

NCA

NATIONAL COMMUNICATION
ASSOCIATION

IMPACT FACTORS,
JOURNAL QUALITY, AND
COMMUNICATION JOURNALS

Introduction

In 1955, a “documentation consultant” from Philadelphia named Eugene Garfield put forth a novel idea for a “bibliographic system for science literature” with the goal of eliminating the “uncritical citation of fraudulent, incomplete, or obsolete data.” In an article in *Science*, Garfield’s proposal referenced the power and benefits of citation systems in other disciplines (as law’s *Shepard’s Citations*). While holding out great hope for his proposed citation index to help in the conduct and presentation of scientific research (“it will help in many ways”), Garfield warned nonetheless that “no one should expect it to solve all our problems.”¹



By 1972, Garfield had collected enough citation data to publish a discussion of the role of citation analysis for what he termed “journal evaluation.” Beyond ensuring the citation of good scientific data, Garfield’s index was now useful, he claimed, to librarians as they made decisions about journal subscriptions, to individual scientists as they made decisions about which journals to read, and to journal editors as they measured the success of their journals. In short, the citation index had become, in seventeen years, a metric for assessing journal quality.²

Garfield’s citation indexing at the Institute for Scientific Information (ISI) expanded quickly beyond the physical and life sciences to include journals from many disciplines. Along with publishing the Science Citation Index, ISI (owned now by Thomson-Reuters) also publishes the Social Science Citation Index (SSCI) that includes indexes of over 4,500 journals from 1900 to the present. From the data collected in the various citation indexes, Thomson-Reuters also publishes the Journal Citation Reports (JCR) for journals in the physical and life sciences (the JCR Science Edition) as well as the social sciences (the JCR Social Science Edition). Organized by discipline, the JCR Social Science Edition now includes journals from 56 separate disciplines and sub-disciplines. Among those 56 disciplines is Communication.



Recognizing the growing importance of the ISI’s SSCI and JCR, the National Communication Association’s Publications Committee, in late 2005, promised to the association’s membership that it would educate itself about impact factors and their importance for NCA’s journals. These disciplinary leaders recognized that “ISI computations can be used by administrators and by promotion and tenure review committees to determine the ‘most important’ journals in the field and to evaluate the relative significance of different publication outlets.”³ NCA’s Publications Committee also acknowledged the efforts underway by a committee of the Council of Communication Associations (CCA), led by Linda Putnam, to increase the number of Communication journals included in the ISI SSCI/JCR. Since 2007, the CCA has hosted at least

¹ Eugene Garfield, “Citation Indexes for Science,” *Science* 122, no. 3159 (1955): 108-111. See also Eugene Garfield, “Commentary: Fifty Years of Citation Indexing,” *International Journal of Epidemiology* 35 (2006): 1127-1128.

² Eugene Garfield, “Citation Analysis as a Tool in Journal Evaluation,” *Science* 178, no. 4060 (1972): 471-479.

³ David Zarefsky, “Publications Board Studies ISI Database and ‘Impact Factor’ Analysis,” *Spectra* 41.12 (2005): 1, 6.

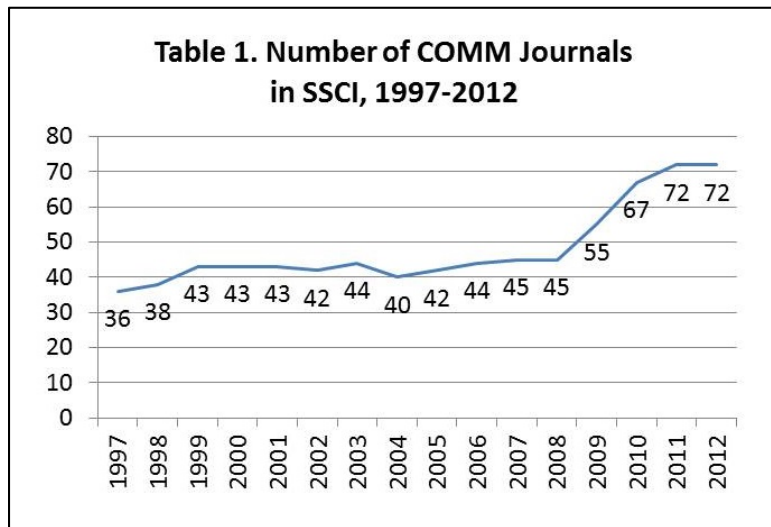
two meetings that included presentations from James Testa, the senior director for Educational Development and Publisher relations at Thomson-Reuters (2007, 2012), and Linda Putnam’s CCA committee has successfully sought to increase the number of Communication journals covered by SSCI/JCR. This topic continued to be salient to NCA over subsequent years in part due to ongoing conversations with CCA, and an earlier version of this report was presented to CCA with a focus on their member organizations. Another version, with a multi-disciplinary focus, was presented at a meeting of the American Council of Learned Societies.

Specifically, this report first details the current range of coverage of Communication journals in the SSCI/JCR and the manner that impact factors are calculated. Second, it considers the relative aggregate place of the Communication journals indexed in comparison to other disciplines. Third, the report discusses concerns and objections about the role and influence of impact factors and, finally, the report discusses emerging alternative indexes and metrics for measuring journal quality and impact.

