



USING JCR (JOURNAL CITATION REPORTS)

The Journal Citation Reports (JCR) is a database for journal evaluation published by The Thompson Corporation, the same company that publishes Web of Science (Science Citation Index). It uses citation data drawn from over 5,900 journals from over 3,300 publishers worldwide. Virtually all specialties in the areas of science and technology are covered.

The JCR shows the highest impact journals, most frequently used journals, “hottest journals”, and the largest journals overall. Journals are clustered into nearly 200 subject categories (as behavioral sciences, biophysics, immunology, neurosciences, nursing, and surgery), which makes it easier to compare journals in your field of interest. If you hear people talking about a journal’s impact factor, JCR is where the impact factor is found.

Caveats

Because JCR is a complex database, there are some things to keep in mind when using it. Do not rely solely upon citation data in evaluating journals. (The metrics given in JCR are derived from citation data.) Many conditions can influence citation rates, as language, journal history and format, publication schedule, and subject specialty.

The following may affect journal rankings and impact factors

- Impact factor by article type – Citation counts may include not only articles, but also letters to the editor and review articles. Both of these publication types may artificially increase the journal’s impact factor.
- Changes in journal format – Sudden changes in a journal’s size can affect the impact factor. For example, if a journal suddenly contains more articles, there will be a fewer average number of cites per article over time. Article counts provide information for sudden changes.

For more information, click on **Information for New Users** at the JCR Home page. Then click on **Using Journal Citation Reports Wisely**.

General Access and Getting Started

Go to the search boxes near the top of the <http://www.utoledo.edu/library/mulford/>. Search by title with the term **JCR**. Select **Journal Citation Reports [Electronic Resource]** and click on **Connect to Online Resource**. Click on the **Additional Resources** tab.

Getting Help

- If assistance is needed, ask for a reference librarian at the Service Desk. For additional information, contact Mulford Reference Assistance at 419-383-4218 or MulfordReference@utoledo.edu.
- One-on-one training is available. Contact Mulford Reference Assistance for more information.
- Instant messaging is available at the Mulford Reference Assistance Web page (<http://www.utoledo.edu/library/mulford/resources.html>).
- Help pages are included in the **Information for New Users** link at the JCR Home Page.

Citation data terminology

- **Journal Cited Half-Life** – Median age of the articles that were cited in the JCR year. Half of a journal's cited articles were published more recently than the cited half-life. A longer cited half-life indicates that the current citations to articles in the journal are largely to older articles; a shorter cited half-life indicates current citations to articles are to newer articles. Only those journals cited 100 or more times have a cited half-life. The half-life does not reflect the value of the journal. The age of a cited article is not an indicator of its quality. For example, a primary research journal may have a longer cited half-life than a journal providing rapid communication of current information. Dramatic changes in half-lives over time may indicate a change in a journal's format (types of articles as research summaries, reviews, opinion pieces and research articles). When comparing journals, the half-life may reflect not only differences in format, but also publication history (as how old the journal is and how often the journal is published).
- **Journal Citing Half-Life** – Media age of articles cited by a journal in the JCR year. For example, in JCR 2003, the journal *Food Technology* has a citing half-life of 9.0. That means that 50% of all articles cited by *Food Technology* in 2003 were published between 1995 and 2003. Only those journals cited 100 or more times have a cited half-life.

The citing half-life helps one evaluate the age of the majority of articles referenced by a journal. A longer citing half life indicates current references contained in its articles are older than that of another journal having a shorter citing half life. The citing half-life does not reflect the value of the journal, for the same reasons outlined above in **Cited-Half Life**.

