The Competition for Journal Space among Referees, Editors, and Other Authors and Its Influence on Journals’ Impact Factors

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All of these and other great and different feats are, were, and will be the works of fame desired by mortals as prizes and as part of the immortality their famous deeds deserve.

—Miguel de Cervantes
Don Quijote de la Mancha, Part 2, Chapter 8

A new approach to study competition for journals’ space in academic publication is introduced. It compares the use of a given journal by two kinds of authors: Journal-related authors and other authors. Journal-related authors are those who are related in some way with the journal, either because they act as external referees or because they are editors on the journal. To investigate journal use by journal-related authors, 18 educational psychology journals were studied and the articles they published were counted during a 2-year period. Journal use by journal-related or other authors is measured by indicators which give the number and percentage of journal-related authors, number and percentage of articles authored or co-authored by journal-related authors, journal pages used, and mean number of pages from articles authored or co-authored by journal-related authors. The data show that journal use by journal-related authors varies. Thus, the percentage of journal-related authors ranges from 1.28 to 33.33% depending on the journal. The percentage of articles authored or co-authored by journal-related authors ranges from 2.33 to 57.89% of the total, with seven journal-related authors being authors or co-authors of five or more articles in the journals on which they serve. In three journals, the mean number of pages from articles authored or co-authored by journal-related authors was higher than that from articles authored by other authors. Finally, there is a positive relationship between the use of journals by journal-related authors and impact factor of journals.

Introduction

The essence of science is the publication of new knowledge (Mindick, 1982; Ziman, 1968). Scientific journals play a dual role in the process of creating and diffusing that new knowledge: Journals are both the means by which the scientific community certifies additions to its body of accepted knowledge and the means by which scientists compete for prestige and recognition (Hagstron, 1965; Hargens, 1988; Merton, 1957). A published article serves a scientist as a means of increasing his or her prestige, advancing his or her career (Lindsey, 1976; Peters & Ceci, 1982) and, often, determining his or her salaries (Diamond, 1986; Gottfredson, 1978; Scott, 1974; Tuckman & Leahey, 1975).

Many journals have editorial boards and external referees or reviewers that filter and select manuscripts for publication. Because of their privileged position, editorial boards and referees can achieve powerful positions from which they can often greatly influence the direction of research in a discipline, and, obviously, the careers of individual scholars (Endres & Wearden, 1990). Editorial board members and external referees are often called the “gatekeepers of science” (Beyer, 1978; Crane, 1967; Glogoff, 1988; Pipke, 1984; Zsindely & Schubert, 1989; Zsindely, Schubert, & Braun, 1982). Publication is such a key ingredient in a successful academic career that reviewers can be said to influence who gets promoted, who gets grants, and even who gets invited to speak at scholarly conferences (Endres & Wearden, 1990). Career advancement of scholars in the academic world requires the positive response of journal editorial boards to the presentation of a scientist’s manuscript (Lindsey, 1976). Thus, editors of scientific journals perform a dual role: They control the flow of scientific information as well as individual scientists’ access to channels of recognition (Beyer, 1978).

Flaws in the peer review system have been documented (Campanario, 1993, 1995), and, in addition, the perception that peer review is biased toward prestigious authors seems widely extended (Anderson, 1991; Bakanic, McPhail, & Simon, 1987; Hensler, 1976; Jacob-
son, 1986). Some research results confirm these negative opinions. Thus, Ensm and Kienbacher have demonstrated that there is a "national publication bias" in which some journals favor articles from their own country (Ensm & Kienbacher, 1991). There is evidence that journals edited by certain universities tend to publish a larger portion of articles from their own universities (Shamblin, 1970). Thus, the University of North Carolina ranked first in publications by recent graduates in Social Forces, edited at the university, and the University of Chicago ranked first in publications by faculty and first in publications by recent graduates in the American Sociological Journal, edited at the University of Chicago. Yotopoulos (1961) found that while the University of Chicago dominates the contributions to the Journal of Political Economy, Harvard University dominates the contributions to Quarterly Journal of Economics. The first journal is edited at the University of Chicago while the second is edited at Harvard University. Although it is not frequent, even in areas closer to the hard sciences, it is sometimes possible to encounter authors who believe that situations like the above exist. Thus, according to Max (1984), the New England Journal of Medicine seems to have a certain partisanship towards Harvard and Boston. Despite its name, the New England Journal of Medicine is no longer a regional publication. As Max pointed out, it is considered to be one of the premier medical journals of the world (Max, 1984, p. 182). According to this author, in 1981, 22% of the papers published by the New England Journal of Medicine were from the Boston area. Furthermore, only 21% of the articles published in the journal in 1981 were from outside the United States (Kohn, 1987). However, submission data to the New England Journal of Medicine were not provided by Max. Crane encountered that academic affiliation and doctoral origin among social sciences journal editors and among contributors is similar. Anonymous evaluation of articles does not change this relationship (Crane, 1967). Cole and Bowers (1973) reported that a handful of schools dominated the six communication journals they analyzed. Pfeffer, Leong, & Strehl (1977) examined the relationship between institutional representation on editorial boards and institutional contributions in the disciplines of chemistry, sociology, and political science. The effect of institutional representation in editorial positions on publication outcomes was assessed, controlling for measures of institutional quality and size. The institutional representation on editorial boards had a strong effect on publication in political science and sociology. In no case was there evidence of such effect in chemistry.

