Journal Citation Indexes and Journal Quality:
Information for Stockton Faculty

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Introduction
Publishing in peer referred journals is a requirement for professional advancement in nearly all
academic disciplines. This document is intended to serve as an aid to faculty who seek to learn
more about the following:

• How to choose an academic journal to submit a paper;
• How to document the quality or impact of the journal; and
• How to document the quality or impact of an author’s scholarly journal article(s).

Part 1. Selecting a Journal
Faculty usually have a pretty good idea of the top journals in their field because of the reading
they did in graduate school. Many of us belong to professional associations that publish a
journal or journals. But there are thousands of academic journals, disciplinary and
interdisciplinary. Assuredly there are dozens of highly regarded journals that will consider your
paper for publication. It is a good idea to become familiar with many journals in your field, and
even related fields.¹ That way you can be current with the literature and also get a sense of the
kinds of articles and topics that various journals publish.

If you want to learn more about what journals are appropriate outlets for your work,
Stockton’s Richard E. Bjork Library subscribes to a useful online database called UlrichsWeb.
UlrichsWeb is an easy-to-search source of detailed information on more than 300,000
periodicals of all types in 900 subject areas: academic and scholarly journals, e-journals, peer-
reviewed titles, popular magazines, newspapers, newsletters, and more. If you need to know
whether a publication is an academic journal, check Ulrichs. If you need to know whether it is
peer reviewed, check Ulrichs.

Ulrichs allows you to directly search a journal title to learn about that journal. But suppose that
rather than learn about an exact journal by title, you want to see what journals are published in
the area of aging. You can search the following, yielding 524 results:

¹ One of the top journals in the economics of labor and employment, my field, is Work and Occupations, a
sociology journal.
When you send a paper to a professional journal, it is akin to sending your oldest child to kindergarten or college. You have done your very best. Now you need to trust other professionals, as your paper enters the review process. If you are fortunate to have a paper accepted, you will want to assess the impact of your publication on the discipline or in the literature. The sections below on documenting journal quality apply equally to (a) knowing about the journal after you publish in it and (b) knowing about possible journals to which you may want to submit your work.

To document journal quality, several scholarly reference publications publish influence and impact factors/statistics. This methodology is called “bibliometrics.” However, faculty regularly publish in journals that are not included among those listed in the impact publications. It is always important to use multiple methods to demonstrate the impact and importance of one’s scholarship.

It is imperative to remind faculty scholars and scholar evaluators of the usual caveat: it is not recommended that any one measure, metric, or index be relied upon to determine the quality and impact of a researcher or a journal. It is equally important to remind faculty and evaluators that scholars who publish interdisciplinary work have a more difficult time utilizing indexes of journal rankings because the rankings are intended for specific disciplines. Finally, scholars who publish research that is dissenting, critical, or alternative—that is, research challenging the dominant paradigm in a discipline—have a more difficult time publishing in the first place; further, rankings of such journals are scarce-to-non-existent.

Part 2. A Brief History of Citation Indexes
Thomson Reuters, a large multinational company, once had a near-monopoly market on the publication of journal “impact factors.” Impact factors measure the influence of journals and of articles (authors) published within journals. Impact factors are published for journals and for

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2 The search will also generate journals with the word “Age” in the title. Ulrichs will search by keyword and not discipline. As a result, if some of the search results are more appropriate to history or the sciences and you are working in gerontology, then do not consider them. One benefit, though, is that a search of “Aging” will also include a search of “Ageing,” the British spelling.

3 Journal reviews are typically “double blind,” meaning that the peer reviewers do not know the name of the author and the author does not know the names of the reviewers or referees. In “single blind” reviews, the author’s name is revealed to the reviewers. Single blind reviewing has been critiqued by feminists because of differential treatment given to female and junior scholars. In rare cases, the reviews are not blind and both the author names and referee names are revealed to one another.
articles.4 Thomson Reuters acquired the Institute for Scientific Information, the developer of the “ISI Impact Factor” (abbreviated as IF). The IF of a journal is the average number of citations received per paper in that journal in the previous two years. Editors and publishers strive to increase IFs through special issues, soliciting high-profile authors, adjusting the number of issues per volume, etc. There is considerable discussion in academic circles about the relevance of IFs and the inherent bias in the types of journals covered in the measures.5 According to statisticians writing a report for several professional societies in mathematics:

> While numbers appear to be “objective,” their objectivity can be illusory. The meaning of a citation can be even more subjective than peer review. Because this subjectivity is less obvious for citations, those who use citation data are less likely to understand their limitations. The sole reliance on citation data provides at best an incomplete and often shallow understanding of research—an understanding that is valid only when reinforced by other judgments. Numbers are not inherently superior to sound judgments. (Adler, Ewing, and Taylor, 2009, p. 1)

Nevertheless, the Thomson Reuters IF is so widely used that it is a market leader in measuring journal quality and author impact.

