LETTERS TO THE EDITOR

Letter to the Editor from G.F. Templeton, B.R. Lewis and X. Luo

FROM: Gary F. Templeton
Mississippi State University

Bruce R. Lewis
Wake Forest University

Xin Luo
Virginia State University

AUTHOR AFFILIATION INDEX: RESPONSE TO FERRATT ET AL.

ABSTRACT

Ferratt, Gorman, Kanet and Salisbury present a new way to rank journals based on the degree to which authors affiliated with high-ranking institutions publish in those journals. We respond to their work by offering another perspective on ranking journals in the IS field. By using institutional journal lists, we present rankings that portray the way IS journal standing is actually applied to inform academic decisions involving faculty and administrative evaluation.

Keywords: Journal rankings

I. INTRODUCTION

Ferratt, Gorman, Kanet and Salisbury [2007] offer a new way to rank journals by offering the Author Affiliation Index (AAI). Their AAI measure addresses an important omission in prior conceptualizations of journal quality, such as opinion surveys and citation counts. They score journals based on the percentage of articles published by authors affiliated with high-quality institutions. In doing so, Ferratt, et al., demonstrate a new and logical approach that many research communities will find useful.

We also have a new and different way to rank journals in MIS. This letter presents a study we conducted that uses institutional journal lists as the basis for scoring journals. First, we assert that journals and journal assessment studies are important artifacts in IS and other disciplines. Second, we demonstrate a practice-based approach to journal ranking that is unique in the IS field. Third, we present findings of our analysis and compare them to those of four other ranking studies, including Ferratt, et al. [2007]. Finally, we conclude that there are a wide range of options for journal ranking and that practice-based measures should be considered for inclusion in a balanced scorecard of journal assessment when making academic decisions.

II. JOURNAL IMPORTANTANCE

Academic peer-reviewed journals are important to the advancement of a global academic community - research findings contained in journals are instrumental in forming the identity of a discipline [Lowry, Romans and Curtis, 2004]. Journals provide significant academic influences, such as shaping and directing discourse, disseminating knowledge, establishing paradigms, and

testing theories [Kuhn, 1962]. Studies that rank journals are important for faculty, institutions, and scholarly communities. They are instrumental in the establishment of faculty and institutional reputations. For faculty, journal publications represent the culmination of prolonged and intense study experiences and are the media for disseminating findings to the public. Institutions use journal publications to determine organizational productivity and to evaluate faculty performance. Scholarly communities use journal publications as formal representations of accepted knowledge and to identify experts in the field.

Rainer and Miller [2005, p. 92] noted the significance of journals and concluded that "the importance of journals in a discipline naturally leads to the question of relative journal quality." Chua, et al. [2002, p. 189] added that "a high quality publication is clearly more valuable to the IS research discipline than a low quality one." Given the importance of relative journal value, it is important for research communities to arrive at acceptable approaches to distinguish between high and low quality publications. Studies that rank journals are an empirical means to determine the relative value of publications in the field. Benefits of IS journal ranking studies include: 1) serving as guides that research community members can use to find and publish leading research, 2) providing research-based information that encourages journal improvement, 3) informing the budget allocation decisions made by institutional libraries, and 4) supporting the evaluation of faculty and institutional output [Lowry et al., 2004]. Consequently, studies presenting rankings of IS journals have been published every two to three years since the 1980s [Hamilton and Ives, 1983; Mylonopoulos and Theoharakis, 2001; Walstrom and Hardgrave, 1995].

III. A PRACTICE-BASED APPROACH

In the long tradition of IS journal rankings, the method reported herein is the first to utilize data on the way journals are officially graded in academic institutions. The primary significance of this research derives from its practical foundation, which captures the relative standings of IS journals as they are *actually used* in academic assessments.

