Towards a situated notion of research quality: An exploratory study of three journal quality frameworks

Patricia Alonso-Álvarez

patricia.alonso@uc3m.es

LEMI Research Group, Carlos III University of Madrid, 126 Madrid Str., 28903, Getafe (Spain)
Research Institute for Higher Education and Science (INAECU), Carlos III University of Madrid, 126 Madrid Str., 28903, Getafe (Spain)

Based on its perceived objectivity, WoS and Scopus have been largely perceived as sources of journal authority (Lillis & Curry, 2010). However, its status has recently been contested due to its linguistic, geographical, and disciplinary biases (Archambault et al., 2006; Chavarro et al., 2017; Asubiaro et al., 2023). Academic literature on journal quality has also started to pay more attention to qualitative criteria –based on the fulfillment of specific conditions that vary depending on the evaluator (Pölönen et al., 2021)– as opposed to quantitative/objective criteria –based on citations (e.g., Garfield, 1999; Saha et al., 2003). In a recent study, Dunleavy (2022) identifies quantitative criteria with 'research impact' rather than 'research quality', which is highly related to the internal policies of journals. Qualitative criteria thus serve as guidelines to assess if a journal meets specific quality standards. Moreover, in the last years, many scholars and organizations have argued that quantitative metrics are heavily context-dependent and proposed new evaluation methods based on mixed or qualitative evaluations (e. g. Hicks et al., 2015; or COARA, 2022). However, when qualitative criteria are used, other difficulties arise –i.e. there is no unique framework used by scholars or indexing platforms, but many, depending on the evaluator's priorities. An example of the significant differences between evaluators is the simultaneous inclusion of the same journals in allowlists and blocklists (Strinzel et al., 2019). Following previous literature on the topic, this project distinguishes research impact from research quality and explores the subjective criteria employed by several Journal Indexing Systems (JIS). This exploratory analysis specifically studies three quality frameworks: the Web of Science (WoS) journal evaluation process; the Scopus content policy and selection; and the Journal Publishing Practices and Standards (JJPS), employed by the Journals OnLine project (JOL), a network of local journal platforms to help Southern journals increase their global visibility and improve their publishing practices.

Following previous literature on the topic (for instance, Moradzadeh et al., 2022), this study uses thematic analysis to identify themes and subthemes regarding journal quality. The analysis was conducted in three steps. First, I read the quality criteria of the three frameworks and coded their topic. Coding categories were not developed *apriory* but inductively as a result of an iterative process where new codes were created until the saturation point was reached. Second, I classified the topics into broader concepts. Third, the codes and concepts were compared with previous literature on the topic to verify that they were consistent with previous research. The analysis resulted in 33 quality criteria classified into five main themes: (i) journal content and structure, (ii) journal policies, (iii) scientific rigor, (iv) editorial structure, and (v) publication volume and availability. The results show that, although sharing some common criteria, each evaluation system analyzed has different priorities and understandings of what quality means and what the minimums a journal must accomplish. Giving traditional JIS the monopoly of journal quality creates profound asymmetries between journals and regions. It also contributes to a hierarchical perception of science, where journals outside these indexes are automatically associated with mediocrity. The emergence and growth of alternative JIS have offered other perspectives and highlighted the biases traditional indexes present, challenging WoS's and Scopus's objectivity and their position as the only valid cognitive authorities. This analysis shows the existence of similarities between the quality criteria employed by traditional and alternative JIS and the presence of other more subjective factors that depend on the JIS's priorities.

Moreover, ignoring that specific quality criteria and guidelines have been developed in concrete socio-historical contexts and represent a limited conception of how science should be produced and disseminated reduces quality to a unique vision and promotes WoS and Scopus as reference points for journal and editorial standards. It also places traditional indexes as the only credible sources of knowledge and, therefore, as cognitive authorities (see Chavarro, 2017, pp. 45-49). Therefore, this article claims a 'situated' nature of quality, which, echoing Albornoz and colleagues (2020), needs to be contextualized, and claims a 'critical reflective process for identifying and assessing how different forms of epistemic injustice are deeply embedded in the current global knowledge production system' (Albornoz, Okune & Chan, 2020, p. 66). Ignoring this situated nature might also constitute what Medina (2017) identifies as a semantically

produced epistemic injustice, as quality aspects conceived by different communities would be removed from the meaning of research quality.