Communication Journals and the SSCI/JCR

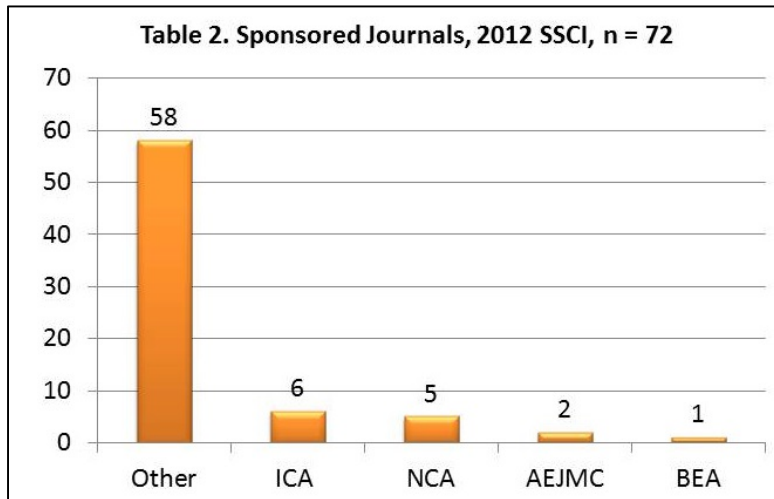
All data contained in this report about impact factors and journal citation information comes from the current ISI “Web of Knowledge” Journal Citation Reports Social Science Edition. This database includes SSCI/JCR data from 1997-2012.

Perhaps due to the efforts of several parties, the overall number of Communication journals included in the ISI SSCI/JCR has increased considerably since 1997. In 1997, 36 Communication journals were included in the JCR Communication subject category—by 2012 that number has doubled to 72 (see Table 1).

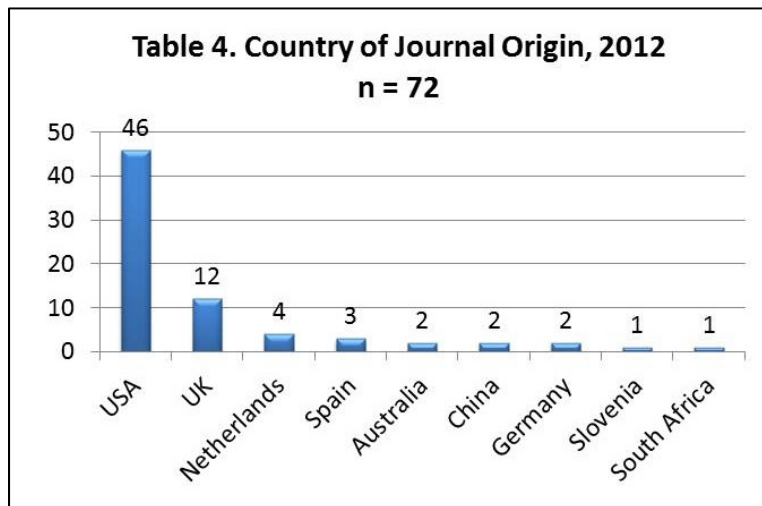


A close look at the Communication journals that have been admitted to the SSCI/JCR reveals much about the manner and emphases of the ISI journal selection process. First, most of the 72 journals now categorized by SSCI/JCR are sponsored and/or published by an array of organizations and entities. Table 2 reveals that just 14 of the 72 SSCI/JCR journals are published

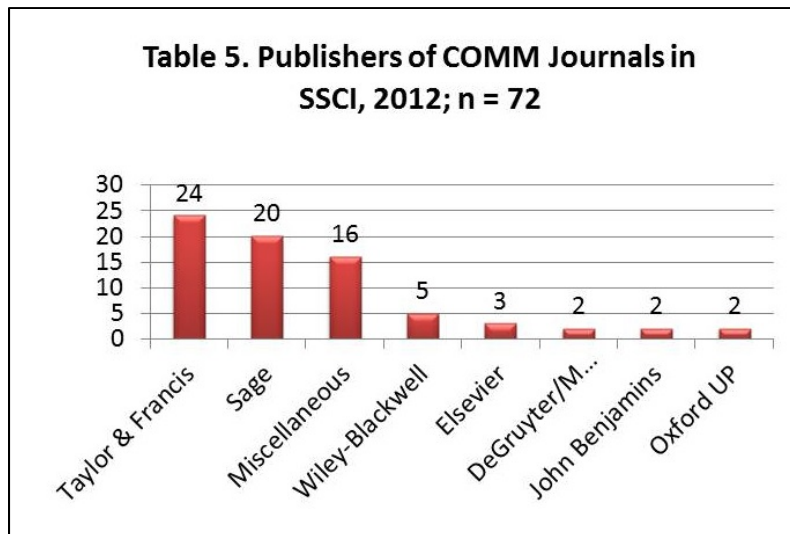
under the auspices of the largest Communication associations, or 19% of the total number of Communication journals covered by SSCI/JCR.



One criteria used by ISI/ Thomson-Reuters in determining journal eligibility is the international focus of the journal. 64% of the journals included in the Communication subject category are based and/or published in the United States. Many of the newer admissions to the Communication category are from international sources, including *Comunicacion y Sociedad*, *Ecquid Novi-African Journalism Studies*, and *Estudios Sobre el Mensaje Periodistico*, Table 4 highlights the country of origin for the 72 journals in the Communication subject category.



61% of the Communication journals in SSCI/JCR are published by either Sage or Taylor & Francis with another five journals (sponsored by ICA) published by Wiley-Blackwell for a total of 49 journals published by these large publishing houses. Table 5 indicates the publisher of record for the 72 Communication subject category journals.



Impact Factors

Arguably the most widely reported statistic emanating from the SSCI/JCR is the journal “impact factor.” Journal impact factors are reported yearly by ISI/Thomson-Reuters and they are used as markers of journal impact and quality by publishers, scholars, disciplinary associations, and other interested parties. Importantly, yearly impact factors are just one of many different journal citation statistics released by the JCR. Others include a five-year impact factor, the total number of citations to a journal, the total number of articles published in the journal, the immediacy index (number of citations in the same year as the JCR), and Eigenfactor scores (impact factors that account for highly cited journals as a variable).

