



Research and Development (R&D) MS Ramaiah College of Arts, Science and Commerce Bengaluru

Brief Review: Evaluation of Quality Scientific Publishing based on the Impact Factor and Other Criteria

Seed Money Grant Scheme

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Introduction

The information provided in this manuscript is an extracted material from different sources of a public domain and an attempt is made to compile briefly and concisely only the relevant information for the benefit of faculty in the academic institution. The information provided below is assumed to be beneficial to the faculty who are doing some kind of research-oriented activities, either on full time or part time basis. In an academic institution, periodically, the faculty will be assessed for giving promotion or incentives using different criteria, among one of the criterion considered will be a publication (number and quality). However, assessing the faculty performance based on the publication quality alone is not a simple task and many other factors needed to be considered. In this regard, some of the difficulties faced throughout the world for arriving a single method that assess quality of a publication and also different recommendations made to optimize the process have been discussed very briefly. At the end, the method adopted to award incentive to the faculty of MSRCASC for their publication is also provided.

Impact factor (IF)

The first question in general anybody can ask is what is an impact factor (IF)? Metrics have become a fact of life in many fields of academics. The responsible use of research metrics encapsulated in use both *qualitative* and *quantitative* input for decision making. The IF refers to a measurement of the influence and authority of a published piece of work. One of the most popular metrics used is the calculation of citation-based IF. IF calculations can measure citations and impact for both individual authors and overall journal publications. Now it has extended to individual departments, university and country level.

Calculation of IF has become effective metrics because students and professionals in academia often produce work and articles for publication in different types of journals. Having work published by journals conveys experience, professionalism and knowledge in their field. When submitting works and evaluating publications, specific benefit may be gained from assessing the impact factor and ranking of a journal. In this article, we discuss the definition, purpose and steps for calculating the IF of a journal and personal impact.

General Impact Factor (**GIF**): The GIF provides quantitative and qualitative ranking, evaluating the journals for evaluation and excellence. This factor is used for evaluating the prestige of journals. The evaluation is carried out by considering the factors like peer review originality, scientific quality, technical editing quality, editorial quality and regularity and other factors. The GIF is a measure reflecting the average number of citations to articles published in journals, books, patent document, thesis, project reports, newspapers, conference/ seminar proceedings, documents published in internet, notes and any other approved documents. It is a measure of relative importance of a journal within its field, with journals of higher journal impact factors deemed to be more important than those with lower ones. Journal Impact factors are calculated in yearly/half- yearly/ Quarterly/Monthly for those journals that are indexed in Journal Reference Reports (JRR).

Personal impact factor (PIF): The personal impact factor calculates the reach and references of individual publications. This measurement displays the average number of times that an individual personal writing appears as a reference in other works. PIF can be calculated by counting the number of citations of a work and dividing it by the total number of pieces published.

Journal impact factor (JIF)

The journal impact factor is a metric that assesses the citation rate of articles published in that journal during a specific time – that's usually 2 years. The JIF value determines the ranking and status of an academic journal. This value represents the average number of references for articles within a journal. The JIF offers insight into the reach, quality and influence of the information provided by the publisher or journal. You can calculate the average references for various time frames and use the value to compare journals with information relating to a particular field of study.

1. Why is the JIF important? The impact factor of a journal can determine the funding, submissions and reputation of publishers and academic writers. Maintaining the quality of work being published increases the frequency or references and improves the overall ranking of the journal. Journals that boast high impact factor values appear as well-managed and prestigious publications.

- 2. When to use JIF: The impact factor allows authors, students and users to analyse a visual hierarchy of the academic journals present in their field. Consulting this ranking allows you to assess which journals align with the needs and values of your writing.
- **3.** Submitting an article: As an author or student, you may submit an article to be published in a journal. Assessing the rank and status of various journals can help you decide which publication has the highest rate of views and citations. Publishing an article in a well-known or high-ranking journal increases the authority and reach of your work and creates a powerful impression for future employers or recruiters.
- **4. JIF for assessing academic success**: The IF of a journal can serve as an indicator of a professional's or student's level of success in their field. Journals with high IF rankings typically hold the articles that they accept and publish to a higher standard of writing or information. Having an article published in a high-ranking journal can distinguish you as a successful and skilled writer or researcher in your field.

