

Peer Review

Review of: "Evaluation of Indonesia's Scientific Publication Performance: Quantity, Quality, Open Access, and Comparison with ASEAN Countries"

Luiz Alberto Pilatti¹

1. Federal University of Technology – Paraná/Brazil (UTFPR), Curitiba, Brazil

The article "Evaluation of Indonesia's Scientific Publication Performance: Quantity, Quality, Open Access, and Comparison with ASEAN Countries" presents a relevant analysis of Indonesia's scientific production performance, considering indicators of quantity, quality, and open access, in comparison with ASEAN countries. The title is clear and coherent with the content developed, and the research objective is relevant, especially for contemporary discussions on scientific evaluation and science and technology policies. The topic is timely, as it addresses a real and current problem emerging countries face: the mismatch between the growing quantity of publications and the actual scientific impact of these outputs. Although the topic is relevant, its originality is only moderate, as several studies in the international and regional literature already address the relationship between scientific productivity, open access, and impact, particularly within ASEAN countries. The paper's contribution lies in the update of recent data and the proposal of a comparative analysis, although it lacks greater theoretical depth.

While minimally adequate to contextualize the topic, the theoretical framework is superficial and underdeveloped. The literature review is brief, limited, and fails to sufficiently address the central concepts and debates regarding evaluating scientific output, the effects of open access, and the limitations of relying exclusively on quantitative metrics such as citation counts. There is an apparent lack of more robust discussions on well-documented phenomena, such as the growth of predatory journals, institutional pressure for productivity, the adverse effects of quantity-driven policies, and contemporary critical approaches within scientometrics.

The methodological approach is appropriate in using descriptive quantitative analysis based on secondary data from the Scilit database, employing Python programming tools for exploratory data analysis and visualization. However, the methodological description is insufficient and presents weaknesses that compromise the study's rigor. The paper lacks detailed information regarding data selection criteria, the choice of countries, the handling of missing data, and the mitigation of potential biases inherent to the chosen database, which, although relevant, does not carry the same prestige and rigor as more established databases in the field, such as Scopus, Web of Science, or Dimensions.

The results are presented clearly, with compelling graphical visualizations that facilitate understanding of the observed patterns. However, the analysis remains descriptive and exploratory, without advancing toward more robust analytical models, such as regressions, multivariate analyses, or cluster modeling, which could provide greater depth and validity to the conclusions. The finding of a negative correlation between the open access rate and citations per article is interesting, but it is treated simplistically, without discussing potential causal or contextual factors that could explain this phenomenon.

The discussion, while relevant, is shallow and lacks greater theoretical and critical depth. The article correctly identifies the contradiction between Indonesia's high publication volume and its low impact as measured by citations and acknowledges that public policies overly focused on quantity are insufficient to boost research quality and international visibility. However, the text does not advance in analysing the structural, economic, linguistic, and geopolitical factors that shape Indonesia's scientific performance. Nor does it discuss the strategies adopted by countries like Singapore and Malaysia to overcome similar challenges and achieve greater scientific impact.

The writing is clear, objective, and well-structured, with few grammatical errors and good textual fluency. Nevertheless, the argumentative construction could be more sophisticated by incorporating greater conceptual and critical depth. The article meets ethical requirements and provides the necessary statements regarding the absence of conflicts of interest and funding sources.

This is a paper with high thematic relevance, moderate contribution in originality, regular theoretical quality, insufficient methodological rigor, and superficial analysis of results. The writing is good, and the text is adequately organized, but the depth of the discussion does not match the topic's relevance. Therefore, it is recommended that the theoretical framework be expanded, the methodological description improved, more robust analyses incorporated, the discussion deepened, and the conclusions refined, making them more aligned with the study's limitations and more operational to guide policies and practices in the field of science and technology.

Declarations

Potential competing interests: No potential competing interests to declare.