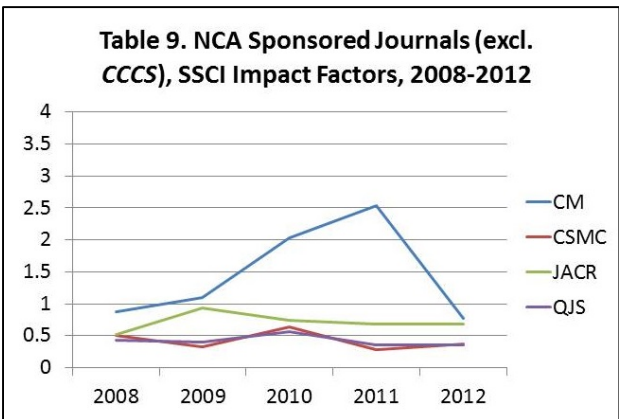
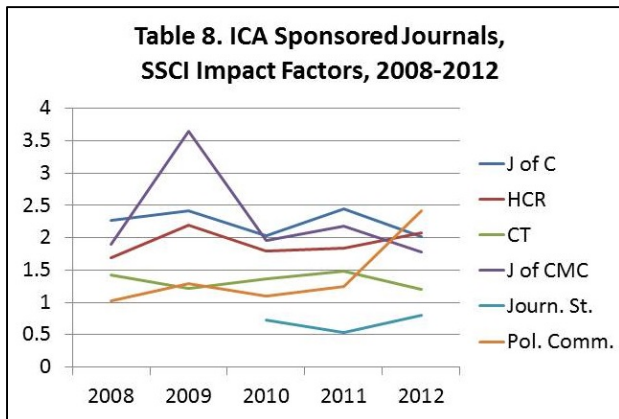
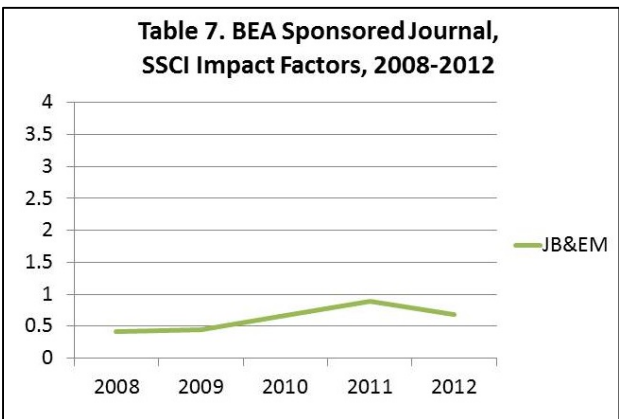
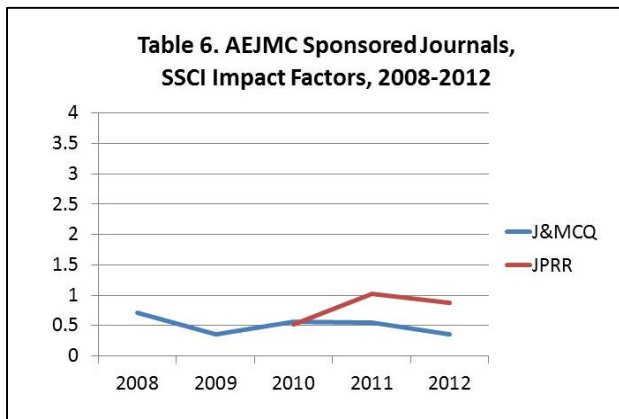
A journal’s impact factor is “the average number of times articles from the journal published in the past two years have been cited in the JCR year.” The impact factor is calculated by “dividing the number of citations in the JCR year by the total number of articles published in the two previous years. An impact factor of 1.0 means that, on average, the articles published one or two year ago have been cited one time.” Moreover, as ISI indicates, “The citing works may be articles published in the same journal. However, most citing works are from different journals, proceedings, or books indexed by Web of Science.”

By way of illustration, consider the calculation of the 2012 impact factor for *Communication Theory (CT)*. In 2012, there were eleven citations from *CT* in 2011 and 33 citations from *CT* in 2010 for a two-year total of 49 citations (in 2012) to *CT*. The total number of articles published by *CT* in 2010 and 2011 was 41, yielding an impact factor for 2012 of 1.195, or 49 divided by 41. Of the 72 Communication journals in SSCI/JCR, *CT* ranked 22nd. The Communication subject category’s impact factors in 2012 ranged from a high of 2.415 (*Political Communication*) to a low of 0.063 (*Estudios Sobre el Mensaje Periodistico*).

Tables 6-9 summarize five years of impact factors for journals published by large Communication associations (NCA, ICA, AEJMC, and BEA). These tables are instructive. They reveal the overall impact factor trends for each of the 14 journals sponsored or published by

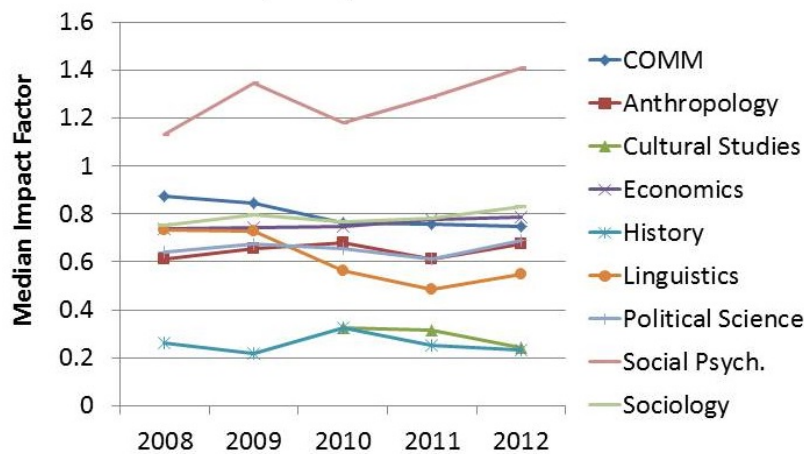
these organizations or their divisions. They also reveal that impact factors are generally higher for journals that publish predominantly social scientific research. For example, the oldest journal publishing Communication scholarship, the *Quarterly Journal of Speech*, has never achieved an impact factor of 1.0 or better, while relatively new journals, like *Human Communication Research* or the *Journal of Computer-Mediated Communication* regularly have impact factors above 2.0. The main distinction between these journals is the nature of the scholarship published there—humanistic and critical scholarship in *QJS* and social scientific scholarship in *HCR* and *JCMC*.