Journal-Level-Metrics

The **journal impact factor** (**IIF**) is a measure of the frequency with which the average article in a journal has been cited in a particular year. It is used to measure the importance or rank of a journal by calculating the times its articles are cited. The journal Impact Factor is calculated by **dividing the number of citations in the Journal Citation Reports** (**JCR**) **year by the total number of articles published in the two previous years**. An IF of 1.0 means that, on average, the articles published one or two year ago have been cited one time.

Tools to Measure Journal Impact Factor

- **Journal Citation Reports (JCR):** Journal Citation Reports provides ranking for journals in the areas of science, technology, and social sciences. For every journal covered, the following information is collected or calculated: Citation and article counts, Impact factor, Immediacy index, Cited half-life, citing half-life, Source data listing, citing journal listing, cited journal listing, Subject categories, Publisher information.
 - Limited to the citation data of Journals indexed in Web of Science
 - Process to determine journals included in the tool
 - Indexes over 12,000 journals in arts, humanities, sciences, and social sciences.
- **Scopus** (Elsevier): Scopus provides three journal metrics CiteScore, SJR (SCImago Journal Rank) and SNIP (Source Normalized Impact per Paper). Once you are in Scopus, click on "Sources" at the top to access the journal impact data. Over 22,000 active journals from over 4,000 international publishers process to determine journals included in the tools. What is Scopus stands for -**sco-pus**. skəpəs: **one that watches**. **in generic names**.
- **Note**: Elsevier is a publisher, and Scopus is article database provided by Elsevier. Not all journal from Elsevier is indexed in Scopus, and not all articles in Scopus come from Elsevier's journals. Scopus is more general, could index journals from other publishing companies.

- SCImago Journal Rank (SJR): "The SCImago Journal & Country Rank is a portal that includes the journals and country scientific indicators developed from the information contained in the Scopus® database (Elsevier B.V.)." Scopus contains more than 15,000 journals from over 4,000 international publishers as well as over 1000 open access journals. SCImago's "evaluation of scholarly journals is to assign weights to bibliographic citations based on the importance of the journals that issued them, so that citations issued by more important journals will be more valuable than those issued by less important ones." (SJR indicator)
- **SNIP** (Source Normalized Impact per Paper): Source Normalized Impact per Paper (SNIP) measures contextual citation impact by weighting citations based on the total number of citations in a subject field. The impact of a single citation is given higher value in subject areas where citations are less likely, and vice versa. Unlike the well-known journal impact factor, SNIP corrects for differences in citation practices between scientific fields, thereby allowing for more accurate between-field comparisons of citation impact. CWTS Journal Indicators also provides stability intervals that indicate the reliability of the SNIP value of a journal. SNIP was created by Professor Henk F. Moed at Centre for Science and Technology Studies (CWTS), University of LCWTS Journal Indicators currently provides four indicators:
- The **impact per publication** (**IPP**), calculated as the number of citations given in the present year to publications in the past three years divided by the total number of publications in the past three years. IPP is fairly similar to the well-known journal impact factor. Like the journal impact factor, IPP does not correct for differences in citation practices between scientific fields. IPP was previously known as RIP (raw impact per publication).
- % self cit. The percentage of self-citations of a source, calculated as the percentage of all citations given in the present year to publications in the past three years that originate from the source itself.

Calculation of Journal Impact Factor of Journal

The calculation is based on a two-year period and involves dividing the number of times articles were cited by the number of articles that are citable.

For Example, calculation of 2007 IF of a journal:

A = the number of times articles published in 2006 and 2005 were cited by indexed journals during 2007. B = the total number of "citable items" published in 2006 and 2005. *Then* **2007 JIF** is = A/B

No. Cites	Number of articles
2006 = 10096	2006 = 352
2005 = 9958	2005 = 319
Sum = 20054	Sum = 671
Calculation: Cites to recent articles	20054
=JIF	= 29.887
No. of recent articles	671
Journal Impact Factor (JIF)	= 29.887

The calculation of IF for Cell (2007). Source: Journal Citation Reports (Thomson Reuters)

The **Journal Impact Factor** (JIF) can be used to evaluate or compare a journal's relative importance to other journals in the same field. It shows an average citation rate per article for the past two years. Thomson Reuters publishes annually JIF for journals included in the Web of Science database in its **Journal Citation Reports (JCR)**.

