as an average value given the (entirely expected) skewed nature of much of the bibliometric data. The median h-index was also computed but was found to have a correlation with the median number of non-self citations as high as 0.93, and was hence not considered further. The resulting data are listed in Table 1.

Table 1. Characteristics of journal editorial boards

<table>
<thead>
<tr>
<th>Journal title (abbreviation)</th>
<th>EBM</th>
<th>Male fraction</th>
<th>International spread</th>
<th>Journal 2-year IF</th>
<th>First publication</th>
<th>Publications</th>
<th>Citations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Review of Information Science and Technology (ARIST)</td>
<td>16</td>
<td>0.45</td>
<td>0.32</td>
<td>2.00</td>
<td>1983</td>
<td>37</td>
<td>400.5</td>
</tr>
<tr>
<td>College &amp; Research Libraries (CRL)</td>
<td>24</td>
<td>0.45</td>
<td>0.08</td>
<td>0.68</td>
<td>1994</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Information Processing &amp; Management (IPM)</td>
<td>42</td>
<td>0.62</td>
<td>0.38</td>
<td>1.67</td>
<td>1991</td>
<td>16.5</td>
<td>128.5</td>
</tr>
<tr>
<td>Information Research (IR)</td>
<td>42</td>
<td>0.69</td>
<td>0.45</td>
<td>0.82</td>
<td>1994</td>
<td>10.5</td>
<td>34.5</td>
</tr>
<tr>
<td>Information Society (IS)</td>
<td>43</td>
<td>0.70</td>
<td>0.19</td>
<td>1.24</td>
<td>1997</td>
<td>5</td>
<td>24</td>
</tr>
<tr>
<td>Journal of Academic Librarianship (JAL)</td>
<td>18</td>
<td>0.39</td>
<td>0.16</td>
<td>0.87</td>
<td>1999</td>
<td>7.5</td>
<td>8</td>
</tr>
<tr>
<td>Journal of Documentation (JDOC)</td>
<td>20</td>
<td>0.65</td>
<td>0.50</td>
<td>1.45</td>
<td>1990.5</td>
<td>21.5</td>
<td>168</td>
</tr>
<tr>
<td>Journal of Information Science (JIS)</td>
<td>19</td>
<td>0.74</td>
<td>0.42</td>
<td>1.41</td>
<td>1996</td>
<td>24</td>
<td>223</td>
</tr>
<tr>
<td>Journal of the American Society for Information Science and Technology (JASIST)</td>
<td>34</td>
<td>0.68</td>
<td>0.27</td>
<td>2.14</td>
<td>1994</td>
<td>28</td>
<td>205</td>
</tr>
<tr>
<td>Library &amp; Information Science Research (LISR)</td>
<td>20</td>
<td>0.30</td>
<td>0.25</td>
<td>1.36</td>
<td>1997.5</td>
<td>17</td>
<td>75</td>
</tr>
<tr>
<td>Library Quarterly (LQ)</td>
<td>33</td>
<td>0.42</td>
<td>0.15</td>
<td>0.65</td>
<td>1997</td>
<td>9</td>
<td>23</td>
</tr>
<tr>
<td>Library Resources and Technical Services (LRTS)</td>
<td>20</td>
<td>0.30</td>
<td>0.05</td>
<td>0.24</td>
<td>1997.5</td>
<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Library Trends (LT)</td>
<td>16</td>
<td>0.56</td>
<td>0.50</td>
<td>0.67</td>
<td>1989</td>
<td>6.5</td>
<td>23</td>
</tr>
<tr>
<td>Online Information Review (OIR)</td>
<td>43</td>
<td>0.70</td>
<td>0.37</td>
<td>0.99</td>
<td>1998</td>
<td>13</td>
<td>29</td>
</tr>
<tr>
<td>Reference &amp; User Services Quarterly (RUSQ)</td>
<td>13</td>
<td>0.15</td>
<td>0.08</td>
<td>0.34</td>
<td>2004</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Scientometrics (SCI)</td>
<td>65</td>
<td>0.77</td>
<td>0.38</td>
<td>1.91</td>
<td>1991</td>
<td>24</td>
<td>217</td>
</tr>
</tbody>
</table>

4. Discussion

4.1. Characteristics of the EBM

The journals have a total of 468 EBMs, these representing 404 distinct individuals. Of these, 358 individuals serve on a single board, a percentage (76.5%) that is very similar to the figure...
of 79% quoted by Cronin (2009) for a set of ten LIS journals, seven of which are included in those studied here. Of the remainder, 32 individuals serve on two boards, ten on three boards and four (Judit Bar-Ilan, Ian Ruthven, Amanda Spink and Mike Thelwall) on four boards. There is hence a fair degree of inter-connectedness between the boards of the chosen sample of journals, as noted in several previous studies (Baccini & Barabesi, 2010, 2011; Malin & Carley, 2007; Rosenstreich & Wooliscroft, 2006).

