The impact or ranking of journals in which an academic publishes is often taken into account when applications for tenure, promotions and grants are considered. Therefore it is important to keep this in mind when choosing where to publish.

- Discussed below are five of the main tools used for journal ranking. Each tool uses different metrics to rank journals and each also has different journal coverage.
- Journal metrics should only be compared across the same discipline or sub-discipline, due to varying citation traditions
- At present, none of the journal ranking tools adequately categorise multi-disciplinary journals
- The use of journal rankings to assess research output is not appropriate for some disciplines, e.g. in the arts and humanities research output in journals is low and citations are infrequent. In some fields, conference proceedings are the main outlet for disseminating research and in general journal ranking tools do not cover these adequately.

**Journal Citation Reports**

**Journal Citation Reports (JCR)** is produced by Clarivate Analytics (formerly Thomson Reuters). JCR is a subscription-based product based on data from the Web of Science. JCR is the original journal ranking tool, first developed in the 1950s, and it is the current market leader for journal rankings.

JCR allows you to search for individual journals or to compare groups of journals by subject category. JCR provides a range of metrics for each journal, covering impact over 2 and 5 years, how quickly things get cited, if citing continues over a long period of time and others. JCR also provides the eigenfactor metrics.

**Key metric: Journal Impact Factor (JIF)**
The journal impact factor is the average number of citations received in a year by articles published in a journal in the previous two years. e.g. a journal’s JIF for the year 2015 is calculated as follows:

\[
\text{JIF} = \frac{\text{Total no. of citations in year 2015}}{\text{Total no. of articles published in year 2014+2013}}
\]

**Comparison of key indicators for two journals in bioethics (2015)**

<table>
<thead>
<tr>
<th>Key metric</th>
<th>Year 2015 citations to 2014+2013 articles</th>
<th>Year 2015 weighted citations to 2014+2013+2012 articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>JCR JIF</td>
<td>6.5</td>
<td>1.75</td>
</tr>
<tr>
<td>CiteScore</td>
<td>0.66</td>
<td>1.51</td>
</tr>
<tr>
<td>SCImago SJR</td>
<td>0.409</td>
<td>0.686</td>
</tr>
<tr>
<td>EigenFactor</td>
<td>0.00419</td>
<td>0.00208</td>
</tr>
<tr>
<td>Scopus SNIP</td>
<td>0.417</td>
<td>1.33</td>
</tr>
</tbody>
</table>

**SCImago**

SCImago is a freely available web resource available at http://www.scimagojr.com This uses Scopus data to provide metrics and statistical data for journals. The main metrics have now also been included within the subscription Scopus product if you have access to that.

As well as a Journal Rank Indicator (SJR) , SCImago provides a number of other metrics and statistics for journals and it allows you to search for journals individually or comparatively by discipline and sub-discipline.

**Key metric: SCImago Journal Rank Indicator (SJR)**
The SJR is much like the Journal Impact Factor in principle. However it goes a step further by mimicking the Google PageRank algorithm. As such it assigns higher value/weight to citations from more prestigious journals. The SJR covers a three year citation window e.g. a journal’s SJR for 2015:

\[
\text{SJR} = \frac{\text{Total no. of citations in year 2015}}{\text{Total no. of articles published in year 2014+2013+2012}}
\]

**Google Scholar Metrics**

Google Scholar Metrics are based on the Google Scholar Index. You can browse the Top 100 publications in broad subject areas (in several languages) or more specific sub-categories (English only) based on the h5-index and the h5-median

**Key Metrics - h5-index and h-5 median**

These are the h-index and h-median of its articles that were published in the last five complete calendar years.

It also lists the h-core (articles the h-index is based on), all citations for each h-core article articles for each journal and it links directly to articles.

Limitations include: the exclusion of some journals that are indexed in Google Scholar; some manually selected resources (such as repositories or working papers) are treated as journals; search options are limited.

**eigenFACTOR.org**

eigenFACTOR.org is a freely available web resource that provides metrics for journals using data from Journal Citation Reports. As well as the eigenfactor score, it also provides the Article Influence score which is more directly comparable with the JCR Journal Impact Factor.

**Key metric- Eigenfactor**

**Eigefactor**

Eigefactor uses a similar method to Google’s PageRank algorithm to rank journals i.e. the eigenfactor of a journal is based on the citations it receives from other journals and citations from highly ranked journals are given more weight than others.

The eigenfactor score also takes into account other variables like the disciplinary relationships between citing and cited journals. It also covers a five year citation window. For these reasons it is considered quite robust.

**CiteScore metrics**

CiteScore metrics are produced by Scopus (Elsevier) and are freely available at http://journals.elsevier.com. A journal’s CiteScore represents the average number of citations received in a year by articles published in the previous three years e.g. a journal’s CiteScore for 2015 is:

\[
\text{CiteScore} = \frac{\text{Year 2015 citations to 2014+2013+2012 articles}}{\text{Total no. of articles published in 2014+2013+2012}}
\]

**Key metric- SNIP Source Normalized Impact per Paper (SNIP)**

Created by Professor Henk Moed at CTWS, University of Leiden, Source Normalized Impact per Paper (SNIP) measures contextual citation impact by weighting citations based on the total number of citations in a subject field. This is designed to allow comparison across research areas, not possible with most metrics

\[
\text{SNIP} = \frac{\text{Year 2015 citations to 2014+2013+2012 articles}}{\text{Total no. of articles published in 2014+2013+2012}}
\]

Website: http://myri.conul.ie

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