Factors Influencing on the IF Statistics

• The IF is relatively independent of the size of a journal (number of articles published by the journal), because it is a relative metric. However, journals with large number of articles published usually have

high IF values, because they are more likely to contain highly cited articles than journals with small numbers of articles published. Sudden changes in a journal's size can affect the IF. If the number of articles published is suddenly decreased, it can cause a temporary rise of the IF of a journal.

- The size of the scientific community that a journal serves does not significantly affect the journal's IF. While more authors produce more citations, these must be shared by a larger number of cited articles.
- Because the IF is determined by citation frequency, it is a valid measure for journal impact for scientists who publish and generate citations. However, it excludes the frequency of journal use, which may be significant in the case of some medical journals.
- The type of journal, rather than the quality alone, may influence the IF. Journals publishing a large number of review articles usually have high IF, because review articles usually have a higher average rate of citation than original research papers. If a journal publishes a large number of reviews one year, there may be a temporary increase in the number of citations received. In some fields methodological papers are also more cited than original research papers.
- The distribution of citations of articles within a journal is skewed, a relatively small number of articles within a single journal receive the majority of all citations. The well-known 80/20 rule applies that 20% of articles may account for 80% of the citations. And a large percentage of published articles are never cited.
- In the first year after a journal title change, the new title is listed without an IF because the article counts for two preceding years used in the IF calculations is zero. This also concerns new titles included in the database.

Fluctuations of the IF

The Impact Factors of journals fluctuate from year to year, and part of this variation is random. The relatively small number of papers contributing to the IF means that there is a large random component in the variation. As there are many more journals with a low IF than journals with a high one, rankings for the low impact ones are less stable than for the high impact ones. For high impact journals, noise and fluctuations have only a small influence on the impact, and do not lead to any change in ranking. However, journals are often compared for a fixed year, without taking into account the higher variation for small journals.

Limitations and Biases of the Impact Factor

- All citations are weighted equally regardless of the reputation of the citing journal.
- Differences in citation patterns among disciplines are not considered, which makes it impossible to compare journals across disciplines. The different disciplinary citation patterns are correlated with the size of the pool of citable literature, different citation traditions, the length of articles, the number of references in articles, the average amount of articles per author and variations in the use of indirect citations, which means citing only one specifically referenced publication, and adding a phrase such as "and references therein".
- The context of citations is not considered. Articles are cited for various reasons, and often a citation does not reflect the scientific merit of the cited work. **Negational** citing is especially related to disciplines with a critical discourse. Thus a high citation rate of an article may not always be associated with high quality.
- Only articles that are cited within two years after publication contribute to the impact factor although many important papers achieve their maximal scientific impact outside of this time-frame.
- Citations made in journals not recorded in the Web of Science database do not contribute to impact factor calculations. Citations are gathered from journal articles only, and not from books, book chapters, or conference proceedings.
- The denominator of the IF calculation is made up by citable articles. The non-citable items, including letters, news stories, abstracts, book reviews, and editorials, are not included in the denominator of the impact factor equation but may be included in the numerator if they are, although infrequently, cited.
- The sample of journals included in JCR is limited, and represents only a small fraction of all journals. In addition, the journal selection process is somewhat ambiguous. The content of the JCR is variable and the journal evaluation and selection process is an ongoing process.