The gender could be identified for 401 of the 404 distinct EBMs: 238 were male and 163 female, i.e., there was a slight (59.4%) male majority in the sample. The 404 EBMs were based at institutions in 40 different countries. Of these, the five most frequently occurring nations were the USA (198 EBMs), the UK (46), Canada (15), and the People’s Republic of China and the Netherlands (both with 10). A total of 231 different institutions was identified, the overwhelming majority of which were universities and the majority of which (166 of them) provided just a single EBM. The most frequently occurring institutions were Illinois at Urbana-Champaign and Indiana with 15 and 13 EBMs, respectively, followed by Maryland (9) and Florida State, Loughborough, Syracuse, California at Los Angeles and Washington (all of which had 6 EBMs); Loughborough was hence the only highly productive institution from outside the USA. In some cases, an institution was strongly represented on a particular journal’s board, e.g., Illinois at Urbana-Champaign has eight board members for LT, and all four members of the Hungarian Academy of Sciences in the sample were on the board of SCI. For comparison, 48,849 different authors were associated with the 39,932 journal articles, proceedings papers and review articles in the Web of Science Information Science & Library Science category published in the period 2001-2011. Even allowing for variant forms of author names, making the figure of 48,849 probably a slight over-estimate, it is clear that the 404 distinct EBMs are a very small subset of the current population of LIS authors, comprising just 0.83% of the latter. It has been noted in the literature review that, in some cases, EBMs do not exhibit the research track record that might have been expected, and it is hence of interest to see whether this is the case for LIS.

The first article was hence chosen from the final issue in 2011 of each of the 16 journals, these 16 articles being associated with a total of 31 different authors. After eliminating seven of these who were included in the set of 404 EBMs (with six of this seven publishing in a journal for which they were an EBM) there was thus a total of 24 authors typical of non-EBMs contributing to the 16 journals. Their publication and citation counts were collected as for the EBMs above, and the resulting counts for the sets of EBMs and non-EBMs compared as summarized in Table 2. A χ² test using Yates’ correction shows that the EBM and non-EBM publication counts are significantly different ($\chi^2 = 16.02, \nu = 2, p <= 0.005$) and that this is also the case for the citation counts ($\chi^2 = 15.05, \nu = 2, p <= 0.005$). The differences are, of course, hardly surprising in that individuals are approached to become EBMs largely on the basis of their research contributions, and for some of the EBMs these contributions were very large: 10 had more than 100 publications and six had more than 2000 citations, the EBM median values for these two variables being 9.5 publications and 39 citations, respectively. However, the contributions are small for some of the other EBMs, as is clear from the bottom row of Table 2: indeed, there were 41 EBMs with no publications and 69 EBMs with no citations. In saying that, it is most important to remember
that *Web of Science* has been used to obtain the publication and citation data. Many of the EBMs of some LIS journals are practicing library or information professionals, with strong publication records in the professional literature rather than in the high-impact academic journals that form the principal input to *Web of Science*, and the boards of journals such as CRL, LRTS or RUSQ contain many such practitioners (as is entirely appropriate given the aims of these journals).

<table>
<thead>
<tr>
<th></th>
<th>Publications</th>
<th>Citations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EBMs</td>
<td>Non-EBMs</td>
</tr>
<tr>
<td>&gt;= 50</td>
<td>35</td>
<td>0</td>
</tr>
<tr>
<td>10-49</td>
<td>168</td>
<td>2</td>
</tr>
<tr>
<td>0-9</td>
<td>201</td>
<td>22</td>
</tr>
</tbody>
</table>

Table 2. Comparison of the publication and citation counts for EBMs and for non-EBMs

At least in part, the large contributions that the EBMs make to the literature reflect the fact that many of them have been working in the field for an extended period. The median date of first publication for the EBMs (for those with publications) was 1995 whilst that for the set of non-EBMs was 2007, with the largest single number of the latter making their first contribution as recently as 2011. At the other extreme, the first publications in *Web of Science* for Gene Garfield and for Tom Wilson date from 1954 and 1963, respectively; and the presence of several very highly experienced researchers on the board of the ARIST results in it having by far the earliest median date of first publication in Table 1.