Jorge E. Hirsch, from the Physics Department of the University of California-San Diego, proposed an alternative measure in 2005 called the Hirsch Index or Hirsch Number to calculate the impact of an individual scholar’s publications. Called the H-Index for short, it can also be used to calculate the productivity or impact of a university department, school, or academic journal. The H-Index reflects both the total number of an author’s publications and the citations per publication. It uses an open source database, Google Scholar, to create the metric. As for an index of productivity, there is criticism of the H-Index, too. For instance, it does not account for journal quality or number of coauthors. Even with its limitations, the H-Index is considered to be the leading indicator of a scholar’s productivity.

Professor of International Management and Associate Dean Anne-Wil Harzing at the University of Melbourne took this effort one step further. She developed a free, downloadable software program named Publish or Perish (PoP) that includes 12 impact metrics that rely on Google Scholar, including the H-Index. It was first released on October 17, 2006, and is updated regularly. To better capture books, conference papers, and a wider range of journals, Harzing argues that Google Scholar might be most beneficial for three of the Google Scholar categories:

- Business, Administration, Finance & Economics;
- Engineering, Computer Science & Mathematics; and

4 Thomson Reuters publishes Book Citation Index® and there are substitutes to it, too. Substantiating the quality of academic presses and books is not covered in this document.
c. Social Sciences, Arts & Humanities.

Harzing has published an important paper on the impact of different data sources and citation metrics across disciplines. Harzing’s PoP has become increasingly popular in the social sciences and business.

Elsevier B.V. publishes Scopus (also referred to as SciVerse Scopus), a database of abstracts and citations for science, medicine, social sciences, and arts and humanities journals. Scopus also includes conference papers. The statistic published for the author impact is the H-Index. Scopus includes a few other proprietary tools for journal analysis, but not as many as Publish or Perish. Scopus is most widely used in the sciences, though scholars from other disciplines are employing it due to the H-Index, in lieu of the Impact Factor.

Part 3. Primary Research Using Citation Indexes
Below I provide brief information and links to citation indexes for multiple disciplines, including general interdisciplinary studies, and then groups of disciplines.

Multiple disciplines

- Thomson Reuters, publisher of the ISI impact factor (IF), has a product line of research impact resources in the Web of Knowledge online platform, covering nearly all disciplines at Stockton. College and universities (typically libraries or academic schools) subscribe to selected services; unfortunately, Stockton does not. But you can still search to see if a journal in which you published is covered by the Thomas Reuters Journal Citation Reports®. The Thomson Reuters Journal Citation Reports® Master Journal Search List is publicly available (for free).

- Scopus (also referred to as SciVerse Scopus) covers almost 18,000 journals (and conference papers) from 5,000+ publishers in the fields of science, medicine, social sciences, and arts and humanities journals. Stockton does not have a subscription to Scopus. Libraries can request an institutional trial of Scopus.

- SCImago Lab, a company specializing in scientific analysis and information, publishes SJR, a journal ranking that draws its information from Scopus, the Elsevier product. The two ranks included by the company are the SJR and the H-Index. As a measure of a journal’s influence or prestige, the SJR is most similar to the ISI impact factor (IF), in that it is equal to the average number of weighted citations in the previous three years (volumes). This online service is free. The 27 searchable “Subject Areas” are broad, but scholars can also search more specific “Subject Category.” For example, a “Subject Area” is Psychology but a “Subject Category” is Aging. (SCImago Lab also ranks research institutions worldwide.)

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7 Journal-Ranking.com is a service to provide ISI impact factor information for free once you register on the site. The provider, Red Jasper Limited, is a business and technology consulting firm. I cannot vouch for the reliability of the service, but libraries and scholars are using it to obtain impact factors.

8 The SJR website does not provide the formula for the citation weights.
• Harzing.com’s Publish or Perish (PoP) is arguably a preferred source for several academic disciplines. Scholars may download and install Publish or Perish for free as long as it is used for private use. There is also a 15-minute audio and slideshow tutorial. An excellent user guide was prepared by Stephanie Ow, librarian at the National Institute of Education Singapore. Subject fields in Publish or Perish include the Sciences, Mathematics, Business, Computer Science, Social Sciences, Arts and Humanities.

• In 2007, the Eigenfactor score was developed by Carl Bergstrom and colleagues at the University of Washington. The developers have argued that their algorithm is an improvement upon the IF because it measures the significance of journal citations and not merely the number of them. According to the overview information at Eigenfactor.org, the score is valuable to librarians because it serves as a proxy for the amount of time a library user spends with a journal. Eigenfactor.org publishes the Eigenfactor Score (for journals) and the Article Influence Score, useful for both journals and authors. The disciplines covered are the natural and social/behavioral sciences, but also fields such as hospitality, ethics, business, law, and women’s studies. (If you choose to use the Eigenfactor score, beware that a journal can only fit in one category in the database. In SCImago Lab’s product, Journal Citation Reports, a journal may appear in one or more categories, and this broader range is more helpful to inter- and multidisciplinary scholars.)