These tables also show that impact factors can fluctuate fairly dramatically from year to year. The impact factor for the *Journal of Public Relations Research*, for instance, nearly doubles in one year, from .512 in 2008 to 1.022 in 2009. This may be because the journal is new to SSCI/JCR, but similar fluctuations are present in other journals. Because of the impact factor formula’s relative susceptibility to small shifts in citations or article numbers, swings in a journal’s impact factor are frequent. In 2009, for instance, the articles published in *Communication Monographs* generated 50 citations in 2010, 110 citations in 2011, and 190 citations in 2012, resulting in a dramatic spike in the journal’s impact factor for 2010 and 2011, and a subsequent drop in 2012 even as the five year impact factor remains high. As a result, the impact factor for *CM* dramatically shifted, a shift that says little to nothing about the quality or impact of the journal itself over time.



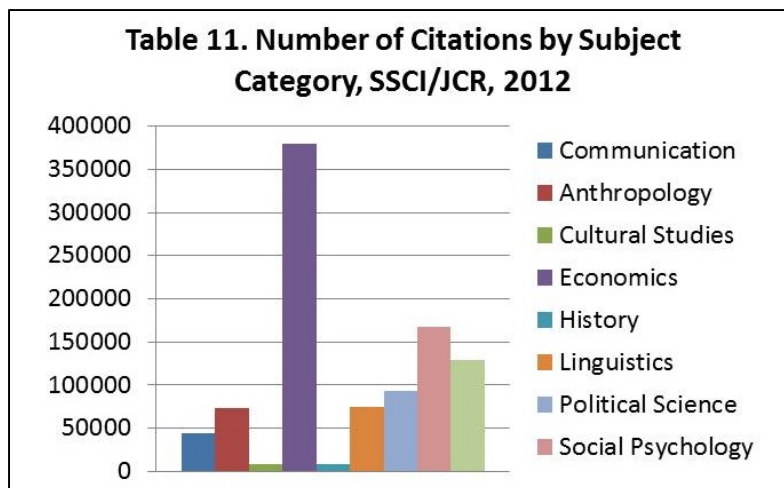
Among the wealth of data available in the yearly report from ISI/Thomson-Reuters is median impact factor data about individual subject categories (disciplines). Not only does the SSCI/JCR indicate the impact factors for each individual journal, it also offers overall impact factor data for all the journals categorized within an individual subject category. For the purposes of this report, subject category impact factor data were gathered for the past five years for Communication as well as related disciplines: Anthropology, Cultural Studies, Economics, History, Linguistics, Political Science, and Social Psychology. Table 10 displays the median impact factor data from SSCI/JCR for each of these subject categories from 2008-2012.

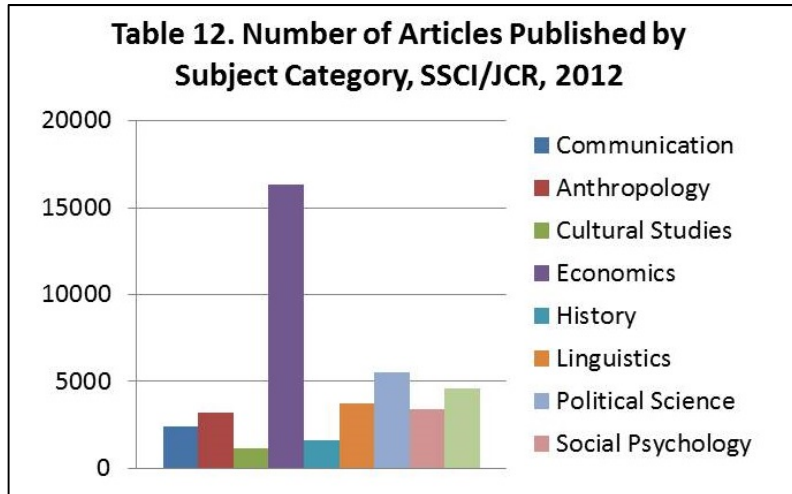
Table 10. SSCI/JCR Median Impact Factors by Discipline, 2008-2012



With the exception of the Social Psychology subject category, Communication journals score quite well over time in their median impact factors. The Communication median impact factors for almost every year are equal to or better than most of the traditionally social scientific disciplines (Anthropology, Economics, Linguistics, and Political Science). Communication journals' median impact factors are considerably higher than Cultural Studies and History, subject categories that are arguably more humanistic and critical in focus.

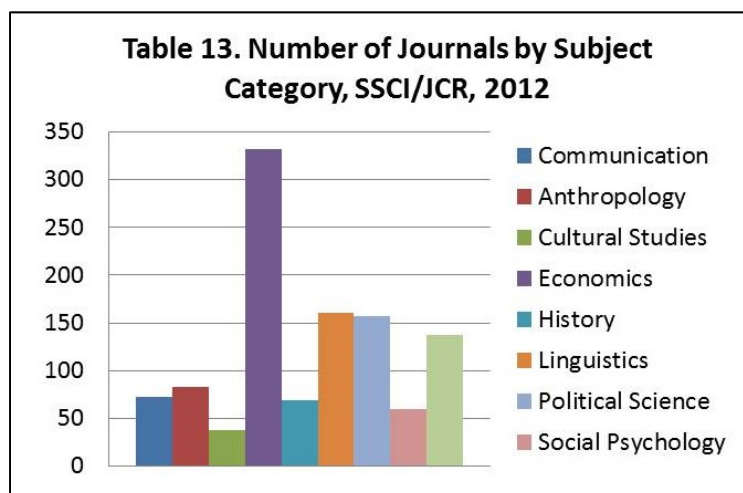
Table 11. Number of Citations by Subject Category, SSCI/JCR, 2012





Because of the formula used by ISI/Thomson-Reuters to calculate a journal’s impact factor, other useful variables to appreciate across subject categories is the number of citations over time and the number of articles published in each subject category.