Wilson (1982) proposed the hypothesis that bias in the journal review process was largely related to investigators and not to institutions. Perhaps the apparent "favoritism" shown to an individual who has previously contributed significantly to a given field can help to enhance the overall accuracy of an editorial decision: Such a person is less likely than others to have made the kind of research errors that are not detectable in the manuscript. Zuckerman and Merton's study is one of the first on the possible bias related to investigators. They showed that there is no consistent relationship between referee acceptance or rejection of physics manuscripts and the relative standing of authors and referees (Zuckerman & Merton, 1973). However Gordon (1980) studied the patterns of referee evaluations of papers submitted by U.K. physicists. Gordon split the sample of authors and referees into two sets corresponding to major and minor universities. Their results indicate that higher frequencies of favorable evaluation were found when author and referee shared membership of institutional groups (p < 10^-4). Pipke (1984) found indications of factors other than merit in the acceptance of abstracts by the Adult Education Research Conference. According to Pipke, the judges did recognize some of their colleagues' work even though abstracts did not contain names or other identifying marks. A careful study on author-editor link was carried out by Willis & McNamee (1990). These authors studied the institutional connections between editors and authors in leading sociology journals. Results suggest a pattern of institutional connections between editors and authors over time beyond random chance alone. According to the authors, "the links between editors and authors represent spheres of influence that increase the probability of publication in the elite journals within the field, thereby contributing to the persistence of accumulated advantage over time" (Willis & McNamee, 1990, p. 374). Abt (1990) demonstrated that the final acceptance rate was higher for papers by the well-known astronomers than for all astronomers. However, a more or less strong direct relation between prestige and ease and/or number of publications might cover, in reality, a relation between higher quality and a larger number of publications (Pfeffer et al., 1977). The possible causes for bias in publication need to be studied in greater detail.

Objectives

In this article a new approach to study competition for journal space in the process of academic publication is introduced. Briefly, the use of a specific journal by two kinds of authors, journal-related authors versus other authors, is compared. Journal-related authors are authors who maintain some type of relation with the journal, either because they are referees or because they are editors. The main advantage of this new approach is that it allows the quantitative study of the extent of competition for journal space in academic publication. An added advantage is that a study of this kind can use data that are easy to obtain without having to fill in questionnaires or obtain information directly from the journal staff. Finally, this new approach makes it possible to obtain indicators that can quantitatively measure journal use by journal-
related authors and by other authors. These data can be compared with journal quality.

The measure of the quality of a given journal is a complex issue. There is a substantial body of literature addressing this issue, but impact factor is considered the most objective and reliable quality standard (see, for example, Garfield, 1994a, 1994b, and references therein). Impact factor is defined as the ratio between annual citations and annual citable items published. Impact factor is useful in clarifying the significance of total citation frequencies and, as Garfield points out, it eliminates counts which favor large, old, or frequently issued journals over small, newer, or less frequently published journals (Garfield, 1994a, p. 3). In addition, it is rare that the ranking of a journal will change within its category unless the journal's influence has indeed changed. However, as Garfield (1994b) tells us, impact factor has to be used with informed peer review. In addition, Seglen (1994) noted as the impact factor of journals should be not used without caution to evaluate individual scientist or individual articles.

