Indexing Databases

Prof Dipali Gupta

Prof Dipali Gupta
RNB Global University, Bikaner

Learning Outcomes

After completion of this lecture the learner will be able to;

- Understand the significance of journal indexing

- Enlist the Journal indexing databases

- Determine the quality of a journal

- Select appropriate journal with high research metrics for publication

Journal Indexing

- In order to be known as an authoritative source of scientific information, and to stand out from among many other publications that are crowding the publishing space, journals must increase their visibility, availability, and readership.

- One of the ways by which journals can achieve this is by getting their publication indexed by one or more leading databases.

- Once a journal is indexed by a database, it is immediately made available to all users of that database.

- Some databases index titles, some index full articles while some others index only the abstract and/or references.

Why Indexing

- Indexing will help your journal achieve its main purpose of being accessible to a wide audience.

- Being accessible in turn will improve your journal's reputation as a reliable source of high-quality information in your field.

- Database research is the first activity researchers undertake as part of their study, and they naturally look to established, well-known databases. Thus, being indexed in a known database in your field will help increase your journal's readership.

How does Journal Indexing help researchers?

- It helps to find a good journal

- Journal Indexing helps track the metrics of the journal.

- It helps to compare more than one journal on one particular subject.

- Indexing helps to detect the journals which practice unethical publication rules.

Categorization

Indexing databases can be categorized by various features:

1.On the basis of organization type

- **Corporate databases**
  - WoS,
  - Scopus,
  - Crossref,
  - Google Scholar
- **Non-profit databases**
  - SCImago,
  - ERIH Plus,
  - MathSciNet

2.On the basis of Selective Approaches

Selective on the basis of scientific excellence

- WoS, Scopus, PubMed, ERIH Plus, ERIC,

Selective on ethical standards

- DOAJ, Cabell

All inclusive

- Crossref, Google Scholar, Research Gate

3.On the Basis of Research Field

- **General Databases**

  - WoS, Scopus, ERIH PLUS, Crossref, Google Scholar

- **Subject specific databases**

  - PubMed on medical research,

  - PsycINFO on psychology,

  - ERIC on educational science,

  - MathSciNet and ZblMATHon mathematics

4.On the Basis of Subscription

- **Subscription based**

  - WoS, Scopus, MathSciNet

- **Freely available**

  - SCImago, Google Scholar, Research Gate, ZblMATH

How get your journal indexed?

- Choose the right database

- Understand the selection process followed by the database you have chosen

- Ensure your journal processes are smooth and efficient

- Approach a company with multiple databases

General parameters for indexing

- Scope of the journal (especially if the index is subject specific)

- Registration of its International Standard Serial Number (ISSN)

- Commitment to a publishing schedule

- Provision of transparent Editorial Board information

- Provision of information on peer review, copyrights, ethics, etc.

- Digital object identifiers (DOIs)

- Basic article-level metadata (persistent identifiers, copyright licenses, open abstracts, etc.).

Major Indexing Databases

- Scopus
- Wos of Science (Clarivate):
  - Science Citation Index Expanded (SCIE)
  - Social Sciences Citation Index (SSCI)
  - Arts & Humanities Citation Index (AHCI)
  - Emerging Sources Citation Index (ESCI)
- DOAJ
- Pubmed
- CNKI (China National Knowledge Infrastructure)
- Chemical Abstracts Service (CAS)
- IJIFACTOR

- SCImago
- Portico
- UGC-CARE List (For India only)
- ProQuest
- EBSCO
- Garuda Indexing(Indonesia)
- Reaxys
- Google Scholar
- HEC Journals(For Pakistan only)

SCOPUS

- Scopus is an Elsevier product.

- It has a big database of academic journals from all scientific fields.

- It is only accessible to subscribers.

- The indexed journals are organized by subject.

- Annually, ranking lists are released based on a variety of metrical characteristics like; Cite Score.

- https://www.scopus.com/sources.uri?zone=TopNavBar&origin=

Cite Score

- [CiteScore](#) was developed in 2016 by Elsevier

Calculation of CiteScore in the Year 2019:

$$\text{CiteScore in } 2019 = \frac{\text{No. of citations received in } 2016\text{-}2019 \text{ to documents published in } 2016\text{-}2019}{\text{No. of documents published in } 2016\text{-}2019}$$

Note: Document types include: articles, reviews, conference papers, data papers and book chapters.

Cite Score Tracker

- CiteScore Tracker **provides a current review of how a journal is performing during the course of the year**.

- It is updated every month.

- **CiteScore Percentile** indicates how a journal ranks relative to other journals in the same subject field.

Source Normalized Impact per Paper (SNIP)

- SNIP measures **actual citations** received relative to **citations expected** for the subject field.

Scimago Journal Rank (SJR) Indicator:

- A measure of the scientific influence of scholarly journals that accounts for ;
- The number of citations received by a journal and
- The prestige of the journals where the citations come from.
- https://www.scimagojr.com/journalrank.php
- 4 Quartiles; Q1, Q2, Q3, Q4
- Factors:
  - 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.
  - https://phdtalks.org/2022/01/q1-q2-q3-q4-journals.html

SJR Calculation

$$\frac{average\ number\ of\ weighted\ citations\ received\ in\ a\ year}{number\ of\ documents\ published\ in\ previous\ 3\ years}$$

WoS of Science (Clarivate)

- WoS was founded by Eugene Garfield, Currently it is owned by Clarivate.
- It includes many selective databases, ranging from general to subject-specific ones.
- It can only be accessed by subscription.
- The most prestigious WoS category is the Core Collection, consisting of four subcategories:
  - Emerging Sources Citation Index (ESCI – since 2015)
  - Science Citation Index Expanded (SCIE – since 1964)
  - Social Science Citation Index (SSCI – since 1961)
  - Arts & Humanities Citation Index (AHCI – since 1975)
- Their data are contained in the annually published, paywall protected **Journal Citation Reports (JCR).**
- The journal metrics is the **Journal Impact Factor.**

Impact Factor

- The impact factor is a measure of the frequency with which the average article in a journal has been cited in a specific year.

- Impact Factor =

$$\frac{\text{Number of times articles cited in the Year}}{\text{Number of citable articles in the Year}}$$

Indexed in **Journal Citation Reports**, which covers journals listed in Science Citation Index Expanded (SCIE) and/or Social Sciences Citation Index (SSCI) of Web of Science.

DOAJ

- DOAJ is operated by the Infrastructure Services for Open Access C.I.C.

- It is freely accessible.

- Specific for Open Access journals.

- The selection is based on research ethics and strict standards.

- The main aim is to promote research integrity.

- https://doaj.org/

Google Scholar

- [Google Scholar](https://scholar.google.com/) is widely known and used.
- This database is run by Google.
- The access is free.
- The Individual can upload their data.
- No authentication.
- https://scholar.google.com/

Crossref

- Crossref is operated by the non-profit Publishers International Linking Association Inc. (PILA).

- It is inherently all-inclusive.

- Crossref collects data willingly submitted by publishers.

- These are generally the publishers who pay a fair rate.

- Some data is publicly accessible (via simple search or API), whereas more complex analysis need a membership.

NAAS Rating (National Academy of Agricultural Sciences)

- Only those journals listed in the **Journal Citation Reports of Clarivate Analytics** have **Journal Impact Factors (JIF).**

- NAAS Score (Max 20) = 6.00 + Impact Factor (category I),

- where JIF is not available, the rating is from 1 to 6.00 only (category II).

- The academy periodically revises its rating.

- The rating is available on   http://www.naasindia.org/rating.html.