Responsible Metrics FAQs

Trouble shooter's guide

Q: I am an assessor on a probation review, can I use the impact factor of the journals the individual has published in to indicate the quality of their work?

A: No. High-quality outputs as judged by peer-review may inform a probation meeting, but the impact factor is only appropriate to assess the quality of a journal, not individual articles or a person. Journal metrics such as SNIP and SJR are better to assess a journal but are equally inappropriate for assessing individual articles or a person. Therefore, those metrics may be used to help inform an author's decision to publish in a journal on balance with the aims and scope, editorial board, other works published, readership and rigour of peer-review, but they should not be used in the assessment of individual outputs.

Q: My Research Group have been asked to target a recommended list of journals, is this an infringement of the Responsible Research Metrics Policy, and can I publish elsewhere?

A: This is technically not an infringement of the policy and you should be able to publish elsewhere. Articles published in journals perceived to have greater reach and rigour may increase their potential for being read, understood and used. It is advised that if a Research Group is developing a recommended list of journals to publish in that they use multiple metrics to confirm the findings, alongside expert judgement. If an individual judges another journal to be a more suitable venue for their output for sound reasons, there should be no consequences for those who choose to publish elsewhere.

Myth-busting guide

Myth: I need to publish in high impact factor journals because I’m submitting this research to the REF.

Busted: The REF2021 guidance clearly states “No sub-panel will use journal impact factors or any hierarchy of journals in their assessment of outputs. No output will be privileged or disadvantaged based on the publisher, where it is published or the medium of its publication” (https://www.ref.ac.uk/publications/panel-criteria-and-working-methods-201902/no-207.P49). The University has published its code of practice for the REF2021. The REF is committed to following the principles of the San Francisco Declaration on Research Assessment (DORA) and recognises that research should be assessed on its own merits.

Myth: H-index is an indicator of the quality of an individual’s research.

Busted: No, the H-index is a flawed indicator of the quality and quantity of an individual’s research. The H-index is the maximum value ($h$) based on the number of papers ($h$) an author has published that have each been cited at least $h$ times. Therefore, this indicator is strongly influenced by discipline, publication volume, career length and effective career length. This makes it very difficult to use responsibly and consistently, especially when assessing Early Career Researchers or individuals with protected characteristics. The H-index has been severely criticised by some funders, including UKRI.

Here is an extreme example which demonstrates the problems with the H-index: an individual could have been cited 1,000 times but will only have an H-index of 2 if they have only published twice, while an author with 1,000 published articles will have an
H-index of 3 if they have 997 uncited papers and 3 cited 3 times. In this case, an H-index of 3 is not an improvement on 2.

There are some variations of the H-index that try to improve it, but it is not clear if any can be used responsibly. We recommend avoiding the H-index, but if it is required, please contact the Library for support.

**Myth:** We shouldn’t use any research metrics at all.

**Busted:** It is possible to use research metrics/bibliometrics responsibly where appropriate. Indeed, without metrics we could not qualify many of our claims as individuals or an institution. Due cause and consideration need to be given, but it is not necessary to have ubiquitous rules against their use. Many metrics were developed responsibly to provide an answer to a specific question, the reason it is necessary to limit their use is that they have been used inappropriately. We should aim to use research metrics as little as possible and only as much as necessary after considering appropriateness, transparency, reproducibility and equality.

**Myth:** Individuals on highly cited lists are having more of an impact.

**Busted:** Perhaps, but perhaps not. Such indicators typically look at people or papers in the top 1% of their discipline which is a very narrow threshold few will meet, and which highly prolific authors are more likely to meet. No doubt, a prolific highly cited author is impactful, but there are many different types of impact and ways of achieving it. Furthermore, there are many different citation, publication and authorship cultures geographically and disciplinarily. Therefore, being on a highly cited list may indicate impact, but does not guarantee it nor does absence/low ranking indicate a lack of impact.

**Myth:** I should publish in the most highly ranked journal I can.

**Busted:** Not necessarily. You should publish where your research will be seen, read, understood and applied. Field-normalised journal metrics can be used to help make a decision but other factors need to be taken into account. Ideally, you should be publishing in journals that meet benchmarking criteria such as ‘have they published similar research recently?’ and ‘do my colleagues have access?’ or ‘is the journal well indexed in internet search engines?’ You should check the aims and scope and the instructions for authors before submitting to a journal. There are other criteria unrelated to journal prestige that you may also need to consider, such as open access policies and the cost or speed of publishing.

**Myth:** Pure shows the journal metrics CiteScore, SJR and SNIP on article records, these must be appropriate.

**Busted:** CiteScore, SJR and SNIP are indicators of what the citation potential of a journal is compared to other journals in that discipline, they are not indicators of the quality of an individual piece of research. However, they can be used to indicate how well-cited an individual piece of research is compared to the average article published in that journal. Unfortunately, we are limited by what we can edit in Pure, so we are unable to provide robust guidance in Pure itself, so please use the ‘Which metric?’ section in this guide to find out what limitations common metrics have.