According to the above, the objectives of this article are:

1) To ascertain the use of journals by journal-related authors. This objective can be accomplished by devising a certain set of indicators to measure journal use by different kinds of authors.

2) To study the relationship between the use of journals by journal-related authors and the impact factor of journals.

**Method**

Nineteen journals were selected from the 23 listed in the educational psychology section of the 1989 *Social Science Citation Index*. The other four were not available or published in languages other than English. Future references in this article to a specific journal will be made using the initials of its full title as given in Table 1. The articles published during a 2-year period by these journals were studied (see Table 2 for details). An attempt was made to obtain data from issues published in 1987 and 1988, but this was not always possible. The publication intervals of two journals, *MECD* and *JEE*, do not coincide with a calendar year. In these cases the volumes occupying the greater part of 1987 and 1988 were selected (Volumes 20–21 for *MECD* and Volumes 55–56 for *JEE*). A 2-year period was chosen so that the resulting data would be both treatable and representative of the journal in question. In addition, the number of journal pages in the selected set did not sensibly change during this time lag.

Two types of authors were defined: Journal-related authors and other authors. A journal-related author can be classified in one of the two following categories: Editor author and referee-author. An editor-author is a person who has served as editor in a given journal for at least 1 year or four issues before an article that he authored or co-authored is published in the journal (all the journals publish four issues in each volume except for *BJEP*, which published three issues in each volume, and *CD*, which publishes six issues in each volume). An editor is an editor-in-chief, editor, deputy editor-in-chief, or member of the editorial and advisory board. Book review editors and so called "managing editors" were excluded because the inclusion might have artificially increased the use of the journal by journal-related authors. A 1-year lag in the editorial board effect was used to account for the fact that editorial decisions require time to appear in print (Willis & McNamee, 1990, p. 374). Editor names were obtained from the editorial board and editorial committee lists published on the cover and/or first pages of every issue of the journals studied. To obtain an accurate record of editors, every issue of all the journals listed in Table 1 was examined. This issue-by-issue review was necessary because a journal that does not have constant changes of editors is quite rare. The *JCB* journal was excluded from further analysis because the list of editors was not published in all the issues.

A referee-author is a referee who is the author or co-author of one or more articles at any time during the 2-year period. A referee is a person serving as an external referee for the journal at any time during the 2 years studied. Referees names were obtained from acknowledgment notes, referee lists, and similar lists published by the journals. In some cases there was no list of external referees (in the journals *CSJ*, *EPM*, *IS*, *JEE*, *PIS*, and *SPR*) while in other cases it was only possible to obtain a list of external referees who had served on the journal during 1 of the 2 years under study. Thus, referee lists

<table>
<thead>
<tr>
<th>Initials</th>
<th>Full journal title</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>BJE</td>
<td>British Journal of Educational Psychology</td>
<td>57-58</td>
</tr>
<tr>
<td>CD</td>
<td>Child Development</td>
<td>58-59</td>
</tr>
<tr>
<td>CEP</td>
<td>Contemporary Educational Psychology</td>
<td>12-13</td>
</tr>
<tr>
<td>CI</td>
<td>Cognition and Instruction</td>
<td>4-5</td>
</tr>
<tr>
<td>CSJ</td>
<td>Child Study Journal</td>
<td>17-18</td>
</tr>
<tr>
<td>EP</td>
<td>Educational Psychologist</td>
<td>22-23</td>
</tr>
<tr>
<td>EPM</td>
<td>Educational and Psychological Measurement</td>
<td>47-48</td>
</tr>
<tr>
<td>IS</td>
<td>Instructional Science</td>
<td>16-17</td>
</tr>
<tr>
<td>JCB</td>
<td>Journal of Counselling Psychology</td>
<td>34-35</td>
</tr>
<tr>
<td>JEE</td>
<td>Journal of Creative Behaviour</td>
<td>21-22</td>
</tr>
<tr>
<td>JEM</td>
<td>Journal of Experimental Education</td>
<td>55-56</td>
</tr>
<tr>
<td>JEP</td>
<td>Journal of Educational Psychology</td>
<td>24-25</td>
</tr>
<tr>
<td>JRB</td>
<td>Journal of Reading Behaviour</td>
<td>19-20</td>
</tr>
<tr>
<td>JSP</td>
<td>Journal of School Psychology</td>
<td>25-26</td>
</tr>
<tr>
<td>McELD</td>
<td>Measurement and Evaluation in Counselling</td>
<td>20-21</td>
</tr>
<tr>
<td>PIS</td>
<td>Psychology in the Schools</td>
<td>24-25</td>
</tr>
<tr>
<td>RRQ</td>
<td>Reading Research Quarterly</td>
<td>22-23</td>
</tr>
<tr>
<td>SPR</td>
<td>School Psychology Review</td>
<td>16-17</td>
</tr>
</tbody>
</table>
were found for 1987 in JSP and for 1988 in JCP, JEP, and MECD. Two referee lists were published in JEM; the first included the referees serving from September 1, 1985 to June 30, 1987, and the second listed the referees serving from July 1, 1987 to June 30, 1988. So as not to increase the number of referees that might figure as authors only the second referee list was used.