Country data was available for 36,141 of the set of 39,932 LIS articles mentioned above. These records represent a total of 145 different countries, of which the four most productive were the USA (15,076 publications), the UK (3,731), the People’s Republic of China (2,958), and Canada (1,626) (note that there is some duplication here since the authors of a publication may come from more than one country); the USA’s dominance is also clear in a study of LIS journals by Davarpanah and Aslekia (2008). Whilst there is clearly a fair degree of match between numbers of EBMs and contributions to the LIS literature (as reflected in *Web of Science*), it is also clear that the People’s Republic of China is markedly under-represented at board level, and this is also the case for other countries. Table 3 lists the country data for the EBMs and for LIS publications in general, and a $\chi^2$ test data shows that these two distributions are indeed significantly different ($\chi^2 = 33.64$, $\nu = 4$, $p \leq 0.0001$). There is a strong bias in the data since three of the journals - CRL, LRTS and RUSQ - are published by divisions of the American Library Association and have editorial boards that are overwhelmingly composed of people from the USA. However a significant difference ($\chi^2 = 16.44$, $\nu = 4$, $p \leq 0.005$) in the distribution of nationalities remains if the analysis in Table 3 is restricted to the other 13 journals.
Table 3. Comparison of the nationalities of EBMs and of LIS authors in general

<table>
<thead>
<tr>
<th>Nationality</th>
<th>EBMs</th>
<th>LIS publications</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>198</td>
<td>15076</td>
</tr>
<tr>
<td>UK</td>
<td>46</td>
<td>3731</td>
</tr>
<tr>
<td>Canada</td>
<td>15</td>
<td>1626</td>
</tr>
<tr>
<td>PRC</td>
<td>10</td>
<td>2958</td>
</tr>
<tr>
<td>Others</td>
<td>135</td>
<td>16624</td>
</tr>
</tbody>
</table>

In brief, it would seem that the set of EBMs considered here is not totally dissimilar in character to the respondents to a questionnaire survey of the EBMs of 56 accounting journals, where Brinn and Jones (2007) noted that the average respondent “was a US, male professor with a PhD and professional qualification who was over 50 and had been in service for over 10 years [and] who was active and successful in research”.

4.2. Characteristics of the journals

Inspection of the summary data for the 16 journals listed in Table 1 will show that the boards vary considerably in size, from RUSQ at one extreme to SCI at the other, with a median of 22 EBMs. Their composition is equally variable, in terms of both gender and nationality. The median male fraction is 0.59, with the lowest values being for two of the more professional journals, RUSQ and LRTS, as might be expected given the predominance of women in the LIS workforce. These two journals are the only ones in the sample of 16 that have female editors, and they (together with CRL) also have the smallest spread of nationalities. JDOC and LT have the most geographically diverse boards using the chosen statistic, with SCI (25) and IR (19) having the largest number of distinct nationalities represented on the board. It is interesting to compare these gender and nationality results with previous studies in other disciplines (though it should be noted that the figures quoted below are taken at a specific moment of time, and some longitudinal studies suggest that the fraction of male and USA representation are both declining).

While men clearly dominate the editorial boards of the LIS journals considered here, this is far less marked than in previous studies of other disciplines: for example, the median male fraction in 2004 for the editorial boards of 57 management journals surveyed by Metz and Harzing (2009) was no less than 0.83, a figure that is identical to that obtained from an analysis by Morton and Sonnad (2007) of 3,473 individuals on 39 professional society boards and 54 journal editorial boards in medicine. A very similar fraction, of 0.82, was obtained for the fraction of male responses to a questionnaire distributed to the editorial boards of 56 accounting journals (Brinn & Jones, 2007) and for the median male fraction of the boards of 14 leading medical journals (Jagsi, Tarbell, Henault, Chang & Hylek, 2008). Fong et al. (2009) quote a much lower value of 0.53 for the editorial boards of five educational psychology journals, a figure that is broadly comparable to the 0.58 that may be estimated from inspection of Figure 6 in a survey of four school psychology
Turning now to the international spread, most previous studies in the literature have focused on the fraction of EBMs that come from the USA. In our sample of 16 LIS journals, 198 EBMs were from the USA, i.e., 0.49 of the set of 404 individual EBMs, with the individual journals having fractions ranging from 0.05 (JDOC) to 1.00 (LRTS and RUSQ) and with a median of 0.62 (or of 0.56 if the three American Library Association journals are excluded). The median figure can be compared with those reported in studies of the nationalities of editorial boards for leading journals in other disciplines: for example, 0.86 for ten marketing journals (Rosenstreich & Wooliscroft, 2006), 0.75 for 16 emergency medicine and critical care journals and 0.59 for 18 anaesthesiology journals (Boldt & Maleck, 2000), 0.57 for 57 management journals (Harzing & Merz, 2012), 0.57 for 281 journals across 15 scientific and engineering disciplines (Garcia-Carpintero, Granadino & Plaza, 2010), and 0.42 for 20 leading chemistry journals (Braun & Diopatonyi, 2006).