Tables 11 and 12, above, provide data about the number of citations by subject category and the number of articles published by subject category. These tables reveal that Communication in 2012 is among the smaller subject categories both in terms of overall number of citations and articles published. Though considerably higher than both Cultural Studies and History on these measures, Communication still lags somewhat behind Anthropology, Linguistics, Political Science, and Sociology on numbers of citations and articles published. Critically, though, these figures are derived from the numbers of journals included in the SSCI/JCR individual subject category. Table 13 provides the specific number of journals included in the database by subject category for 2012. This data reveal that Communication is closest to Anthropology and History in the number of journals included in the database, and is far behind Linguistics, Political Science, and Sociology. Economics as a subject category is in a class by itself on all of these measures—except median impact factor, where it ranks only slightly above Communication in 2012 (see Table 10).



Concerns about Impact Factors

For Communication and other disciplines, the rise of impact factors and journal citation analysis is palpable and of concern to some. Their objections are varied, sometimes idiosyncratic to a discipline, and often complicated. This report reviews the more salient concerns and objections to the uses of impact factors and the potential, often unintended, consequences of an over-reliance on the impact factor as a measure of journal and subject category (disciplinary) quality.

1) *Impact Factors measure citation patterns and practices, not impact or quality.*

One objection made against the impact factor as a measure of journal quality, or a tool for journal evaluation, is that because of the manner of calculation for the impact factor, the resulting statistic really only measures citation patterns, not impact. Recall that impact factors only count citations, and do not assess the nature or manner of citation. Every citation is equal in this formulation, therefore, regardless of the value or contribution that the citation makes to the actual study where it was cited, as long as it occurs within the appropriate time frame specified for the impact factor calculation.

This objection was clearly demonstrated in the analysis offered by Beatty, Feeley, and Dodd in 2011. Their study compared a sample of issues of *Human Communication Research* and *Communication Monographs* published between 2007 and 2009. Their content analysis reveals that “despite higher impact factors for *HCR*, there were not more citations to *HCR* than *CM* as sources of conceptual or methodological influence in articles appearing in *HCR* or *CM*.” Their analysis also revealed that even with *HCR*’s higher impact factor, *CM* articles cited offered “comparatively greater theoretical impact.” Thus, these authors conclude “journal impact factors are generally uninformative about how the work published in a journal affects progress in a discipline,” and “journal impact factors do not accurately represent the intellectual influence of journals or the essays published in them.”⁴

2) *Impact Factors are improperly used in a variety of ways.*

Beatty and Feeley note, in 2012, “the allure of an objective, single digit proxy for journal quality,” and find the attending use of journal impact factors to measure journal quality and the impact of individual example of research “understandable,” even as they question the validity of this use of impact factors.⁵ Increasingly, scholars and scientists are objecting to the use of impact factors to assess or judge quality of research and the quality of journals.⁶

⁴ Michael J. Beatty, Thomas Hugh Feeley, and Melissa D. Dodd, “Journal Impact Factors or Intellectual Influence? A Content Analysis of Citation Use in *Communication Monographs* and *Human Communication Research* (2007-2009),” *Public Relations Review* 38 (2012): 174-176, emphasis added. See also George Lazaroiu, “The Reliability of Impact Factor as an Indicator of Journal Quality,” *Linguistic and Philosophical Investigations* 11 (2012): 115-122

⁵ Michael J. Beatty and Thomas Hugh Feeley, “Journal Impact Factors: Uses and Misuses,” *Spectra* 48.1 (2012): 16.

⁶ Shah Ebrahim refers to this phenomenon as an evitable result of the law of unintended consequence. See Shah Ebrahim, “Entelechy, Citation Indexes, and the Association of Ideas,” *International Journal of Epidemiology* 35 (2006): 1117-1118.

Cameron highlights “a current trend to use this quantitative data as a means for evaluating the performance of researchers in academic institutions, which can then be tied to promotion.” He cites evidence and anecdotes from around the world to demonstrate the uses of impact factors in cases of promotion and tenure: universities in the U.K. that demand their biologists publish in journals with impact factors of five or better; a Spanish university that determined promotion cases by “multiplying the number of articles published with the impact factor”; and studies that reveal that impact factors were used in the evaluation of over 5,000 academic departments at U.S. universities.⁷

The misuse of impact factors as a shorthand, objective barometer of individual research quality for promotion, tenure, funding, and other purposes is not without its critics. Even Eugene Garfield, in 1993, argued that “while citation data create new tools for analyses of research performance, it should be stressed that they supplement rather than replace other quantitative-and qualitative-indicators.”⁸ Similarly, a joint committee on quantitative assessment of research in mathematics argued in 2008 that “citation data provide only a limited and incomplete view of research quality, and the statistics derived from citation data are sometimes poorly understood and misused. Research is too important to measure its value with on a single coarse tool.”⁹ The European Association of Science Editors suggests that “journal impact factors are used only—and cautiously—for measuring and comparing the influence of entire journals, but not for the assessment of single papers, and certainly not for the assessment of researchers or research programmes either directly or as a surrogate.”¹⁰ Most recently, the San Francisco Declaration on Research Assessment issued a general recommendation about impact factors: “Do not use journal-based metrics, such as Journal Impact Factors, as a surrogate measure of the quality of individual research articles, to assess an individual scientist’s contributions, or in hiring, promotion, or funding decisions.”¹¹

3) *For Communication, Impact Factors/Citation Data are misused to define the discipline and its research.*

When the National Research Council (NRC) released its ranking scheme of doctoral-granting institutions in 2010, one dimension of those rankings sought to measure the relative research productivity of doctoral program faculty. For disciplines classified as a social science (or what NRC defined as Non-Humanities), publications per faculty and citations per publication were measured using ISI/Thomson-Reuters databases. So to determine an individual program’s research publications score, NRC took an average over seven years (2000-2006) “of the number of articles for each allocated faculty member divided by the total number of faculty allocated to

⁷ Brian D. Cameron, “Trends in the Usage of ISI Bibliometric Data: Uses, Abuses, and Implications,” *Libraries and the Academy* 5 (2005): 105-125.

