

EDITORIAL

The enormous amount of scientific information along with the increasing dissemination of this material, the growing number of authors and researchers, the index and metrics of journals, articles, and researchers require appropriate literacy to identify the impact of the authors, editors, articles, and journals; this is an appropriate experience that allows evaluating such impact and drawing strategies that guide the scientific production. Therefore, this editorial report will attempt to provide a description of the main internationally recognized scientific information databases WoS and Scopus.

The large-scale bibliometric research has its origins in the creation and development of the Science Citation Index - (SCI) in 1963, which is now part of Web of Science (WoS), the broadest scientific information platform provided by Thomson Reuters (which it was acquired by Onex Corporation and Baring Private Equity Asia in October 2016), whose main function is the consultation of databases of the Institute for Scientific Information (ISI), its purpose is not offering the text or the summaries (although they can be consulted), but to provide tools of analysis that allow assessing the scientific quality of publications. It includes three databases classified by areas: Science Citation Index Expanded (SCIE), Social Science Citation Index (SSCI), and Arts & Humanities Citation Index (AHCI), to which the Emerging Sources Citation Index (ESCI) was added in 2015 [1, 2].

WoS had been the only tool for the analysis of citations until 2004, when Scopus was created by ELSEVIER and Google Scholar by Google. However, due to the lack of rigor in the data presented by Google Scholar, WoS and Scopus are currently the main sources of bibliographic citations with an interdisciplinary coverage that allows the study and comparison of different scientific fields [3].

Assessing these two databases, it was found that WoS has a record of 16,957 journals and Scopus has a record of 34,274 journal titles [4]. Contrasting the lists of WoS and Scopus journals having as criteria the ISSN, the title, and identifying active journals and eliminating duplicates, or the same journal with an electronic ISSN, and another printed version, or non-active journals, the corresponding list of WoS is 13,605 journals and Scopus is 21,900 journal titles (1,800 in open access) from more than 5,000 international editors and 55 million records [2, 4]. Scopus is the largest database of bibliographic references with abstracts and citations of peer-reviewed scientific literature.

The publication of articles in journals indexed in Scopus or in the Web of Science translates into the author's visibility, guaranteeing the adequate and necessary diffusion of scientific production, so that they reach the entire potential public. These databases become allied tools of the researchers because of their visibility as authors, and offer them information on the visibility and impact of journals so as to define in which journals their scientific production must be published.

These databases benefit all the actors involved: publications, institutions and authors, which is reflected in the indicators and metrics they offer [2]:

WEB OF SCIENCE

Journal Citation Reports (JCR): It is an annual publication, the best known quality indicator and the most appreciated by the institutions evaluating the research activity.

InCites: It is an assessment tool based on citations, comparing scientific productivity; it is very useful for academic, research, funding, and government organizations to evaluate their institutional productivity.

Essential Science Indicators (ESI): It is available through ISI Web of Science. It analyzes research performance and identifies significant trends.

ResearcherID: It is the Thomson Reuters solution to create a unique identifier aiming at solving the author identification and the correct attribution of works, due to correspondences of names and surnames of some authors.

SCOPUS

CiteScore: It is the newest Elsevier index available to the scientific community, which calculates the average number of citations received from a publication in a three-years window. It is updated monthly, which differentiates it from the Thomson Reuters impact factor which is updated yearly.

SJR (Scimago Journal and Country Rank): It is a measure of scholarly journals whose prestige is reflected by the number of citations weighted during a selected year per document published in relation to the number of documents published.

SNIP (Source Normalized Impact per Paper): It measures contextual citation impact in a subject field.

Index h: This is an author-level metric to measure the citation impact and the productivity developed by an author, which has been widely used recently in research

evaluation systems.

Scopus ID: It is an identifier used in the database SCOPUS, assigned to each author, so they can be identified without confusion caused by names and surnames often shared by several authors.

WoS has the particularity that the bibliographic records include the bibliographic references used by the authors in their articles, which allows identifying the citations of the article. Based on the Science Citation Index (SCI) and Social Sciences Citation Index (SSCI), Clarivate Analytics produces a numerical database called Journal Citation Reports (JCR) where the impact factors of journals can be consulted (Journal Impact Factors, or JIF) and some other indicators.

The criteria for being indexed in WoS include the regularity of publication, the uniform description of metadata (which must also include the DOI), the English translation (at least the title and the abstract), an international editorial committee, information about the funding sources of published studies, etc. All these requirements can be found at: <https://clarivate.com/essays/journal-selection-process>

Similarly, for being accepted in Scopus, the Elsevier publisher also emphasizes compliance with the periodicity of the journal, peer-review process, diversity of institutions in the editorial committee, intelligibility of the articles, reputation of the editor (for instance, a recognized institution with a record of academic achievement, publishing in other indexed journals, etc.), and the journal website in English.

The JCR indicators are based on WoS, and SJR are based on Scopus. To access JCR where the JIF (journal impact factors) are informed, a payment must be made at: <https://clarivate.com/products/>

[journal-citation-reports](#).

In contrast, the SJR indicators (SCImago journal rank) are free: <http://www.scimagojr.com>. ESCI (Emerging Sources Citation Index) is a database integrated to WoS, which is constituted by the journals in evaluation process to be indexed in the three WoS core databases mentioned above.

By November 2017, ESCI had 6,950 indexed journals. <http://mj1.clarivate.com/cgi-bin/jrn1st/jlresults.cgi?PC=EX>. The selection criteria of ESCI refer to peer review, interesting content for the scientific community and, obviously, compliance with the same technical requirements indicated above, although it is much easier to be accepted in ESCI than in any of the three databases of the core collection.

References

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