- JCR has a preference for the English language. Journals that publish articles in languages other than English will likely receive fewer citations because a large portion of the scientific community cannot read them.
- Self-citations are included in total cites of a journal. A high self-cited rate indicates a journal's low visibility, and a high self-citing rate is an indicator of the isolation of the field covered by the journal. Thomson Reuters takes into consideration the self-citation rates of journals it covers, and an unusually high rate of self-citations can lead to exclusion of the journal. The total citation counts also include citations of authors to their own work but several citations to same article in one article are counted only once. JCR also provides journal IFs without journal self-cites.
- Minor errors in the preparation of article reference list information (basic typographical mistakes, inconsistent spelling of surnames and use of initials, and so on) may also inadvertently bias citation identification and recording. It has been suggested that this type of mistake occurs in up to 7% of citations.
- Comparisons of two journals in different disciplines using IF are not possible. The IF varies considerably among disciplines due to different citation and referencing tendencies of each discipline. In addition, if in some disciplines many citations occur outside the two-year window, IF for journals will be low.
- The IF of a journal cannot be considered to represent the citation rate of an individual article and does not permit assessment of the quality of an individual article or author. In fact, there is virtually no correlation between the frequency of citation of an individual article and the IF of the publishing journal. The misuse of IF has, in recent years, widened to include evaluation of the quality of individual authors and research groups.
- Many authors may be tempted, or feel pressured, to select the highest IF-rated journals likely to accept their article for publication while rejecting journals whose target audience may in fact be more suitable and receptive to the publication itself.
- IF can distort publication polices of journals, if they focus on improving their IF for example by publishing more reviews. An item is classified as a review by Thomson Reuters if it meets any of the following criteria: it cites more than 100 references, it appears in a review publication or a review section of a journal, the word review or overview appears in its title, or the abstract states that it is a review or survey.

Quartiles

Journal ranking within a specific subject category can also be indicated by quartiles. Four quartiles rank journals from highest to lowest based on the impact factor: Q1, Q2, Q3, & Q4.

Journals comprises (statistically) prestigious	Journal % in each Quartile
journals within the subject category	Groups
Q1 Journals fall in	Top 25% group
Q2 journals fall in	25%–50% group,
Q3 journals fall in	50%–75% group,
Q4 journals fall in	75%–100% group

Some of the factors considered in the categorisation include the aim and scope of the journal, the quality of its board, the impact factor, external opinions about the journal and quality of the papers. The number of citations for journal publications is an influencing factor, called the impact factor, which is used to rank journal ranks. Several journal-level metrics have been developed. The majority of these are based on citations.

Numbers = status, and many authors, or their institutions, insist on publication in a Q1 or at least a Q2 journals.

What is a Good Impact Factor (Ranking in 27 Categories)?

Using 13,000 as the total this is how it would break down:

JIF	# journals	Overall
0-<1	3936	30.3%

1-<2	3851	29.6%					200	2				
2-<3	2369	18.2%	Research BCI JOURNAL 9064									
3-<4	1248	9.6%	73.21%	73.21% Impact Factor								
4-<5	617	4.8%				Journa	I Rank	ing 201	8/2019			
5-<6	309	2.4%		5213								
6-<7	175	1.4%		42.10%								
7-<8	117	0.9%			2844							
8-<9	78	0.6%			22.97%	1596						
9->10	244	1.9%				12.89%	7.91%	670	495	378	300	244
								5.41%	4.00%	3.05%	2.42%	1.97%
			>1	>2	>3	>4	>5	>6	>7	>8	>9	>10

Personal Impact Factor

Personal impact factor calculations can also display the importance and success of your published content. Having a high number of references and a high average impact value means that your claims and findings receive support and serve as useful for others in academic settings. A high personal impact factor establishes your credibility and knowledge of topics in your field.

Author-level metrics

Author-level metrics are **citation metrics** that measure the **bibliometric impact** of individual authors, researchers, academics, and scholars. Author-level metrics help track an individual researcher's impact in an academic discipline. This is traditionally calculated by using the number of times their scholarly publications are cited by other researchers. These impact factors can help in promotion and tenure, as well as aiding in funding and grants

Many metrics have been developed that take into account varying numbers of factors (from only considering the total number of citations, to looking at their distribution across papers or **journals** using statistical or **graph-theoretic** principles). The main purpose for developing these quantitative comparisons between researchers is to allocate resources (e.g. funding, academic appointments). However, there remains controversy in the academic community as to how well author-level metrics achieve this goal.

