CITATION METRICS WORKSHOP – JOURNAL CITATION REPORT (JCR) Prepared by Cited Reference Team, NUS Libraries. Apr 2015 (Update)

1. Overview

The JCR provides quantitative tools for ranking, evaluating, categorizing and comparing journals. The impact factor is just one quantitative tool to use in evaluating or comparing a journal's relative importance to others in the same field. It identifies the frequency with which an average article from a journal is cited in a particular year. The annual JCR impact factor is a ratio between citations and recent citable items published. Thus, the impact factor of a journal is calculated by dividing the number of current year citations to the source items published in that journal during the previous two years.

More on journal impact factor is available at http://thomsonreuters.com/products_services/science/free/essays/impact_factor/

In addition to the journal impact factor, the JCR offers additional metrics as follows:

- Journal rankings (including impact factors)
- Total number of cites to a journal in a given year
- 5-year impact factor
- Immediacy index
- Cited half-life
- Eigenfactor score
- Article influence score.

Refer to Appendix 1 for a list of definitions/terminology relating to the above metrics.

2. Search JCR by Subject

- 2.1 Go to the Library portal at http://lib.nus.edu.sg
- 2.2 Select the **Databases** tab, then click on **Web of Science**:



2.3 At the Web of Science display screen, click on **Journal Citation Reports**:

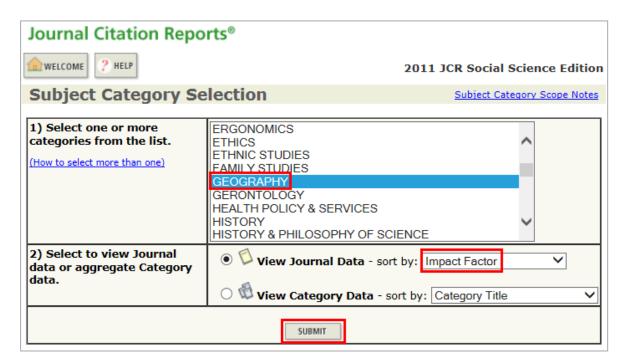


- 2.4 At the Journal Citation Reports screen, select a JCR Edition (Science or Social Sciences) and year. Select also one of the following search options from the drop-down menu:
 - View a group of journals by Subject category or Publisher, or country/territory
 - Search for a specific journal (by full/abbreviated journal title, title word or ISSN)
 - View all journals

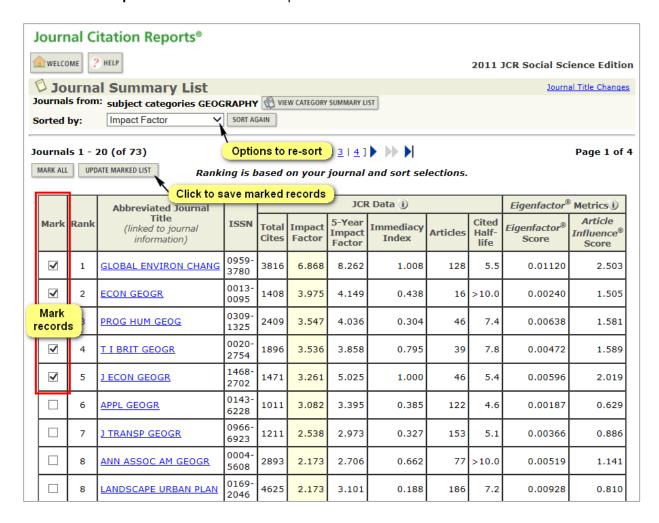


In the above example, we have chosen **JCR Social Sciences Edition** for the year **2011** to run a JCR report for a group of journals by **Subject Category**.

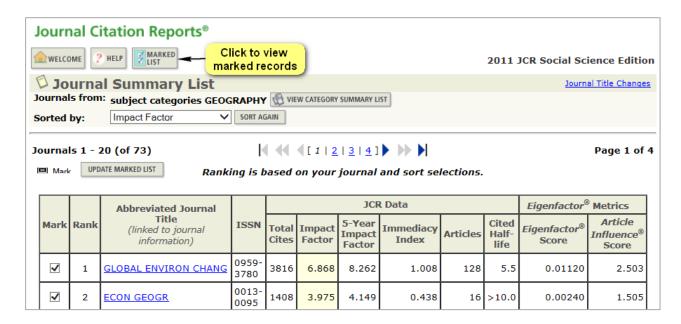
2.5 At the Subject Category Selection page shown below, select to group journals by the Subject Category **Geography** and finally choose to display Journal Data sorted by **impact factor**.