• **Cabell’s Directories** (Cabell’s Directory of Publishing Opportunities) are reference resources to help scholars find appropriate scholarly journals for their research. There are 5 general directories: Business; Education; Health; Psychology; and Computer Science. The Stockton Library subscribes to the Business Directories, which include 4 separate searchable directories: Accounting; Economics & Finance; Management; and Marketing.

**Arts and Humanities**

• Thomson Reuters publishes the **Arts & Humanities Citation Index**.

• SCImago Lab publishes **SJR**, a journal ranking that draws its information from Scopus, the Elsevier product. The two ranks included by the company are the SJR and the H-Index. Besides the sciences, SCImago publishes ranks in Arts and Humanities. (Relevant Subject Categories include, for example, History, Philosophy, Communication, Music, Gender Studies, and Visual and Performing Arts).

**Business**

• Harzing.com maintains an online **Journal Quality List** in Economics, Finance, Accounting, Management, and Marketing (currently 934 journals). Anne-Wil Harzing began to assemble and publish this list in 2000 and she released its 47th edition in August of 2012.

• In business schools throughout the globe, **Cabell’s Directory of Publishing Opportunities** is generally considered to be a reliable listing of worthy journals in business fields. In

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9 More information can be found in Bergstrom’s original article, published in *College & Research Library News*. A caveat: The algorithm yields data for which very large journals have higher scores than smaller journals, all other things equal.
other words, if a journal is listed in Cabell’s, it is often considered to be a journal in which a published or accepted article would “count” toward tenure and promotion. The Stockton Library subscribes to the Cabell’s Business Directories, which include 4 separate searchable directories: Accounting; Economics & Finance; Management; and Marketing.

- SCImago Lab publishes SJR, a journal ranking that draws its information from Scopus, the Elsevier product. The two ranks included by the company are the SJR and the H-Index. Besides the sciences, SCImago publishes ranks in Business, Management, and Accounting; Computer Science; and a category termed Economics, Econometrics and Finance.

**Education**

- Thomson Reuters makes available a subset of Journal Citation Reports® Social Sciences Edition for journals in education, named Education & Education Research.
- SCImago Lab, a company specializing in scientific analysis and information, publishes SJR, a journal ranking that draws its information from Scopus, the Elsevier product. The two ranks included by the company are the SJR and the H-Index. Besides the sciences, SCImago publishes ranks in Education in the more specific “Subject Category” search.

**Health Sciences**

- The health sciences are well covered in the Thomson Reuters Journal Citation Reports® (a subset of the Science Edition for the Life Sciences).
- SCImago Lab, a company specializing in scientific analysis and information, publishes SJR, a journal ranking that draws its information from Scopus, the Elsevier product. The two ranks included by the company are the SJR and the H-Index. Besides the sciences, SCImago publishes ranks in the Health Professions.

**Social Sciences**

- Thomson Reuters Journal Citation Reports® Social Sciences Edition aka Social Sciences Citation Index
  - Covers > 8,000 journals globally
  - Statistics from 1997 – present
- In 2007, scholars Anne-Wil Harzing and Ron Van der Wal published an influential paper that used the H-Index to rank scholars and journals in the fields of Economics and Business.
- *Cabell’s Directory of Publishing Opportunities* Business Directors includes Economics & Finance as a journal category. The Stockton Library subscribes to the Cabell’s Business Directories, which include 4 separate searchable directories: Accounting; Economics & Finance; Management; and Marketing.
- SCImago Lab, a company specializing in scientific analysis and information, publishes SJR, a journal ranking that draws its information from Scopus, the Elsevier product. The two ranks included by the company are the SJR and the H-Index. Besides the sciences,
SCImago publishes ranks in the two relevant Subject Areas: Economics, Econometrics and Finance; and Social Sciences. But more fields are covered with a “Subject Category” search, e.g. Aging, Gerontology, Social Psychology, Human Factors and Ergonomics, Law, Gender Studies.

**Natural Sciences and Mathematics**

- Thomson Reuters Journal Citation Reports® Sciences Edition aka Science Citation Index
  - Covers > 2,650 journals globally
  - Statistics from 1997 – present
- SCImago Lab publishes SJR, a journal ranking that draws its information from Scopus, the Elsevier product. The two ranks included by the company are the SJR and the H-Index. Besides the sciences, related fields included are Mathematics, Decision Sciences, Energy, and Environmental Science.