Indexing of Journal

Indexing is a database of scientific journals having a good track record of maintaining the ethics and quality in terms of publication. Indexed journals considered to be higher quality in comparison to a non-indexed journal.

Indexing of a journal provides better visibility of the journal to a wider user. Being visible and accessible to larger people will cause better quality papers and results.

Almost every researcher and author search journals using these databases to find a particular journal. Indexing helps the researcher to find a good journal according to his/her needs.

The benefits of Indexed journals

- The indexed journal gets better visibility.
- Gets quality papers from the authors for publication.
- The Journal impact factor gets increased.
- Authority and reputation of the journal get improved.

The 10 Best Academic Research Sources:

Here are some of the most reputed journal indexing agencies where you can check the indexing and apply for it.

Google Scholar	EMBASE	OAJI
Scopus	DOAJ	Index Copernicus

PubMed	ISI Indexing	Open J Gate
EBSCO	SCIE	Ulrich's International Periodical Directory
IJIFACTOR	SCIMAGOJR	BASE

General Rules Followed by Journal Indexing Agencies

- Journal must have e-ISSN and p-ISSN
- The Journal must have at least 5 issues or at least 1-3 years old.
- Journal must have at least 60% foreign members on the editorial board etc.
- These are some of the conditions of applying the journal for indexing. There could be many other points you should check.

Resources to Find the h-index

- 1. Google Scholar: Google Scholar provides the h index for authors who have created a profile.
- 2. Publish or Perish: Publish or Perish is a software program that retrieves and analyzes academic citations from Google Scholar and provides the h index among other metrics. Publish or Perish is handy for obtaining the h index for authors who do not have a Google Scholar profile.
- **3. Scopus**: Scopus provides a Citation Tracker feature that allows for generation of a Citation Overview chart to generate a h index for publications and citations from 1970 to current. The feature also allows for removal of self-citations from the overall citation counts.
- **4.** Web of Science: Web of Science allows for generation of the h index for publications and citations from 1970 to current using the "Create Citation Report" feature.

The h-index

Although, originally conceived as an author-level metric, the h-index (and some of its numerous variants) have come to be applied to higher-order aggregations of research publications, including journals. The *h-index*, developed in **2005 by J.E. Hirsch (also called as Hirsch index or Hirsch number)**, is one of the most widely used author-level-metrics that quantifies research output by measuring author productivity and citation impact of the publications, initially used for an individual scientist or scholar. For a researcher to have an *h-index*, they must have a certain number of publications (*h*) that have received at least *h* citations. For example, an *h-index* of 15 means the researcher has at least 15 publications that have been cited at least 15 times each.

Definition and purpose

The h-index is defined as the maximum value of h such that the given author/journal has published at least h papers that have each been cited at least h times. The index is designed to improve upon simpler measures such as the total number of citations or publications. **The index works best when comparing scholars working in the same field**, since citation conventions differ widely among different fields.

Author-level metrics differ from journal-level metrics which attempt to measure the bibliometric impact of academic journals rather than individuals. However, metrics originally developed for academic journals can be reported at researcher level, such as the author-level eigenfactor and the author impact factor

What is a good h-index ranking of scientists?

Hirsch reckons that after 20 years of research, an h-index of **20 is good, 40 is outstanding, and 60 is truly exceptional**. In his paper, Hirsch shows that successful scientists do, indeed, have high h-indices: 84% of Nobel prize winners in physics, for example, had an h-index of at least 30.

No.	Scientists	h-index	Status
1	Scientists of >20 years of research experience	20	good
2		40	outstanding
3		60	Truly exceptional
4		>30	84% Nobel prize winners
	Ph.D. Student	1 or 2	At the end of Ph.D.
5	Post doc with 2 years of experience	5	After two years

What is a Good h-index in Education?