Other authors are: a) Scholars authoring or co-authoring articles in a given journal without being institutionally affiliated to the journal; or, b) editors that are co-authors of articles but do not fulfill the condition of having served at least 1 year as editor in the journal before appearing as co-authors for articles published therein. Note that with this definition of other authors one avoids the danger of indiscriminately increasing the use of the journal by journal-related authors. Author names were obtained from article title pages and the annual index published by the journals.

Using the above definitions, the following indicators were calculated:

**Statistical Data**

- Total number of **different** authors, defined as scholars that were listed as co-authors of published articles in the 2-year period.
- Total number of articles published in the issues reviewed.
- Number of editors during the 2-year period who had served as such for at least 1 year before the end of 1988.
- Total number of external referees who have been mentioned in the journal in any one of the issues (except, as noted above, for JEM).

The following indicators measure the degree of journal use by journal-related authors:

**Distribution of Authors and/or Co-Authors**

- Number of editor-authors, as defined above.
- Number of referee-authors, as defined above.
- Number of journal-related authors, i.e., authors that are editors or referees (this number need not be equal to the sum of the number of editor-authors plus referee-authors because, sometimes, a referee may be appointed editor or vice versa).

**Paper Distribution**

- Number of papers authored or co-authored by editor-authors.
- Number of papers authored or co-authored by referee-authors.
- Number of papers authored or co-authored by authors that are editor or referee (again this number need not be equal to the sum of the two previous numbers of papers because, for example, a given paper may be co-authored by one or more editor-authors and one or more referee-authors).

**Total Page Distribution in Each Journal**

- Total number of pages occupied by articles that were authored or co-authored by editor-authors.
- Total number of pages occupied by articles that were authored or co-authored by referee-authors.
- Total number of pages of the articles that were authored or co-authored only by other authors—not editors or referees.

**Mean Page Distribution for Articles Published in Each Journal According to Author Type**

- Mean number of pages in the articles that were authored or co-authored by editor-authors.
- Mean number of pages in the articles that were authored or co-authored by referee-authors.
- Mean number of pages in the articles that were authored or co-authored only by other authors; i.e., authors other than editors or referees.

When a paper is co-authored by editors and/or referees and/or other authors, it is credited to the different groups in the above order. When tallying articles, no editorials, editorial commentaries, book reviews, announcements, or introductory notes by editors have been counted. Articles appearing in the section titled “computer applications” in JSP have not been counted since this section is written by the journal editors and the information published in such a section has a different category than regular articles.

**Results and Discussion**

In two journals (IS and CSJ) the use of journals by journal-related authors is minimum. In both journals there was only one editor-author in each journal and no listing of external referees was found. Table 2 gives the statistical data for the journals investigated. It shows the total number of authors, articles, and editors that have served for at least 1 year and the external referees. These data will be used to calculate the percentages on the following tables.

Table 3 shows the data for the distribution of authors within the categories of editor-author, referee-author, and journal-related authors. As can be seen in this table, the percentage of journal-related authors varies. While only one author in CSJ or IS and 2.70% of the authors in EPM were directly related with the journal, one in three authors was an editor of at least 1 year’s standing in the journal or had served as an external referee for JEM. It must be noted that, as I have indicated earlier, only referees on the referee list from July 1, 1987 to June 20, 1988 have been considered for JEM.

