Calculating Impact Factors: Promoting JCR, Eigenfactor, h-index, WoS, and Google Scholar in an Academic Health Sciences Library



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HealthLinks | Health Sciences Libraries | How-To

How-To Sheets?

Impact Factors

An Impact Factor is one measure of the relative importance of a journal, individual article or scientist to science and social science literature and research. Each index or database used to create an impact factor uses a different methodology and produces slightly different results, revealing the importance of using several sources to judge the true impact of a journal's or scientist's work. Included on this page is information on Journal Impact Factor and Author Impact Factor.

Informed and careful use of generate impact factors. T

- It is not clear wheth
- Some databases that Certain disciplines h discipline.
- Review articles norm
- · Self-citing may also
- Some resources use
- Editorial policies can

Journal Impact Fa

Journal Impact Factor is fr tools for finding the impact

Journal Citation Report

The JCR provides quantital measure of the frequency impact factor applies only

The impact factor of a jour preceding years divided b which means that on aver-

Problem:

Increasing number of questions on interpreting and determining impact factors of journals and researchers.

Objective:

Describe methods used to educate users on how to calculate impact factors using Journal Citation Reports (JCR), Eigenfactor, h-index, Journal-Ranking, Web of Science (WoS) and Google Scholar.

Solution:

- 1. Create a web page describing different resources to use to calculate impact factors: <u>healthlinks.washington.edu\howto\impactfactors.html</u>
- 2. Offer "What is your impact?" teaching sessions as part of library liaisons biennial marketing campaign:
 - Tailored to audience
 - Mix and match with other selected topics
 - 15 minutes to 1 hour in length
 - See marketing materials at healthlinks.washington.edu/hsl/liaisons/mla2009/impactfactors/

Journal Impact Factor

Eigenfactor:

- Measures journal price as well as citation influence.
- Ranks scholarly journals as well as newspapers, theses, popular magazines, etc.
- Uses structure of the entire network to evaluation the importance of each journal, cutting across all disciplines.
- Calculations based on citations received over a 5-year period.
- Excludes self-citations.
- Free at eigenfactor.org.

Journal Citation Reports (JCR):

- Provides quantitative tools for ranking, evaluating, categorizing, and comparing journals.
- Find IF of an individual journal title or journal subject groups.
- Provides 2-year and 5-year impact factors.
- The IF of a journal in a particular year is the number of citations received in a the current year to articles published in the 2[5] preceding years divided by the number of articles published in the same 2[5] years.
- Now includes Eigenfactor score.

Journal-Ranking:

- Online interactive journal ranking service.
- Find IF of an individual journal title or journal subject groups
- Based on journals indexed by SCI plus journals recommended by registrants.
- The rank of a journal is based on the Page Influence Index (PII). PII is determined by the Journal Influence Index (JII) divided by article number multiplied by 1000.
- Free at journal-ranking.com with registration.

Author Impact Factor

Google Scholar (beta):

- Covers peer-reviewed papers, theses, books, abstracts, and other scholarly, and non-scholarly, literature from all broad areas of research.
- Unclear which resources are included.
- Use 'Cited by' link at end of search result.
- The 'Cited by' feature only includes resources indexed by Google Scholar.

h-index:

- Quantifies the actual scientific productivity and apparent impact of a scientist.
- Based on the author's most cited papers and the number of citations they have received from other articles.
- A scientist has index h if h of his/her Np papers have at least h citations each, and other (Np-h) papers have no more that h citations each.
- Access via Web of Science.

Web of Science (WoS) Cited References:

- Use Cited Reference search.
- Indicates number of times the reference has been cited in all years of WoS, regardless of how many years searched.
- Analyze Results allows you to view rankings of the authors, journals, etc. for your set of results.
- Citing Article references may not include all known citations of the paper, just those in journals covered by WoS.