**Part 4. Secondary Research to Find Impact**
If a college or university does not subscribe to any services, scholars must resort to free resources to document the quality of journals and the impact of their work.

- **Use Publish or Perish software.** Remember, Harzaing.com’s software program is free once you agree to its acceptable use policy.
- **Check the journal’s website.** Journal websites often advertise their latest impact factors for the journal. Before you submit to a journal, visit the website to learn something about the publication’s aims and scope, mission, audience, whether it is an official journal of a professional society, Editor(s) and Editorial Board, etc. If available, the journal will mention any special feature about its quality.
- **Ask the Editor.** A highly reliable and useful source of information on the number of journal subscribers (individuals and in bundles) is a journal’s Editor(s), who receives this information annually from the journal’s Publisher in preparation for Editorial Board meetings. If you ask, a journal Editor may also choose to release to you information about the “acceptance rate” for manuscripts in a particular year or years.10 This data is regularly monitored by journal Editors, and often shared with the journal’s Editorial Board. If you explain to an Editor that you need the information for a tenure and/or promotion decision and that you will not share the information, they may release it to you. If you receive this data for use in your faculty file, indicate the name of the Editor who shared it with you and the date of the communication.
- **Google search for new information that lists journal rankings.** Sometimes an online web search will yield some secondary information published by libraries or academic departments that features information derived from Journal Citation Reports® and rankings. This is often a “hit-or-miss” situation. The information can be old. Examples:

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10 Note that an acceptance rate for a journal special issue is usually quite different (higher) than for a journal’s regular issues.
The University of Southern California Libraries have a website with information for faculty in various disciplines. One Link is for [Library Resources in the Field of Education](#). When you click on this link, one choice is [Journals Ranked by Impact: Education & Educational Research](#). Here you would find the top 20 education journals included by Thomson Reuters in the Social Sciences Citation Index in 2007.

- Times Higher Education (a UK publication) has news and blogs that reproduce journal rankings, mostly from Thomson Reuters. One blog covered top journals in History from 2009.
- The University of Massachusetts-Amherst Library recently re-published the Top 50 journals in Psychology.

- **Try WorldCat, but….** [WorldCat](#) an online database with the largest network of library resources, can yield some data on the number of libraries that subscribe directly to a journal, but this information is quite tedious to cull through to avoid duplicates; further, the search does not capture unique journals when they are bundled into databases. Thus, I do not recommend WorldCat as reliable for your sole journal search.
- **Google Scholar yourself for author impact, too.** Use Google Scholar to analyze where you are showing up in publications. You can see who is citing you and where. This is time-consuming because you need to follow links and do further investigations to double-check the quality of the source, but it is important. You should at least differentiate among the following: (1) those who cite your work in high-quality journals and books, especially if they are recognizing the impact of your work or using it to make further advancements in their own work; (2) those who cite your work in journals and books (check the quality of the publication) because they disagree with it; and (3) those who are using your work in blogs or websites or news articles.
- **Search regular Google in certain circumstances, too.** If you are a scholar who is cited regularly in the popular press, you may already possess copies of places where you are quoted, but you may also find your work or quotes discussed by secondary sources.

### Part 5. Journal Awards and Prizes

Journals and individual academic articles are eligible for awards. Winning an award or an honorable mention for a journal or for an author (best paper) award is highly praiseworthy depending upon the strength (quality and quantity) of the competition. If a faculty member has won a paper award or a journal in which the faculty member has published has received an award, this should be noted on the C.V. and in the faculty file. If a university/institution publishes a journal that has received an award, this should be promoted widely.

- **The Council of Editors of Learned Journals** (CELI) has an awards competition each year. Categories include Best New Journal, Best Design, Lifetime Editorial Achievement, and the Phoenix Award for Editorial Revitalization. Winning an award is prestigious. The Best
New Journal Award can vault a journal to a higher status and impact factor fairly quickly. Journal websites will advertise any awards they have been given.\footnote{11}

- Individual journals will also announce competitions for “best paper” awards. Some awards are only open to junior (untenured scholars). Other awards are open to all, e.g., best paper published in a single volume.

Part 6. How to Increase Your Professional Profile/Impact
Junior scholars finishing graduate school recognize the importance of professional networking. Participating actively at conferences by sharing your work and listening to the work of others is important to negotiating academe. The internet and social networking sites make it easier for scholars with similar interests to stay in touch between conferences and to collaborate on projects. A reliable social networking site for academics is housed at academia.edu. On this site, you can upload a working paper or article and invite others to comment. This is not only a way to improve your paper prior to submitting it to publication, but also to get your name out there in the scholarly community.

\footnote{11 The journal Feminist Economics won the Best New Journal award in 1997 and then steadily increased in rank in both economics and women’s studies journals.}