No.	H-index		Designation		
	Recommendation-1	Recommendation-2			
1	3-5	2-5	Assistant professor		
2	8-12	6-10	Associate professor		
3	15-20	12-24	Professor		

These are mean or median values only—the distribution of values at each rank is very wide. *As a general rule in many fields, an h-index that matches the number of years a scholar has been working in the field is a respectable score.*

Few examples of h-index of Faculty working in the International institutions/ Universities and their Research Area

Name	h-index	University	Research area						
A good h-index for an assistant professor									
Yuan Lu	30	Yale	Cardiovascular epidemiology						
Mohammad Alizadeh	44	MIT	Computer networks						
Manuel A. Rivas	39	Stanford	Human genetics						
Mark L. Hatzenbuehler	66	Columbia	LGBT health disparities						
Martin J. Aryee	49	Harvard	Statistics						
A good h-index for an Asso	ociate prof	essor							
Ivan P. Gorlov	27	Dartmouth	Bioinformatics						
Arvind Narayanan	41	Princeton	Information privacy						
Yajaira Suarez	44	Yale	MicroRNAs						
Richa Saxena	63	Harvard	Genetics						
Alon Keinan	45	Cornell	Computational genomics						
A good h-index for a full p	rofessor		1						
James E. Hansen	100	Columbia	Climate change						
Olivia S. Mitchell	78	University of Pennsylvania	Economics						
Fredo Durand	88	MIT	Computer graphics						
Li-Jia Li	35	Stanford	Machine learning						
Enrique Rodriguez Boulan	84	Cornell	Cell polarity						

Note: These numbers shouldn't be taken as the yardstick of comparison, as every researcher has different experiences, and the h-index is not the only measure that defines them.

Useful For

- 1. Comparing researchers of similar career length.
- 2. Comparing researchers in a similar field, subject, or Department, and who publish in the same journal categories.
- 3. Obtaining a focused snapshot of a researcher's performance.

Not Useful For

- 1. Comparing researchers from different fields, disciplines, or subjects.
- 2. Assessing fields, departments, and subjects where research output is typically books or conference proceedings as they are not well represented by databases providing h-indices.
- 3. **Hirsch** states that "obviously a single number can never give more than a rough approximation to an individual's multifaceted profile, and many other factors should be considered in combination in evaluating an individual

The i-10-index of author

The i10-index was created by Google Scholar as an index to rank author impact. Simply, it is the number of publications the researcher has written that have at least 10 citations. This very simple measure is only used by Google Scholar, and is another way to help gauge the productivity of a scholar.

Google Scholar Metrics

Google Scholar Metrics provide an easy way for authors to quickly gauge the visibility and influence of recent articles in scholarly publications. Scholar Metrics summarize recent citations to many publications, to help authors as they consider where to publish their new research. To locate an author's h-index and i10-index by Google Scholar:

- 1. Go to Google Scholar.
- 2. Place a search for the name of an author or the title of a work.
- 3. Under the work's title, click the name of the author if it's underlined (this indicates they have a Google Scholar profile).
- 4. This will bring you to the author's Google Scholar public profile page where you can view the author's *i10-index* and other metrics.

In order for an author to have their scholarly research included in the i10-index, the author must first have created a public Google Scholar profile. To create a profile in Google Scholar, visit Google Scholar Citations and click on Set up your Google Scholar Profile.

Are journals indexed by Google Scholar good?

Speaking of which, Google scholar journals are considered the most reputed in the world of academic journals. **Journals and presses that have been deemed predatory are not included in Google Scholar**, so papers published in such venues may not be indexed. Google Scholar is a **Web search engine** that specifically searches scholarly literature and academic resources. Google Scholar searches for scholarly material including **books, journal articles, conference papers, chapters, and theses** on a wide range of subjects. Results are sorted by relevance, based on full-text matching, where it was published, who wrote it, and how often it has been cited.

Advantages and disadvantages of i10-Index

Advantages of i10-Index	Disadvantages of i10-Index		
• Very simple and straightforward to calculate	Used only in Google Scholar		
• My Citations in Google Scholar is free and easy to use			

Calculation of Impact Factor Manually/Personally

Follow these three steps to measure the personal impact factor of your academic writing and publications:

- 1. **Count the total citations**: To calculate the average number of citations for your works, first identify and total the number of times other publications reference your pieces. Typically, this total refers to citations within a time frame of one or two years. This value represents the first portion of the impact factor calculation.
- 2. **Divide by the number of published works**: The personal impact factor calculates an average. To determine the average value, you can divide the total number of citations by the total number of articles that you published within your determined timeframe. Ensure to include only articles that allow for citations and articles that credit you as an author.
- 3. **Compare to other authors**: Once you find the average number of references for your publications, you can use the personal impact factor value to compare and rank yourself. Compare your value with the averages of other professionals or students in your field and at your level of experience. Identifying how you compare with others allows you to understand the quality and importance of your writing and allows you to display your rank to employers, recruiters and supervisors.