DATA

The data used to rank journals in this study were collected from the graded journal lists of schools that offer doctoral programs in Information Systems. Van Fleet, et al. [2000] noted that "a list provides an explicit measure of how a department values research outlets" [p. 340]. As such, institutional lists reflect the state of journal standing in academic practice. Since faculty at research schools are strongly encouraged to publish as an integral part of their program's mission, it follows that they would be familiar with the journals in the field. Further, larger departments, such as those at research schools, are more likely to utilize journal lists [Van Fleet et al., 2000]. Based on these reasons, we issued a request for graded journal lists from the institutions on the listing of 'Doctoral Programs in Information Sciences' at the ISWorld web site. A total of 157 schools were solicited and 81 (52%) responded. Of these responses, 44 reported that they do not use internally-generated lists for evaluation purposes (five of these noted that they used externally generated lists). Thirty-five of the responses submitted their active journal lists; two respondents declined to release their list because they were prohibited from doing so by institutional policy. The schools that provided their lists represented an international sample, although they were predominantly from the U.S. Based on these responses, we estimate that approximately 54% of the target population (institutions listed as IS doctoral granting schools at ISWorld) do not have formal, internally developed journal lists. Conversely, we estimate that approximately 46% from the ISWorld listing make use of journal lists. Thus, our sample of 35 school lists represents approximately 49% of the schools on the ISWorld listing with IS doctoral programs that do make use of formal journal lists. We are confident that, with a sample of almost 50% of the doctoral-granting schools that employ lists, our findings are representative and generalizable, as noted by Van Fleet, et al. [2000], who received a similar sample size in a study of management journals based on school lists.

SCORING

Since the number of graded categories in use differed among the schools in our sample, a mean percentile score was computed for each journal at each school, based on its assignment in the school's graded categories. These scores were based on the number of categories at the school, the total number of journals in that school's categories, and the category placement of the given journal. The mean percentile scores were averaged across the schools in our sample to arrive at a composite score for each individual journal. In addition, we recorded the percent of schools listing each journal in any of their graded categories and the percent of schools listing the journal in their highest category. These category-based scores estimate how the journals are actually valued in practice.

SAMPLE

One methodological dilemma in arriving at journal rankings, especially in multidisciplinary fields such as IS, is the question of what journals to include in the sample. Peffers and Tang [2003] argue that IS journals may be categorized as either 'pure' (mainstream-IS) or 'allied' (related-field) journals. Further, they argue that journals should be segregated by type when ranking IS journals. They empirically produced what we believe to be a compelling list of IS-only research journals in their study. Accordingly, we followed their lead by employing a journal basket that included only the journals enumerated in Table 3 (IS Research Journals) of their article. In total, our study encompassed 77 Peffers and Tang [2003] IS journals listed by at least one of the schools in our sample.

III. FINDINGS

Based on the aforementioned average mean percentile scoring, the final IS journal rankings are reported in Table 1, arranged from highest to lowest. Also included in Table 1 is the percentage that each journal was listed by the schools in our sample and the percentage of schools that listed the journal in their top category. Although our journal basket incorporated 77 IS research journals, only the top 25 journals (that were categorized by at least a fifth of the schools in our sample) are presented in Table 1. The ranks shown in Table 1 estimate the relative standing of IS journals as they are used in academic practice.

COMPARISON OF FINDINGS

As noted, this study is one in a long stream of IS journal rankings. Consequently, it is instructive to compare the results of this study with other recent studies in the stream. For the 25 ranked journals from our study, Table 2 presents the rank scores from ours as well as four recently published studies. Each approach was based on uniquely different data sources. Ferratt, et al. [2007] produced a ranked list based on the percentage of publishing authors affiliated with a basket of high-quality academic institutions. The ranked list produced by Rainer and Miller [2005] was a result of calculating a weighted mean of rankings from nine individual studies published from 1991 to 2003 (Note: seven of these studies were based on opinion surveys and two on citation scores). The Barnes [2005] rankings were derived from citation impact scores, and Peffers and Tang [2003] used the opinion survey method.

Table 1: Journal Rankings from School Lists

Rank	Journal	Average Mean Percentile Score	Percent of Schools Listing in Any Category	Percent of Schools Listing in the Top Category
1	*MIS Quarterly*	80.9	100.00%	100.0%
2	*Information Systems Research*	78.4	97.14%	97.1%
3	*Journal of Management Information Systems*	71.2	97.14%	77.1%
4	*Decision Support Systems*	41.3	77.14%	11.43%
5	*Information & Management*	40.2	82.86%	14.29%
6	*European Journal of Information Systems*	36.4	71.43%	8.57%
7	*Journal of Strategic Information Systems*	28.2	62.86%	5.71%
8	*DATA BASE*	28.1	60.00%	5.71%
9	*Journal of the AIS*	28.0	51.43%	8.57%
10	*ACM Transactions on Information Systems*	27.2	37.14%	20.00%
11	*Information & Organization*	25.1	42.86%	17.14%
12	*Information Systems Journal*	25.0	51.43%	5.71%
13	*Information Systems*	23.4	37.14%	14.29%
14	*International Journal of Ecommerce*	22.0	42.86%	5.71%
15	*International Journal of Human Computer Studies*	17.8	37.14%	2.86%
16	*The Information Society*	16.8	37.14%	5.71%
17	*Journal of Information Technology*	16.3	40.00%	5.71%
18	*Organizational Computing & Ecommerce*	14.6	37.14%	2.86%
19	*Journal of the ACM*	14.0	22.86%	8.57%
20	*Journal of Database Management*	13.5	25.71%	2.86%
21	*Information Technology and People*	13.0	34.29%	5.71%
22	*Communications of AIS*	12.7	34.29%	0.00%
23	*Journal of Organizational & End User Computing*	10.6	34.29%	0.00%
24	*Journal of Computer Information Systems*	10.5	25.71%	0.00%
25	*Information Resources Management Journal*	10.4	31.43%	0.00%