- **Journal Immediacy Index** - this is a rough indication of the “hottest journals”; measure of how quickly the “average article” in a journal is cited. It tells how often articles published in a journal are cited within the same year. This per-article average downplays the advantage of large journals over smaller ones. Frequently issued journals, however, have an advantage because an article published early in the year has a better chance of being cited than one later in the year.
- **Journal Impact Factor** –Average number of times articles from the journal published in the past two years have been cited in the JCR year. It is calculated by dividing the number of current citations to articles published in the two previous years by the total number of articles published in the two previous years. The impact factor is a tool for evaluating citation frequencies and journal evaluation. This measurement reduces the advantages of the larger journals, more frequently issued journals, and older journals. Caveats regarding this measurement may be found in the JCR CD-ROM under **Impact Factor**.
 - **5 Year Journal Impact Factor** -average number of times articles from the journal published in the past five years have been cited in the JCR year. Available only in JCR 2007 and subsequent years. Instructions for calculating earlier years may be found at http://0-admin-apps.isiknowledge.com.carlson.utoledo.edu/JCR/help/h_fiveyr_if.htm
- **Total Cites** – Number of times the journal has been cited by all journals in the database in a particular year.
- **Total Articles** – Number of articles published in a given year; it is used to find largest journals.
- **Eigenfactor™ Metrics** – Journal ranking scores which use citation data to assess and track the influence of a journal in relation to other journals. Eigenfactor™ Metrics are available only for JCR years 2007 and later. More information available at <http://www.eigenfactor.org/>
 - **Eigenfactor™ Score** - number of times articles from the journal published in the past five years have been cited in the JCR year. Comparisons between this score and JCR's Impact Factor is outlined at
 - **Article Influence™ Score** - measures the relative importance of the journal on a per-article basis. A score greater than 1.00 indicates that each article in the journal has above-average influence. More information about this score is available at http://0-admin-apps.isiknowledge.com.carlson.utoledo.edu/JCR/help/h_eigenfact.htm

Basic Journal Specific Information

Individual journal names may be searched to obtain data for the total cites for the year, impact factor, immediacy index, article count for the year, and cited half-life.

- Select **Search for a specific journal**
- Search by journal title, [JCR] journal abbreviation, or word(s) in title. (Note link to list of full journal titles).

Additional Journal Specific Information

- Click on the **Abbreviated Journal Title** (result from above search).
- Journal specific citation data links (Impact factor, Immediacy Index, Cited Half-Life, and Citing Half) present related calculations.
- Click the **Impact Factor Trend** button to view a graph of the journal impact factor for the past five years.
- **(Article) Source Data** table shows the number of citable items in the JCR year. Citable items are further divided into articles (i.e., research articles) and reviews.
- Cited Journal
 - **Cited Journal (Graph)** shows the distribution by cited year of citations to articles published in the journal. It aids in citation analysis (see above caveats) through the inclusion of cited half life and self citations.
 - **Cited Journal (Table)** displays a breakdown of the citations *to the journal* by the cumulative percent of latest cites to articles published in the last ten years.
- Citing Journal
 - **Citing Journal (Graph)** shows the distribution by cited year of citations from articles in the selected journal.
 - **Citing Journal (Table)** lists journals cited by the journal identified at the top of the page. One may view annual data for the past ten years as well as a lump sum of previous years.

Comparing a specific journal to other journals

Journals may be evaluated by creating a smaller subset of journals. One may use the pre-assigned subject categories or select individual journal titles. Either option allows one to view a smaller, more specific set of journals.

Subject Category Option. At the home page, select **View a group of journals by ...Subject Category** (in the drop-down menu). Select one or more categories. Select **View Journal Data** with an option in the drop-down menu (as journal title, impact factor, or immediacy index).

Using a Known Journal Title. Search for a specific journal (above **Basic Journal Citation Data**). Click on **Abbreviated Journal Title** link. Click on **View Journal Summary List** (lower right hand corner).

Sorting/Marking/Saving/Storing Journal information

Sorting Journals. Once a group of journals is selected, the titles may be re-arranged, or sorted, to aid comparisons among the journals. Go to **Sort again** : (above and to the left of the journal list). Journals may be sorted by: journal abbreviation, total cites, impact factor, immediacy index, total articles, and cited half-life.

Marking Journals. A journal may be marking by clicking in the mark column at the beginning of the row of the desired journal. One may also mark all the records. Click on **Update Marked List** after adding or deleting records. **Marked list** (near top of page) displays current marked records.

Saving/Printing. These options are available from the **Marked List**. Items may only be saved using text files.

Other Features

- **Journal Title Changes** may be accessed through the *Journal Search*, *Journal Summary List*, or *Marked Journal List* pages. These changes are for the last two years only. Provided information includes new title(s), superseded title(s), type of change (change, split, merge) and year change occurred.
- **Analyzing self-citations** may be helpful in evaluating journals. Self-citations often make up a significant portion of the citations a journal gives and receives each year. Calculation instructions are included in the **Help Contents** (through the **Information for New Users** link at home page).
- Directions are also given in the **Help Index** (through the **Information for New Users** link at home page) for the following
 - Identifying review journals.
 - Calculating unified impact factors (when a journal changes titles, splits into multiple titles, or merges with another title).
 - Calculating a five-year impact factor.