Table 3 shows that most journal-related authors belong to the referee-author category. Thus, while the maximum percentage of authors that are editors is no higher than 14%, this value can reach 26% for the referee-authors. If we calculate the mean percentages of authors.
that are editors and those that are referees, excluding the six journals for which there are no referee lists, we find mean values of 5.69 and 11.79% with a significant difference (F(1, 22) = 5.64, p = .03). It would seem that, in those journals that give a list of external referees, the referees have a greater tendency than the editors to publish in the journal on which they serve.

The percentages of editors and referees that are authors or co-authors of some article are variable. In JSP, the percentage of editors that publish some article reaches 40% while the highest percentage of referees that are authors or co-authors reaches nearly 35% in CEP. If we exclude journals that do not give the referee list, there are no significant differences between the percentages of editors and those of referees that are authors or co-authors of published articles (F(1,22) = .141, p > .70). Globally, there is a correlation between the number of authors and the number of editor-authors (r = .141, p > .70). We could consider that the journals that rank first and second in the number of authors could be outliers (extremely deviant scores) and, thus, they could artificially increase the correlation coefficient. However, the correlation coefficient is still significant even if journals that rank first and second in the number of authors are removed from data. Thus, it seems that journals with a larger number of authors are also the journals with the higher numbers of editor-authors.

Table 4 gives the number and percentage of papers authored or co-authored by editor-authors, referee-authors, and author-editor or referee. Sometimes an article can be co-authored by one or more editor-author(s) and one or more referee-author(s). For this reason the sum of articles authored or co-authored by editor-authors and referee-authors need not be equal to the sum of articles by author-editors or referees. In addition, some editors can switch to referees or vice versa.

The mean percentage of articles authored or co-authored by editor- or referee-authors is 31.48% with a maximum of 57.89% in JEM and a minimum of 23.35 and 23.80% for CEP and IS, respectively. In four of the journals (JEM, CI, JRB, and CD), over half of the published articles have at least one journal-related author or co-author. There are no significant differences in the mean percentage of articles that have an editor-author or referee-author as author or co-author, not even excluding the journals that do not have a referee list. However, in the last case, the differences between the means (14.48 and 23.07%) for editors and referees, respectively) are close to statistical significance (F(1, 22) = 3.51, p = .07). If one considers the set of all the journals in the sample, there is a high correlation between the number of articles published by each journal and the number of articles authored or co-authored by editor-authors and referee-authors.
TABLE 5. Journals in which the number of articles authored by editor-authors is above average.*

<table>
<thead>
<tr>
<th>Journal</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPM</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JEP</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MECD</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPR</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The number of editor-authors is shown by the amount of articles each one published.

TABLE 6. Total page number of articles authored or co-authored by journal-related authors (editors or referees) and other authors.*

<table>
<thead>
<tr>
<th>Journal</th>
<th>N (%)</th>
<th>N (%)</th>
<th>N (%)</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BJEP</td>
<td>1(1.02)</td>
<td>126(18.29)</td>
<td>556(80.69)</td>
<td></td>
</tr>
<tr>
<td>CD</td>
<td>433(13.30)</td>
<td>1,324(40.68)</td>
<td>1,498(46.02)</td>
<td></td>
</tr>
<tr>
<td>CEJ</td>
<td>91(11.65)</td>
<td>76(9.73)</td>
<td>614(78.62)</td>
<td></td>
</tr>
<tr>
<td>CI</td>
<td>66(10.84)</td>
<td>321(52.71)</td>
<td>222(36.45)</td>
<td></td>
</tr>
<tr>
<td>CSJ</td>
<td>10(1.66)</td>
<td></td>
<td>594(98.34)</td>
<td></td>
</tr>
<tr>
<td>EP</td>
<td>22(3.01)</td>
<td>137(18.72)</td>
<td>573(78.28)</td>
<td></td>
</tr>
<tr>
<td>EPM</td>
<td>238(11.72)</td>
<td></td>
<td>1,792(88.28)</td>
<td></td>
</tr>
<tr>
<td>IS</td>
<td>3(0.96)</td>
<td></td>
<td>309(99.04)</td>
<td></td>
</tr>
<tr>
<td>JCP</td>
<td>221(24.58)</td>
<td>45(5.00)</td>
<td>633(70.41)</td>
<td></td>
</tr>
<tr>
<td>JEE</td>
<td>26(6.45)</td>
<td></td>
<td>377(93.54)</td>
<td></td>
</tr>
<tr>
<td>JEM</td>
<td>113(17.07)</td>
<td>281(42.45)</td>
<td>268(40.48)</td>
<td></td>
</tr>
<tr>
<td>JEP</td>
<td>262(25.44)</td>
<td>134(13.01)</td>
<td>634(61.55)</td>
<td></td>
</tr>
<tr>
<td>JRB</td>
<td>81(12.02)</td>
<td>291(43.18)</td>
<td>302(44.81)</td>
<td></td>
</tr>
<tr>
<td>JSP</td>
<td>257(33.55)</td>
<td>111(14.50)</td>
<td>398(51.96)</td>
<td></td>
</tr>
<tr>
<td>MECD</td>
<td>50(16.95)</td>
<td>11(3.73)</td>
<td>234(79.32)</td>
<td></td>
</tr>
<tr>
<td>PIS</td>
<td>90(11.36)</td>
<td></td>
<td>702(88.64)</td>
<td></td>
</tr>
<tr>
<td>RRQ</td>
<td>191(20.78)</td>
<td>193(21.00)</td>
<td>535(58.22)</td>
<td></td>
</tr>
<tr>
<td>SPR</td>
<td>457(40.12)</td>
<td></td>
<td>682(59.87)</td>
<td></td>
</tr>
</tbody>
</table>