Table 2: Rankings Comparisons

Journal	Institutional Lists	AAI	RM	B	PT
MIS Quarterly	1	2	1	2	1
Information Systems Research	2	1	3	5	2
Journal of Management Information Systems	3	4	4	20	3
Decision Support Systems	4	8	5	12	7
Information & Management	5	9	7	4	5
European Journal of Information Systems	6	10	8	9	4
Journal of Strategic Information Systems	7	7	13	16	16
DATA BASE	8	5	17	17	8
Journal of the AIS	9	3			9
ACM Transactions on Information Systems	10		6		39
Information & Organization	11				28
Information Systems Journal	12		18	18	10
Information Systems	13				21
International Journal of Ecommerce	14			13	12
International Journal of Human Computer Studies	15		16	14	42
The Information Society	16			15	49
Journal of Information Technology	17				40
Organizational Computing & Ecommerce	18			21	34
Journal of the ACM	19		11	6	17
Journal of Database Management	20				14
Information Technology and People	21				15
Communications of AIS	22	6	10		6
Journal of Organizational & End User Computing	23				22
Journal of Computer Information Systems	24			23	13
Information Resources Management Journal	25		32		11

Legend: AAI = Author Affiliation Index [Ferratt et al., 2007]; B = Barnes [2005]; PT = Peffers and Tang [2003]; RM = Rainer and Miller [2005]

While comparing the results of these studies is a non-scientific task (there are differing journal sample sizes and too many missing data points), we can make some general inferences. First, there appears to be general agreement between the five ranking perspectives shown. Among the top ten journals resulting from our analysis, nine also exist in Ferratt et al. [2007], seven overlap with Rainer and Miller [2005] and eight overlap with Peffers and Tang [2003].

Significant disparities between the studies also exist. Among top ten journals, Barnes [2005] overlapped least with the other studies (four with our analysis). Most notably, he ranks *JMIS* 20th, which deviates substantially from the other studies. Other anomalies are the premium that AAI [Ferratt et al., 2007] gives to *JAIS,* and our analysis discounts *CAIS* relative to the other studies. Clearly *JMIS* is more highly valued in practice than citation scores would indicate. This observation is reinforced by the recent calls for *JMIS* to be universally recognized as an 'A' journal [Dennis, Valacich, Fuller and Schneider, 2006; Kozar, Larson and Straub, 2006]. These comparisons show that alternatives for ranking journals are diverse, and the one presented in this letter offers a unique perspective.

IV. CONCLUSIONS

We believe that the IS discipline is on the verge of leading a 'scientometric revolution'. For too long, scientometrics has been mired in 'normal science' [Kuhn, 1962], with limited measures and scoring perspectives for assessing journal quality. Based on informal conversations, we understand that at this time, at least a half-dozen journal ranking articles are currently under review among IS journals. Further, practical solutions such as the AAI offer a wide range of hypothetical options for evaluating journals, articles, and subsequently, faculty and institutions involved in IS research. We believe that research such as ours and that by Ferratt, et al., will prove to be useful contributions as IS and other research communities move toward the development of a more 'balanced scorecard' of measures for journal assessment.

The approach undertaken in this study resulted in a new perspective on ranking IS research publication outlets. By employing a sample of journal lists actually used in the field, the rankings reported herein provide a practice-driven representation of IS journal stature and uniquely reflect the guidelines that govern the publishing activities of faculty in the IS discipline.

