Metrics Good Practice with SciVal

Institutions are under increasing pressure to examine the way they use metrics responsibly, to contribute to a healthy global research ecosystem. In response, many institutions have signed a document such as the San Francisco Declaration on Research Assessment (DORA) and the Leiden Manifesto, or created their own policy. While the University of Plymouth have not to date created or signed a responsible metrics policy, it would be wrong to ignore good practice when using SciVal. This document draws together recommendations from SciVal guidance alongside common principles of DORA and the Leiden Manifesto to provide tips for using SciVal responsibly.

Give those you are analysing the opportunity to verify their details prior to analysis.

If you are intending to run an analysis, it would be a good idea to ask colleagues to check their Scopus profiles. This will allow them to verify the data so that your analysis is as accurate as possible. It would not be fair to evaluate outputs or individuals using incorrect data, if this can be avoided.

The author can do this within Scopus via the “request author details correction” button under the citations graph in the author profile. This allows the author to set their preferred name, merge profiles, add and remove documents and update affiliation.

If another change needs to be made, this can be done by emailing Scopus via the ‘contact us’ link at the bottom of the page.

Use more than one metric to evaluate research output.

There is no single metric to measure research, and different types of research need to be examined using different metrics.

For example, examining a set of publications using field weighted metrics may show you how they are performing within their field, but alternative metrics might also show you how these publications are affecting policy decisions, generating economic value, or reaching the public via the media.

Try to use more than one metric for analysis to triangulate your results or gain deeper insight.

Journal level metrics are not appropriate to evaluate research output or performance.

It is inappropriate to utilize journal level metrics such as Journal Impact Factor to make claims about a researcher’s performance. Research outputs need to be evaluated and
analysed using article-level metrics. Metrics such as Journal Impact Factor were originally designed to help with journal purchasing decisions, and do not reflect the impact of a piece of research.

To evaluate outputs, try using **field-weighted citation** metrics (for samples over 100 this is more accurate) or **top percentile** metrics, which are at the article level.

When looking at journal level metrics to make publication decisions, it is also worth checking multiple metrics alongside impact factors, such as SNIP (source-normalised) and Scimago ranking to triangulate journal performance. Do not forget to check the percentage of non-cited articles too!

**Use metrics appropriate to your question and ensure that you are comparing like for like i.e. articles against articles, reviews against reviews.**

Defining your question first is key and there are a number of factors to take into considerations to ensure that you are using the most appropriate metrics for your questions. For example, smaller samples may be less stable when using field-weighted citation metrics, and reviews will naturally have more citations than articles. It may not be appropriate to compare a smaller dataset with a larger dataset using some metrics.

**Further help and advice**


Gives an overview of different types of metric and case studies. Can recommend appropriate metrics for different disciplines, outputs and impact.

**Snowball Metrics:** [https://www.snowballmetrics.com/](https://www.snowballmetrics.com/)

Explains the logic and calculation behind ‘Snowball Metrics’, a set of metrics developed by Elsevier with a working group from the HE sector and used within SciVal and Scopus.

**Elsevier Research Metric Guidebook:** [https://www.elsevier.com/research-intelligence/resource-library/research-metrics-guidebook](https://www.elsevier.com/research-intelligence/resource-library/research-metrics-guidebook)

A comprehensive guide to the metrics used in Elsevier products.

**San Francisco Declaration on Research Assessment:** [https://sfdora.org/](https://sfdora.org/)

**Leiden Manifesto:** [https://www.nature.com/news/bibliometrics-the-leiden-manifesto-for-research-metrics-1.17351](https://www.nature.com/news/bibliometrics-the-leiden-manifesto-for-research-metrics-1.17351)

**Further assistance with SciVal/ Responsible Metrics.**

Contact your Information Specialist: InformationSpecialists@plymouth.ac.uk

**Using SciVal for REF Impact Case Studies?**

Contact Alison Bendall (R&I): Alison.Bendall@plymouth.ac.uk