⁸ Cameron, 114.

⁹ Robert Adler, John Ewing, and Peter Taylor, “Citation Statistics: A Report from the International Mathematical Union (IMU) in cooperation with the International Council of Industrial and Applied Mathematics (ICIAM) and the Institute of Mathematical Statistics (IMS),” June 12, 2008. Available at <http://imstat.org/publications/citationstatistics.pdf>.

¹⁰ “EASE Statement on Inappropriate Use of Impact Factors,” November 2007. Available at http://www.ease.org.uk/sites/default/files/ease_statement_ifs_final.pdf. See also Per O. Seglen, “Why the Impact Factor of Journals Should not be Used for Evaluating Research,” *BMJ* 1998; 314:497.1.

¹¹ *San Francisco Declaration on Research Assessment*, December 16, 2012. Available at <http://am.ascb.org/dora/>.

the program. Data were obtained by matching faculty lists supplied by the programs to the ISI list of publications.” Similarly, for citations “Data from the Institute for Scientific Information were used to construct this variable.”¹² Had Communication been classified as a Humanities discipline, the research productivity variable would have derived from the CVs of allocated faculty (not ISI), would have spanned twenty years (not seven), and would have weighted book publications considerably more than article publications.

Arguably, the methodological choices of the NRC influenced the ranking of the Communication programs assessed in their report, and thus may be said to contribute to very definition of Communication as a discipline.¹³ Even the most casual perusal of the NRC rankings on the research productivity variable reveals that programs with a stronger, larger faculty presence of social scientific researchers were ranked more highly than those programs with more of a critical or humanistic focus.

Feeley and Moon similarly extrapolate from SSCI/JCR data a network analysis of citation patterns to discern the citation centrality of journals within and without the Communication discipline. Doing so, of course, presumes much about both the conduct of scholarship and research in Communication and the value of impact factors and other citation data as barometers of the quality or connectedness of that scholarship. Not surprisingly, Feeley and Moon identify five journals as “highly central in the communication journal citation network”: *Communication Research*, *Human Communication Research*, *Journal of Communication*, *Communication Monographs*, and *Communication Theory*. Each of these journals, with the possible exception of *Communication Theory*, would be properly classified as predominantly social scientific in their publishing and editorial aims. Defining them as central to the Communication journal citation network suggests, of course, that other journals are not as central and are, thus, less valuable in defining the parameters and quality of the discipline’s scholarship.¹⁴

4) *Impact Factors are potentially manipulated and may derive from alternative factors.*

Even if used to measure and assess what they are intended to measure and assess (citation patterns), impact factors are nonetheless still subject to manipulation. In addition, several studies indicate that factors other than citation may play a role or influence an individual journal’s impact factor.

In part because impact factors have achieved a level of credibility and status within the academic community on a variety of levels and for a variety of audiences, incidences of attempts to “game the impact factor” have begun to emerge. Most of these examples are anecdotal, but nonetheless

¹² Jeremiah P. Ostriker, et al., eds. *A Guide to the Methodology of the National Research Council Assessment of Doctorate Programs*, (Washington, DC, The National Academies Press, 2009), 171.

¹³ Gaye Tuchman also notes how impact factors may sometimes be employed to define disciplines and sub-disciplines. See Gaye Tuchman, “Essay on the Gaming of Citation Index Measures,” *Insider Higher Ed*, February 6, 2012. Available at <http://www.insidehighered.com/views/2012/02/06/essay-gaming-citation-index-measures>.

¹⁴ Thomas Hugh Feeley and Shin-Il Moon, “Update on Journal Impact Ratings in Communication: 2006-2008,” *Communication Research Reports* 27 (2010): 355-364. See also Timothy R. Levine, “Rankings and Trends in Citation Patterns of Communication Journals,” *Communication Education* 59 (2010): 41-51; and Clement Y.K. So, “The Rise of Asian Communication Research: A Citation Study of SSCI Journals,” *Asian Journal of Communication* 20 (2010): 230-247.

reveal a disturbing trend in some quarters to manipulate a journal's impact factor in the pursuit of greater prestige. The eminent sociologist Gaye Tuchman reported on an editor who wrote the following: "There is one thing I want to encourage you to consider doing, namely have a look at a couple of preliminary and relevant articles from other contributors to the special issue. If you acknowledge each other's work it will clearly add to the feeling of having a special issue that is relatively well-integrated, *plus add to the impact factor of each other's work.*"¹⁵ To its credit, Thomson-Reuters monitors and guards against attempts to manipulate or manage citations and, therefore, impact factors. They do so largely by tracing the self-citation practices often evident in particular journals. Journals engaged in such practices face "de-listing" from the ISI/Thomson-Reuters SSCI or the Science Citation Index and also, therefore, from the JCR. "De-listed" journals include the *World Journal of Gastroenterology*, the *Asian-Australasian Journal of Animal Sciences*, and *Cereal Research Communications*.¹⁶

In addition to attempts to game the impact factor system, several studies have demonstrated that impact factors and citation practices may derive from factors other than the quality or influence of individual examples of research. The assumption driving the entire process of calculating and reporting on impact factors is that citation is a measure of impact because research articles are cited by others for their value and quality. This assumption, however, may not be a reasonable one.

