Impact Factor is one of the quantitative tools for ranking, evaluating, categorizing, and comparing journals. It is a measure of the frequency with which the “average article” in a journal has been cited in a particular year or period. The annual 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.

**Journal Impact Factors** (*Source: Thomson Reuters, Science gateway*)

There have been many innovative applications of journal impact factors. The most common involve market research for publishers and others. But, primarily, Journal Citation Reports (JCR) provides librarians and researchers with a tool for the management of library journal collections. In market research, the impact factor provides quantitative evidence for editors and publishers for positioning their journals in relation to the competition—especially others in the same subject category, in a vertical rather than a horizontal or interdisciplinary comparison. JCR® data may also serve advertisers interested in evaluating the potential of a specific journal.

Perhaps the most important and recent use of impact is in the process of academic evaluation. The impact factor can be used to provide a gross approximation of the prestige of journals in which individuals have been published. This is best done in conjunction with other considerations such as peer review, productivity, and subject specialty citation rates. As a tool for management of library journal collections, the impact factor supplies the library administrator with information about journals already in the collection and journals under consideration for acquisition. These data must also be combined with cost and circulation data to make rational decisions about purchases of journals.

The impact factor is useful in clarifying the significance of absolute (or total) citation frequencies. It eliminates some of the bias of such counts which favor large journals over small ones, or frequently issued journals over less frequently issued ones, and of older journals over newer ones. Particularly in the latter case such journals have a larger citable body of literature than smaller or younger journals. All things being equal, the larger the number of previously published articles, the more often a journal will be cited.

The impact factor for a journal is calculated based on a three-year period, and can be considered to be the average number of times published papers are cited up to two years after publication.

**CALCULATION OF IMPACT FACTOR**

- A=Total citations in 2008 to items published in Journal X
- B=2008 citations to items published in journal X in 2006-07(Subset of A)
- C=Number of substantive articles published in Journal X in 2006-07

Impact Factor=B/C

For example, assume that in 2010, there were 3200 citations to items published in Journal X. Of these 550 were citations to items published in Journal X in 2008 and 2009. During those two years, Journal X published 72 articles.

2008 Journal X impact factor=550/72=7.64
The impact factor of a journal reflects the frequency with which the journal's articles are cited in the scientific literature. It is derived by dividing the number of citations in year 3 to any items published in the journal in years 1 and 2 by the number of substantive articles published in that journal in years 1 and 2. For instance, the year 2008 impact factor for Journal X is calculated by dividing the total number of citations during the year 2008 to items appearing in Journal X during 2006 and 2007 by the number of articles published in Journal X in 2006 and 2007[3-5].

Please note the following key points related to Journal Impact factor:

- Journal Impact Factor cannot be calculated for new journals. I mean “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”, hence impact factor can be calculated after completing the minimum of 3 years of publication.
- Journal Impact Factor will be a quotient factor only and will not be a quality factor.
- Journal Impact Factor will not be related to quality of content and quality of peer review, it is only a measure of the frequency with which the "average article" in a journal has been cited in a particular year or period.
- Journal, which publishes more review articles, will get highest impact factors.