* When an article is co-authored by editors and/or referees and/or other authors, it is credited to the different groups in the above order.

thored or co-authored by journal-related authors. The correlation coefficient is \( r = .743, p < .05 \). Again, the correlation coefficient is significant even if the two journals ranking first and second in the number of pages are removed.

In some journals the ratio of the number of articles authored or co-authored by editor-authors to the number of editor-authors or referee-authors is abnormally high. Thus, while this ratio is 1.400 for the whole sample of journals, for \( EPM, JEP, MECD, \) and \( SPR \) these means are 2.417, 1.833, 2.000, and 1.850 respectively. There seems to be a fairly prolific group of editor-authors in this group. Table 5 gives the number of editor-authors that published two or more papers in each of these four journals. As can be seen in this table, each journal is a different case. \( MECD \) has three editor-authors as author or co-author of two articles each. In two other journals (\( JEP \) and \( EPM \)) there are two editor-authors that are authors or co-authors of eight and 10 papers each. In the last journal, \( SPR \), most of the editor-authors are author or co-author of two or three papers each, although there is also an editor/author who is author or co-author of six papers.

Table 6 gives the total number and percentage of pages occupied by articles authored or co-authored by editor-authors, by referee-authors, and by other authors. When an article is co-authored by editors and/or referees and/or other authors, it is credited to the different groups in the above order. The percentage of pages of a journal occupied by articles authored or co-authored by journal-related authors varies from less than the 1\% (\( IS \)) to 63.50\% (\( CI \)) with a mean of 33.93\%.

Table 7 gives the mean distribution of pages of the articles published in each journal. Again, when an article is co-authored by editors and/or referees and/or other authors, it is credited to the different groups in the above order. Some ANOVAS have been calculated to ascertain if the mean number of pages of the articles published in each journal is statistically different at the level of .05. For some journals there are significant differences in the mean number of pages of the articles authored or co-authored by editor-authors, referee-authors, and those by
other authors. These differences never favor other authors over journal-related authors, except for IS journal. In this journal, only one editor is author of just one paper. The title of this article is “Some Reflections on Thinking Skills” and, although it is listed as a regular paper, in fact, is a short reflection on some topics that one of the authors (a well reputed psychologist) worked out some years ago. Taking these data into account, it seems that the statistical differences are not of practical significance and it seems advisable to discard them.

Articles authored or co-authored by editor-authors are significantly longer than the rest of the papers in JCP. In JSP articles authored or co-authored both by editor-authors and/or referee-authors are longer than articles authored by other authors. The most striking results correspond to CI, in which the articles authored or co-authored by referee-authors are nearly twice as long as those authored by editor-authors and/or other authors.