One rather renowned study demonstrates that aside from the quality of research, the journals where articles appear may "have a strong influence on their citation rates." This study examined duplicate publications (articles published in two different journals with the same title, the same first author, and the same number of cited references) and determined that an article published in a journal with a higher impact factor was more likely to be cited than the same article published in a journal with a lower impact factor. Shockingly, perhaps, the study discovered 4,918 pairs of duplicate publications.¹⁷

Other studies note additional factors that may influence citation patterns and, therefore, impact factors. For Psychology journals, Hegarty and Walton reveal that articles with fewer graphs and more structural equation models were more frequently cited. Citations were predicted more successfully by reference to article length and citation count rather than journal impact factors and using journal impact factors underestimated the impact of women authors and social science research in general.¹⁸ Mutz and Daniel note the presence of "bias factors" that influence journal impact factors and that have "nothing to do with the prestige or quality of a journal." These authors particularly note that the "document type" influences citation patterns, and thus impact factors, particularly in scientific research—the journal impact factor "is positively biased in favor

¹⁵ Tuchman, "Essay on the Gaming of Citation Index Measures," emphasis added.

¹⁶ "Gaming the Impact Factor Puts Journal in Time-Out," *The Scholarly Kitchen*, October 17, 2011. Available at <http://scholarlykitchen.sspnet.org/2011/10/17/gaming-the-impact-factor-puts-journal-in-time-out/>. See also Richard Monastersky, "The Number That's Devouring Science," *The Chronicle of Higher Education*, October 14, 2005. Available at <http://chronicle.com/article/The-Number-That-s-Devouring/26481>.

¹⁷ Vincent Larivière and Yves Gingras, "The Impact Factor's Matthew Effect: A Natural Experiment in Bibliometrics," *Journal of the American Society for Information Science and Technology* 61 (2010): 424-427.

¹⁸ Peter Hegarty and Zoe Walton, "The Consequences of Predicting Scientific Impact in Psychology Using Journal Impact Factors," *Perspectives on Psychological Science* 7 (2013): 72-78.

of reviews and negatively biased to the detriment of research letters.”¹⁹ And Lozano and Larivière speculate on the impact of evolving modes of research and article delivery on the citation of research and the calculation of impact factors. They predict that the increase in digital delivery of research publications “might bring an end to the use of the IF [impact factor] as a way to evaluate the quality of journals, papers, and researchers.”²⁰

Alternative Metrics for Journal/Research Quality

In 2005, *The Chronicle of Higher Education* labeled the journal impact factor “The Number That’s Devouring Science,” noting that the impact factor had become “an unyielding yardstick for hiring, tenure, and grants.”²¹ Communication associations recognized the growing power and influence of impact factors. In the mid-2000s, ISI/Thomson-Reuters impact factors and journal citation reports were the only game in town and dominated the scholarly assessment of journal quality and research citation.

Much has changed since the mid-2000s and among the most significant shifts is the development of new journal and research assessment metrics.²² Many alternative metrics offer greater coverage of the Communication academic literature while also tracking and reporting on citation patterns.

- 1) *SCImago Journal Rank* (<http://www.scimagojr.com/index.php>)

The SCImago Journal Rank database is developed from information contained in the Scopus database, an Elsevier product. It is operated by a “research group” based in Spain. Ever growing, the Journal Rankings include, for reporting year 2012, 157 journals in the Subject Category “Communication.” Each journal is given a score (the SCImago Journal Rank or SJR) that is “based on the transfer of prestige from a journal to another one...The calculation of the final prestige of a journal is an iterative process, in which the prestige in the stage i of a journal depends on the prestige of the set of journals in state $i-1$.”²³ Operating on a three year cycle, the SJR is weighted and thus offer a different measure of impact that the SSCI/JCR. SCImago also offers other data and ranking points about the journals in the subject category and it ranks journals on a quartile system based on the journal’s SJR. Table 14 presents the SCImago coverage of journals sponsored by major Communication associations. Some sponsored journals are categorized in different subject categories than Communication and are marked by an asterisk on the quartile ranking.

¹⁹ Rüdiger Mutz and Hans-Dieter Daniel, “Skewed Citation Distributions and Bias Factors: Solutions to Two Core Problems with the Journal Impact Factor,” *Journal of Informetrics* 6 (2012): 169-176.

²⁰ George A. Lozano and Vincent Larivière, “The Weakening Relationship Between the Impact Factor and Papers’ Citations in the Digital Age,” *Journal of the American Society for Information Science and Technology* 63 (2011): 2140-2145.

²¹ Monastersky, “The Number That’s Devouring Science.”

²² Of interest is Emilio Delgado and Rafael Repiso Granada, “The Impact of Scientific Journals of Communication: Comparing Google Scholar Metrics, Web of Science, and Scopus,” *Comunicar* 21 (2013): 45-52.

²³ See “Description of SCImago Journal Rank Indicator,” available at <http://www.scimagojr.com/SCImagoJournalRank.pdf>

Table 14. Association-Sponsored Journals in SCImago, 2012

Journal	Sponsor	SJR	Quartile
<i>Journal of Business Communication</i>	ABC	.671	Q2
<i>Business Communication Quarterly</i>	ABC	.265	Q2/Q3*
<i>Journalism & Mass Communication Quarterly</i>	AEJMC	.766	Q1
<i>Journal of Public Relations Research</i>	AEJMC	1.32	Q1*
<i>Journal of Broadcasting & Electronic Media</i>	BEA	.716	Q2*
<i>Journal of Radio & Audio Media</i>	BEA	.137	Q3
<i>Journal of Communication</i>	ICA	1.281	Q1
<i>Human Communication Research</i>	ICA	1.748	Q1
<i>Communication Theory</i>	ICA	1.357	Q1
<i>Journal of Computer-Mediated Communication</i>	ICA	2.106	Q1
<i>Journalism Studies</i>	ICA	1.164	Q1
<i>Political Communication</i>	ICA	2.561	Q1*
<i>Communication Education</i>	NCA	.633	Q1*
<i>Communication Monographs</i>	NCA	1.543	Q1
<i>Communication Teacher</i>	NCA	.157	Q3
<i>Critical Studies in Media Communication</i>	NCA	.44	Q2
<i>Journal of Applied Communication Research</i>	NCA	.449	Q2
<i>Quarterly Journal of Speech</i>	NCA	.433	Q1*
<i>Review of Communication</i>	NCA	.178	Q3
<i>Text and Performance Quarterly</i>	NCA	.139	Q3

2) *Google Scholar Metrics* (scholar.google.com)

Google Scholar released a series of journal metrics in August of 2013 based on the Google database as it was in July 2013. Covering articles published between 2008 and 2012, the metrics covers a range of journals and scholarly publication. Journals are given a series of “h” scores and then ranked within broad subject categories and subcategories according to their “h5-index” score, or the “largest number h such that at least h articles in that publication were cited at least h times each” in the last five calendar years.