Google Scholar Mapping Based on Citation Index



Charles Robert Darwin

naturalist (1809-1882) life sciences - evolution - biogeography - speciation - natural selection Verified email at unr.edu.ar Homepage

Citation indices			Citations to my articles				
	All	Since 2008	6291			I	11. C
Citations	77539	27837					ш
h-index	80	49					Ш.
i10-index	331	159	0 1974	1983	1993	2003	2013
Select: All, None Export						Show: 20 💌 1-20	0 Next >
Title / A	uthor					Cited by	Year
Origin CMA Da DMP	of spec arwin	ies				21606 *	1978
The de C Darwi Digiread	scent o ⁿ ls. Com	f man				11815	2009
The ex	pressio	n of the emo	tions in man a	and animals		9556	2002

Here is a screenshot of a Google Scholar My Citations page for Charles Darwin (you can see the i10-Index highlighted in the small table):

What Is a Good Impact Factor for a Journal?

When it comes to identifying a top journal to submit your manuscript to, there are a number of different metrics you can consider in order to assess journal quality. A good journal impact factor (JIF) is often the main consideration for researchers. Many researchers assume that a high JIF indicates a more prestigious journal. And that means more recognition for the manuscript author(s). In principle, a higher impact factor is better than a lower impact factor, but there are a lot of conditions to that. There's no single determinant of what makes a good journal impact factor. It depends on the field of research, and what you mean by "good". What applies as "good" for a breakthrough immunology study may not apply as "good" for an incremental regional economics study. The use of impact factors in the academic world to rank journals is controversial. Yet researchers continue to associate a good IF with better quality research.

SCI Journal analysed the impact factors of 13,000 journals across 27 scientific disciplines and graphed the results to help identify the JIF range that defines a top journal. They found that about one quarter of journals have an impact factor of less than 1, suggesting that these are lower-tier journals. Interestingly, despite the large number of journals with an impact factor greater than 1, less than 2% have an impact factor that is over 10, making this a very select subset of journals. This analysis argues that, in general, a scientific journal with an impact factor greater than 10 could be considered a top journal in most fields.

Some pros of using impact factor to judge a journal's quality

The impact factor was used initially to rank journals, which will then help you decide on which one to which to submit your research. Some of the pros of an IF include:

- Easily accessible
- Gives a general picture of a journal's prestige and reputation
- Is pretty good for comparison within a field if not across fields
- Appeals to people and institutions that like rankings and numbers

What is considered a good journal impact factor?

In most fields, the impact factor of **10 or greater** is considered an excellent score while 3 is flagged as good and the average score is less than 1.

The difficulties in the assessment for incentive at Academic Institutions based on the high impact publications alone.

When compared to the research intensive institutions, academic institutions have different priorities compared to the research oriented institutions. Academic institutional activities are mainly centred around teaching, research, periodic student progression assessment, office documentation, co- and extra-curricular activities, involvement in official works (institutional and university works), class lecture preparation, conducting practical classes, etc. Almost all the regular staff has to be engaged in one or other activities without failure.

Difficulties in assessing faculty performance based on the quality papers alone

Though, some research works are non-citable, in the interest of institutional brand building and to have high public perception, the following activities need to be compulsorily executed.