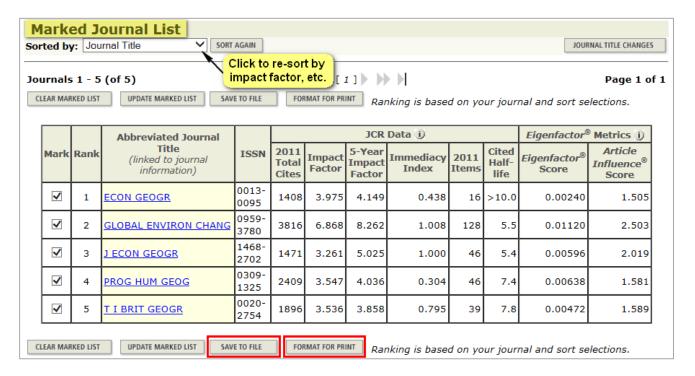
2.6 After making the above selections, JCR produces a list of journals in Geography published in 2011 and ranked by impact factor. You can **re-sort** all the journals in the list by using the dropdown menu at the top of the screen. To save specific journal titles into a list, click the **checkbox** next to each journal title desired and then click the **Update Marked List** at the top of the screen:



2.7 Click the Marked List button to produce a final list of only those titles you wish to keep:

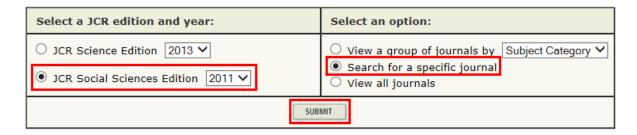


2.8 The new screen will give you the option to either **save** the selected journal title data to a file that can be emailed as an attachment, or you can re**format** the list for printing:

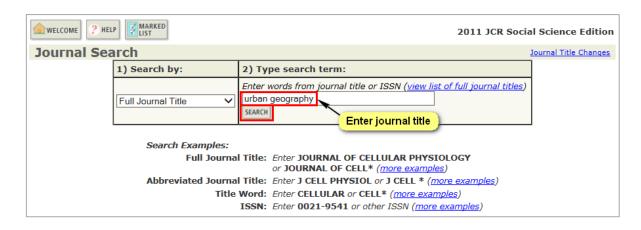


3. Search JCR by Journal Title

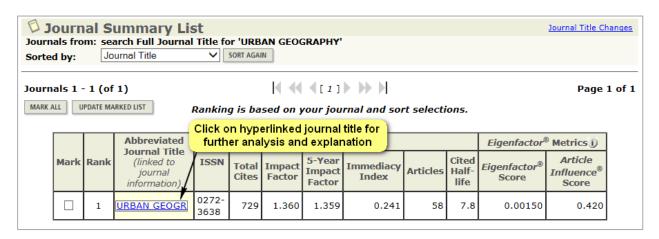
- 3.1 Go to Journal Citation Reports database.
- 3.2 Choose the Science or **Social Sciences Edition** and the specific year e.g. **2011**. Select an option to search for a **specific journal title**:



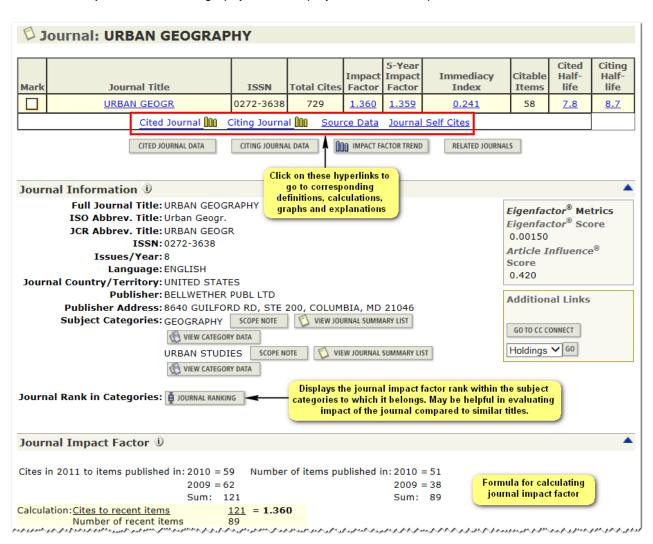
3.3 To search for a specific journal, you may search by Full or Abbreviated journal title, title word, or ISSN. We will search for the journal **Urban Geography**:



3.4 Click on the **hyperlinked journal title** to see more information on the journal including Impact Factor, Immediacy Index, Cited Half-Life, Cited Journal Graph, etc.