As of September 2013, only the top twenty ranked journals in the Communication subcategory were available. Table 15 indicates those Communication association sponsored journals appearing on the “Top Publications” list.²⁴

²⁴ See Emilio Delgado López-Cózar, Nicolas Robinson-García, and Daniel Torres-Salinas, “Manipulating Google Scholar Citations and Google Scholar Metrics: Simple, Easy, and Tempting.” *EC3 Working Papers* 6 (2012, May 29).

Table 15. Association-Sponsored Journals in Google Scholar Metrics, 2013

Journal	Sponsor	h5-index	Rank
<i>Journal of Computer-Mediated Communication</i>	ICA	38	1
<i>Journal of Communication</i>	ICA	34	3
<i>Journalism Studies</i>	ICA	25	6
<i>Human Communication Research</i>	ICA	23	8
<i>Journal of Broadcasting & Electronic Media</i>	BEA	22	10
<i>Political Communication</i>	ICA	22	12
<i>Communication Education</i>	NCA	22	13
<i>Communication Theory</i>	ICA	21	14
<i>Journal of Public Relations Research</i>	AEJMC	20	18

3) *Microsoft Academic* (academic.research.microsoft.com)

Similar to Google Scholar’s metric, Microsoft Academic ranks scholarly journals according to both “field rating” (analogous to Google’s h-index), and overall number of citations. The service also ranks individual scholars (living and deceased) within overall categories as well as sub-categories or disciplines. The citation data is derived from the more general Microsoft Academic Search engine, designed to model Microsoft’s Bing search engine but with an exclusive concentration on scholarly materials. According to the “beta” site for this service, “Microsoft Academic Search indexes not only millions of academic publications, it also displays the key relationships between and among subjects, content, and authors, highlighting the critical links that help define scientific research. Microsoft Academic Search makes it easy for you to direct your search experience in interesting and heretofore hidden directions with its suite of unique features and visualizations.”

Table 16 indicates those Communication association sponsored journals appearing on Microsoft’s list of 103 Communication journals.

Table 16. Association-Sponsored Journals in Microsoft Academic Search, 2013

Journal	Sponsor	Field Rating	Rank
<i>Human Communication Research</i>	ICA	62	1
<i>Journal of Communication</i>	ICA	60	2
<i>Communication Monographs</i>	NCA	60	3
<i>Political Communication</i>	ICA	36	5
<i>Communication Theory</i>	ICA	35	6
<i>Critical Studies in Media Communication</i>	NCA	31	9
<i>Journal of Broadcasting & Electronic Media</i>	BEA	30	10

<i>Journal of Applied Communication Research</i>	NCA	26	17
<i>Journalism & Mass Communication Quarterly</i>	AEJMC	21	20
<i>Journalism Studies</i>	ICA	15	27
<i>Communication & Critical/Cultural Studies</i>	NCA	8	44
<i>Communication, Culture, & Critique</i>	ICA	4	71
<i>Communication Teacher</i>	NCA	2	82

4) Harzing's Journal Quality List (www.harzing.com/jql.htm)

The Journal Quality List (JQL) compiled by Anne-Wil Harzing, a professor of international management and an associate dean of research at the University of Melbourne in Australia, brings together journal rankings from twenty-two international sources and organizes those rankings into usable tables categorized by discipline. Communication is one of the disciplines in Harzing's list. Harzing's website also contains notification that Thomson-Reuters has specifically requested that she not report impact factors from the JCR in her JQL. Harzing includes twenty-eight Communication journals on the JQL and Table 17 lists the Communication association sponsored journals that she includes.

Table 17. Association-sponsored Journals on Harzing's JQL, 2013	
Journal	Sponsor
<i>Journal of Business Communication</i>	ABC
<i>Business Communication Quarterly</i>	ABC
<i>Journalism & Mass Communication Quarterly</i>	AEJMC
<i>Journal of Communication</i>	ICA
<i>Human Communication Research</i>	ICA
<i>Communication Theory</i>	ICA
<i>Political Communication</i>	ICA
<i>Communication Monographs</i>	NCA
<i>Critical Studies in Media Communication</i>	NCA
<i>Journal of Applied Communication Research</i>	NCA
<i>Quarterly Journal of Speech</i>	NCA

Conclusion

In light of the considerable efforts to manage and maintain the ISI/Thomson-Reuters relationship with the Communication discipline, and bearing in mind the findings of the foregoing, this report offers five recommendations relevant Communication associations, and the ISI/Thomson-Reuters impact factor system.

- I. Communication associations should pursue extensive educational and outreach initiatives to educate members, administrators, and other interested parties about the nature and quality of the journal impact factor as a measure of journal quality, research quality, or research influence.
- II. Communication associations should disseminate information and data about the manner of data collection for impact factors, should monitor the uses and misuses of impact factors, and should closely assess the relative and longitudinal status of individual journal impact factors for sponsored publications.
- III. Communication associations should guard against the misuse of journal impact factors and make public examples of such misuse when it occurs.
- IV. Communication associations should work closely with their publishing partners to offer readers and audiences the fullest possible assessment of research and journal quality and influence through the dissemination of alternative metrics of same.
- V. Communication associations should consider the full range of assessing journal and research impact and quality, and avoid an exclusive focus on the ISI/Thomson-Reuters system.