Teacher centric activities such as:

- 1. The teachers in the academic institutions are employed mainly for teaching work and research work is secondary.
- 2. Full time teachers will be loaded with teaching work and get less time for doing research.
- 3. Teachers have to complete the syllabus and assessment of student progression well in time, which is highly time-bound and held responsible.
- 4. In addition, teachers have to do other works such as providing documents periodically for IQAC, NAAC, LIC, NIRF, Star College scheme, etc.
- 5. The faculty are also obligated to do the duties assigned by the Institution/University: such as paper evaluation, paper setting, conduction of value-added and value addition courses, etc.
- 6. Faculty has to conduct and attend FDPs, Guest Lectures, Conferences, technical workshops, exhibitions, non-academic student activities, etc.
- 7. Resources (infrastructure and financial assistance) for conducting research are very much limited and no overtime remuneration is given for research work.
- 8. Human resources are available on need based only and has tightly regulated: therefore, teacher has to have fashion for doing research out of the class hours if needed and an individual faculty has to take full responsibility to complete the project.
- 9. Getting research motivated students help are scanty.

Research Centric activities of faculty can take up:

- Since the Colleges/Institutions demands to have programs for
 - Building Institutional Visibility (building brand image)
 - Popularization of Science
 - Dissemination of knowledge
 - Alumni activities for enhancing of placement:
 - Getting externally funded grants, etc.

All these activities have to be done in as a part of the jab in addition to the teaching work.

- The research activities in an academic institution are not fulltime job, evaluation of a purely on publication in high impact factor journal is become secondary.
- However, staff and students can be engaged in divers activates, which provides opportunities to improve their overall contribution to the department and also to the institution.

• Student guiding of	 reviewing journal 	• member in editorial committees
research projects and	articles	 preparation of laboratory manuals
thesis writing	 preparation of videos 	 newspaper clips and columns
 writing review articles 	for YouTube and	• field demos
 text books writing 	other medias	• extension actives
• writing technical reports.	 conducting 	• conducting and participating in national
 book chapters 	certificate courses	and international programs
• Bringing out seminar	 participation in 	 conducting and participating
proceedings	outreach programs	seminars/conferences/symposiums
 research paper reviewing 	 conducting technical 	 bringing out research journals
• developing protocols for	trainings.	• and many more
practical classes	• exhibitions and	 collaborative research projects
 publishing popular 	model building	• conduction of quizzes and tests
articles.	activities.	-

Though, many of these activities may not come under research, the contribution made by the faculty is very significant and needed to be considered during faculty appraisal. All these activities help enormously for institutional brand building and also for improving of individual faculty profile.

Incentives for faculty publication at MSRCASC

Though, incentive giving to the faculty for the paper publication is not a common practice in the most colleges/Institutions/ Universities. Also, the incentive amount will not reflect the quality of the paper or journal standards. Quality of the paper is gauged and assessed by many other parameters as mentioned above. The use of the JIF to provide incentive (monitory benefit) at MSRASC is only to inspire the faculty to have publication culture and to cover some incidental publication costs. The incentive slabs rolled out by the Principal, RCASC and the same was accepted by the RR committee members is for the benefit of faculty working in different departments and with different research backgrounds only.

Slabs	Status	JIF	Quartile	Publication Incentive per paper
1	Extraordinary	>10	Q1 & Q2	Rs 15,000
2	Excellent	8<10	Q3 & Q4	Rs 12,000
3	Very Good	6<8	-	Rs 10,000
4	Good	4<6	-	Rs 8,000
5	Ordinary	2>4	-	Rs 6,000
6	Average	1<2	-	Rs 4,000
7	Considerable	0<1	-	Rs 2,000

Note: A senior faculty of MSRCASC in the paper author list will receive the incentive cheque. The distribution of the amount will be left the faculty who receives the amount (It may be one-person can get all the amount or distributed equally among other faculty or distribution may be in the order of contribution).

In conclusion

What makes a good impact factor boils down to the field of research and the host of arbiters of "good". Highly reputable journals may have low impact factors not because they lack credibility, but because they're in specialized/niche fields where there are low citations. Impact Factors are useful, but they should not be the only consideration when judging quality. Not all journals are tracked in the JCR database and, as a result, do not have impact factors. New journals must wait until they have a record of citations before even being considered for inclusion. The scientific worth of an individual article has nothing to do with the impact factor of a journal. A journal stands to benefit more from the good-quality research it publishes rather than the other way around.