3.5 Details for the journal Urban Geography will be displayed at the subsequent screen as shown below:



Suggested Readings

- Althouse, B. M., West, J. D., Bergstrom, C. T., & Bergstrom, T. (2009). <u>Differences in Impact Factor Across Fields and Over Time</u>. *Journal of the American Society for Information Science and Technology, 60*(1), 27-34. doi: 10.1002/asi.20936
- Archambault, E., & Larivière, V. (2009). <u>History of the journal impact factor: Contingencies and consequences</u>. *Scientometrics*, *79*(3), 635-649.
- Bensman, S. J. (2008). <u>Distributional differences of the Impact Factor in the sciences versus the social sciences: An analysis of the probabilistic structure of the 2005 Journal Citation Reports</u>. *Journal of the American Society for Information Science and Technology, 59*(9), 1366-1382. doi: 10.1002/asi.20810
- Dorta-González, P., & Dorta-González, M. I. (2012). <u>Comparing journals from different fields of science and social</u> science through a JCR subject categories normalized impact factor. *Scientometrics*, 1-28.
- Franceschet, M. (2010). <u>Journal influence factors</u>. *Journal of Informetrics, 4*(3), 239-248. doi: 10.1016/j.joi.2009.12.002
- Leydesdorff, L., & Rafols, I. (2011). <u>Indicators of the interdisciplinarity of journals: Diversity, centrality, and citations</u>. *Journal of Informetrics*, *5*(1), 87-100. doi: 10.1016/j.joi.2010.09.002
- Pontille, D., & Torny, D. (2010). <u>The controversial policies of journal ratings: evaluating social sciences and humanities</u>. *Research Evaluation, 19*(5), 347-360. doi: 10.3152/095820210x12809191250889

Appendix 1 Definitions & Terminologies (Adapted from the JCR Quick Reference Guide)

Cited Half-Life: Benchmarks the age of cited articles by showing the number of years back from the current year that account for 50% of the total number of citations to a journal in the current year.

Immediacy Index: Measures how frequently the average article from a journal is cited within the same year as publication. This number is useful for evaluating journals that publish cutting-edge research.

Journal Impact Factor: Identifies the frequency with which an average article from a journal is cited in a particular year. You can use this number to evaluate or compare a journal's relative importance to others in the same field or see how frequently articles are cited.

Five-Year Impact Factor: Average number of times articles from the journal published in the last five years has been cited in the JCR year. This metric can be used to better gauge the impact of journals in fields where the influence of published research evolves over a longer period of time.

Eigenfactor Score: The Eigenfactor Score is measured using the current JCR year citations to citable items from the five previous years. While the Impact Factor weighs each citation to a journal equally, the Eigenfactor Score assigns a greater weight to those citations coming from influential journals, allowing these journals to exert greater influence in the determination of the rank of any journal which they reference. The Eigenfactor Score does not count journal self-citations. The sum of Eigenfactor Scores for all journals is 100; each journal's Eigenfactor Score is a percentage of this total.

Article Influence Score: The Article Influence Score measures the relative importance of the journal on a per-article basis. It is the journal's Eigenfactor Score divided by the fraction of articles published by the journal. That fraction is normalized so that the sum total of articles from all journals is 1.

The mean Article Influence Score is 1.00. A score greater than 1.00 indicates that articles in that journal have above-average influence. A score less than 1.00 indicates that articles in the journal have a below-average influence.

Journal Self-Cites: Refers to a paper in a journal citing another paper from the SAME journal. Journal Citation Reports shows what percentage of a journal's total citation count is a result of journal self-citation, and provides an adjusted Impact Factor that excludes journal self-cites.