As stated in the objectives, it is interesting to relate the use of journals by journal-related authors and other authors to the impact factor of these journals. Pearson correlation coefficients among impact factor and indicators that measure the degree of journal use have been computed. Indicators that measure the degree of journal use by external referees were excluded from computations because for some journals no list of referees was found. Thus, the computation of correlation coefficients involving variables related to referees should be done using a reduced sample. It is well known that the correlation between variables tends to be artifactually decreased when the variables’ variances are lesser, as it is true for more reduced samples (Glass & Hopkins, 1984, p. 92). There are significant correlations between the impact factor and variables representing the percentage of articles by journal-related authors (r = .542, p < .05) and, thus, percentage of articles by other-authors (r = .542, p < .05), given that these variables are linked. Figure 1 shows the relationship between impact factor and percentage of articles authored by journal-related authors. There are other statistically significant correlation coefficients between variables representing the use of journals by journal-related-authors and other authors, but they are due either to the presence of extreme values (outliers) or either to the presence of other trivial correlations (for example, the significant positive correlation between impact factor and percentage of total pages of articles authored by journal-related authors is due to the relationship between this variable and the percentage of articles authored by journal-related authors). Given the relatively small number of cases, it seems unadvisable to compute multiple regression coefficients to avoid spurious “overfitting” of data.

Journals were classified according to their broadness in general journals (BJEP, CEP, CI, EP, IS, JEE, JEP, JSP, PIS, and SPR) and more specific journals. There are not statistically significant differences in indicators that measure the percentual use of the journal by journal-related-authors nor impact factor between the above groups.

Conclusions

A more profound study would have required taking into account a second degree of proximity between authors and journals. This second degree of proximity would have been implemented by also considering those authors who, without being editor-authors or referee-authors, had been co-authors of some other article with an editor-author or referee-author as journal-related authors, too. These authors would be journal-related authors in the second degree. This focus is similar to the one followed by Willis & McNamee (1990). In an even wider study it would also have been necessary to consider the use of a journal by authors that are related with journal-related authors by virtue of serving together as editors on one or more other journals. These authors would be considered journal-related authors in the third degree.

A possible interpretation of the data reported in this article could be as follows: If a research field is relatively small (maybe less than 10 journals) journal-related authors would figure prominently as authors of articles in journals they serve. However, Educational Psychology is a broad field. There are studies on publishing patterns in the field of Educational Psychology that include 40 (Walberg, Vukosavich, & Tsai, 1981), 50 (Walberg, 1990), and even 66 core journals (Smart, 1983). The
number of journals in this field is large enough to invalidate this alternate explanation. In addition, there are not significant differences in the use of journals by journal-related authors nor in impact factor between general journals and more specific journals.

Some of the indicators developed in this article show that the opportunities to publish longer articles in certain educational psychology journals are better for journal-related authors than for other authors. In three of the journals investigated, articles by editor-authors or referee-authors were significantly longer than articles by other authors: A surprising and unexpected finding. An possible explanation for this finding is that, sometimes, editors are not inclined to ask their co-editors or referees to downsize their papers substantially. The degree of journal use by journal-related authors varies. In some journals the competition by external authors to publish articles must be terrific, since over half of the pages are used by journal-related authors. The process of selecting papers is particularly important in the social and behavioral sciences. In this area the rejection rates range from 70 to 90% (Biggs, 1990; Cole, Simon, & Cole, 1988; Lindsey, 1988; Zuckerman & Merton, 1973) and there is a great paucity of space in which to publish (Beyer, 1978). However, there are some journals with a lesser use by journal-related authors.

There is a significant positive relationship between impact factor and the use of journals by journal-related authors as measured by percentage of articles by journal-related authors and percentage of pages of articles authored by journal-related authors. Thus, the use of journals by these very special kind of authors tend to correlate with the quality of the journal as measured by impact factor. The most obvious interpretation is that authors serving as editors or referees in Educational Psychology journals tend to increase the quality of these journals. A possible mechanism for the above is that high impact journals are successful because they manage to tie together a group of highly-qualified scholars. These scholars tend to act as editor, referee, and author. For example, authors can submit papers to journals they feel are the best, distinguished authors can be invited to join editorial boards of journals they respect, these authors can continue publishing in the same journal, and so on. Possibly the low impact journals, having few journal-related authors, tend to publish a fraction of articles that were rejected by the better journals (I owe this interpretation to two anonymous JASIS referees).

It would be interesting to study this relationship between use of journals by journal-related authors and impact factor in other areas, and in the same area, in other time-lags. The replication of the results reported in this article for other journal samples would have consequences in the process of academic publishing and in the evaluation of individual scientists for promotion and other purposes.

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