The early date of first publication for the ARIST EBMs has been noted above; other journals in Table 1 that have a significant number of such experienced contributors include IPM, JDOC, LT and SCI, all of which have median first publication dates prior to 1992. There are, as would be expected, strong correlations between the publication and citation data in Table 1, with the five journals having the largest median numbers of publications (ARIST, JDOC, JIS, JASIST and SCI) also having the largest median numbers of citations; and all of these (bar JIS, which is replaced by IPM) are included in the five journals with the largest 2-year impact factor.

### 4.3. Relationships between the journals

The data in Table 1 have been used to generate a classification of the 16 journals, with each of the seven columns being Z-standardized so that each variable had a zero mean and a unit standard deviation. The resulting 16×7 data matrix was then submitted to the group-average hierarchic agglomerative clustering routine in SPSS, with the inter-journal distances calculated using the squared Euclidean distance.

The resulting classification contained three well-marked clusters: ARIST on its own in a singleton cluster; then a six-member cluster (CRL, JAL, LISR, LQ, LRTS and RUSQ) consisting of, predominantly, library-focused journals with a strong professional slant, and then the remaining nine, research-focused journals (IPM, IR, IS, JDOC, JIS, JASIST, LT, OIR and SCI). Exactly the same partition is obtained if one takes the three-cluster solution resulting from the widely-used Ward’s minimum variance clustering method, instead of using the group-average method as here. The same set of 16 journals has been clustered by Milojević et al. (2011) on the basis of common title words using the Jaccard coefficient and the group-average method. The dendrogram shown in Figure 5 of their publication again reveals a well-marked, three-cluster solution: one cluster consisting of SCI on its own; a cluster of library-focused journals (CRL, JAL, LISR, LQ, LRTS, LT and RUSQ); and then a cluster containing the remaining, more information-focused journals. It will be realized that this is very similar indeed to the three-cluster solution obtained in the present work, despite the very different variables used to characterize the journals in the two studies. The singleton status of SCI in the earlier study is likely to arise from the bibliometrics-focused vocabulary employed
in the titles of the articles published therein, while the comparable status of ARIST in the present study arises from its EBMs’ very strong research profiles (the journal is also, of course, unique in containing only review articles but this is not a characteristic coded explicitly in Table 1).

The three-cluster solution obtained here is based on the use of all of the seven variables in Table 1 to characterize each of the journals and, as noted previously, there are two rather different types of variable considered in this study: those that characterize each journal as a whole (i.e., number of EBMs, the male fraction, the international spread and the IF) and those that characterize the individual EBMs (i.e., their date of first publication, and their publication and non-self citation counts). Use of the journal-specific variables yielded a two-cluster solution: one consisting of CRL, JAL, LQ, LRTS and RUSQ, i.e., the library-focused cluster obtained previously with the exception of the more research-focused LISR; and one consisting of the other eleven journals. Use of the EBM-specific variables yielded a three-cluster solution: ARIST on its own; a group of five high-impact research journals (IPM, JDOC, JIS, JASIST and SCI); and finally the remaining ten journals. Both of these classifications are entirely understandable given the natures of the journals that are being clustered. Alternative classifications of LIS journals are discussed by Ni et al. (2013), who have used distances between pairs of journals based on numbers of common authors, of common EBMs, of co-citations in reference lists, or of common title and abstract words.

5. Conclusions

The editorial boards of academic journals play a key role in the development of a discipline, and this short paper provides a snap-shot (as of early, 2012) of the constitution and characteristics of the boards in 16 leading LIS journals. These boards vary markedly in size, in the balances of both gender and nationality, and in the experience and the bibliometric profiles of their board-members. That said, a typical editorial board member will be male, work in the USA, have published their first LIS article in 1995, and have 9.5 publications and 39 non-self citations to those publications. These personal characteristics are not too far removed from the stereotypical view of an EBM suggested by Brinn and Jones (2007), and it may hence be appropriate for journal boards to consider whether there is need to enhance the diversity of their membership to reflect better the characteristics of the communities that they serve; based on the data presented here, an obvious first stage would be to increase the representation of the People’s Republic of China.

References