The analysis of the quality criteria used by different academic databases contributes to the discussion on measuring research excellence and offers a new perspective on the objectivity of quality criteria. Therefore, comparisons between different quality frameworks can help to show the existence of multiple approaches to research quality, which can be further explored by historical and contextual analysis. This project plans on expanding the analyses presented here to include other alternative and regional indexes to further explore their scientific and journal quality perspectives and thus advance towards a situated notion of research quality.

Ackowledgements

This study is funded by a PIPF contract of the Madrid Education, Science and Universities Office (reference: PIPF-2022/PH-HUM-25403)

References

Albornoz, D., Okune, A., & Chan, L. (2020). Can open scholarly practices redress epistemic injustice. *Reassembling scholarly communications: Histories, infrastructures, and global politics of open access*, 65-79. https://doi.org/10.7551/mitpress/11885.001.0001

Archambault, É., Vignola-Gagné, É., Côté, G., Larivière, V., & Gingrasb, Y. (2006). Benchmarking scientific output in the social sciences and humanities: The limits of existing databases. *Scientometrics*, *68*(3), 329–342. https://doi.org/10.1007/s11192-006-0115-z

Asubiaro, T. V., & Onaolapo, S. (2023). A comparative study of the coverage of African journals in Web of Science, Scopus, and CrossRef. *Journal of the Association for Information Science and Technology*, *74*(7), 745–758. https://doi.org/10.1002/asi.24758

Chavarro, D. (2017). *Universalism and particularism: Explaining the emergence and growth of regional journal indexing systems* [Thesis, University of Sussex]. https://sussex.figshare.com/articles/thesis/Universalism_and_particularism_explaining_the_emergence_and_growth_of_regional_journal_indexing_systems/23440772/1

COARA Agreement on Reforming Research Assessment. (2022). Retrieved from https://coara.eu/app/uploads/2022/09/2022_07_19_rra_agreement_final.pdf

Dunleavy, D. J. (2022). Progressive and degenerative journals: On the growth and appraisal of knowledge in scholarly publishing. European Journal for Philosophy of Science, 12(4), 61. https://doi.org/10.1007/s13194-022-00492-8

Garfield, E. (1999). Journal impact factor: a brief review. Cmaj, 161(8), 979-980.

Hicks, D., Wouters, P., Waltman, L. *et al.* Bibliometrics: The Leiden Manifesto for research metrics. *Nature* 520, 429–431 (2015). https://doi.org/10.1038/520429a

Lillis, T. M., & Curry, M. J. (2010). *Academic writing in global context*. London: Routledge.

Moradzadeh, M., Sedghi, S., & Panahi, S. (2023). Towards a new paradigm for 'journal quality'criteria: a scoping review. *Scientometrics*, *128*(1), 279-321. https://doi.org/10.1007/s11192-022-04520-5

Pölönen, J., Guns, R., Kulczycki, E., Sivertsen, G., & Engels, T. C. (2021). National lists of scholarly publication channels: An overview and recommendations for their construction and maintenance. *Journal of Data and Information Science*, *6*(1), 50-86. https://doi.org/10.2478/jdis-2021-0004

Saha, S., Saint, S., & Christakis, D. A. (2003). Impact factor: a valid measure of journal quality?. Journal of the Medical Library Association, 91(1), 42.

Strinzel, M., Severin, A., Milzow, K., & Egger, M. (2019). Blacklists and whitelists to tackle predatory publishing: a cross-sectional comparison and thematic analysis. *MBio*, *10*(3), 10-1128. https://doi.org/10.1128/mbio.00411-19