Nonetheless, some caveats are worthy of note. First, inclusion in our study was dependent upon whether or not the journal was categorized by any member of our institution sample. Even though our journal basket contained 77 journals, many worthy IS journals were not incorporated in the study. Second, our sample included only schools that offered doctoral programs. Albeit internally-generated journal lists are more prevalent at research schools, inclusion of a representative sample of journal lists from non-doctoral schools should fittingly broaden the scope of the data. Lastly, while we had a large sample of the schools with official journal lists, it should be noted that only about half of IS doctoral granting schools actually utilize lists.

While conducting this research, we encountered a methodological anomaly that should be addressed in subsequent research, as this and other recent studies have done [Peffers and Tang, 2003; Rainer and Miller, 2005]. The makeup of the journal basket in a given study can hinder the ability to make comprehensive comparisons between studies. Given the ongoing expansion of the number of IS journals in existence, the need to arrive at an acceptable definition for the 'IS journal basket' is emerging. It is our judgment that the journal basket in all assessments of IS journal quality should include only 'pure' IS journals. Further, we suggest that the Peffers and Tang [2003] definition should become the norm in the IS journal ranking stream. This kind of definitional standardization will greatly enhance the prospects for longitudinal assessments of relative IS journal quality. Indeed, the IS discipline has matured to the point that it is now appropriate to focus on the broad set of IS-centric journals in investigating relative journal standing.

REFERENCES

Barnes, S.J. (2005) "Assessing the Value of IS Journals," *Communications of the ACM*, (48)1, pp. 110-112.

Chua, C. Cao, L. Cousins, K. Straub, D.W. (2002) "Measuring Researcher Production in Information Systems," *Journal of the Association for Information Systems*, (3)6, pp. 145-215.

Dennis, A.R. Valacich, J.S. Fuller, M.A. Schneider, C. (2006) "Research Standards for Promotion and Tenure in Information Systems," *MIS Quarterly*, (30)1, pp. 1-12.

Ferratt, T.W., Gorman, M.F., Kanet, J.J., and Salisbury, W.D. (2007) "IS Journal Quality Assessment Using the Author Affiliation Index," *Communications of the ACM*, (19), pp. 710-724.

Hamilton, S. and Ives, B. (1983) "The Journal Communication System for MIS Research," *Database*, (15)2, pp. 3-14.

Kozar, K. A., Larson, K. R. and Straub, D. W. (2006) "Leveling the Playing Field: A Comparative Analysis of Business School Journal Productivity," *Communications of the Association for Information Systems*, (17), pp. 524-538.

Kuhn, T.S. (1962). The Structure of Scientific Revolutions. University of Chicago Press, Chicago.

Lowry, P.B., Romans, D., and Curtis, A. (2004) "Global Journal Prestige and Supporting Disciplines: A Scientometric Study of Information Systems Journals," *Journal of the Association for Information Systems*, (5)2, pp. 29-77.

Mylonopoulos, N. and Theoharakis, V. (2001) "Global Perceptions of IS Journals," *Communications of the ACM*, (44)9, pp. 29-33.

Peffers, K. and Tang, Y. (2003) "Identifying and Evaluating the Universe of Outlets for Information Systems Research: Ranking the Journals," *Journal of Information Technology Theory and Application*, (5)1, pp. 63-84.

Rainer, R. K. and Miller, M. D. (2005) "Examining Differences across Journal Rankings," *Communications of the ACM*, (48)2, pp. 91-94.

Van Fleet, D.D., McWilliams, A., and Siegal, D.S. (2000) "A Theoretical and Empirical Analysis of Journal Rankings: The Case of Formal Lists," *Journal of Management*, (26)5, pp. 839-61.

Walstrom, K.A., Hardgrave, B.C., and Wilson, R. L. (1995) "Forums for Management Information Systems Scholars," *Communications of the ACM*, (38)3, pp. 93-107.

ABOUT THE AUTHORS

Gary F. Templeton is an Assistant Professor of MIS in the College of Business and Industry at Mississippi State University. His research interests include organizational learning, IS scientometrics, and novel information technologies. He received his Ph.D., Masters in MIS and M.B.A. from Auburn University.

Bruce R. Lewis is Associate Professor and Cooper Fellow in Information Systems in the Calloway School of Business at Wake Forest University. His research interests include IS construct development, IT infrastructure, and IS scientometrics. He received his Ph.D. in MIS from Auburn University and M.S. in Statistics from New Mexico State University.

Xin Luo is an Assistant Professor of CIS in the School of Business at Virginia State University. His research interests include IS security, M/E-commerce and global IT management. He received his Ph.D. and M.S. in IS from Mississippi State University and M.B.A. from the University of Louisiana at Monroe.