The Journal Integrity Score: A Transparent Framework for Evaluating Editorial Practices and Author Experience in Scientific Publishing

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Abstract

The Journal Integrity Score (JIS) is introduced as a transparent framework for evaluating scientific journals based on editorial practices and author experience rather than citation counts alone. The score consists of seven binary components reflecting retractions, formatting burden, manuscript limits, submission friction, review speed, copyright policy, and publication cost. Each component is assigned a value of 1 or 0, allowing journals to be represented as a seven-bit code and, optionally, by a cumulative score. The JIS is designed to complement citation-based metrics such as the True Impact Function (TIF) by providing a process-oriented assessment of journal behavior. The framework emphasizes transparency, interpretability, and immediate applicability, while permitting future refinement through partial weighting or expanded dimensions.

Introduction

The evaluation of scientific journals has traditionally depended on citation-based measures, most notably the Journal Impact Factor. While such metrics provide information about the dissemination of published work, they offer little insight into editorial practices, author burden, and the practical conditions under which manuscripts are reviewed and published.

Authors often encounter substantial differences among journals in formatting requirements, submission workflows, decision speed, copyright arrangements, and publication cost. These dimensions materially affect the accessibility and fairness of scientific publishing, yet they are rarely incorporated into formal journal evaluation systems. The Journal Integrity Score addresses this gap by providing a structured, reproducible framework focused on author-facing aspects of editorial conduct.

Conceptual Framework

The Journal Integrity Score is one component of a broader three-part framework for journal evaluation consisting of: (1) the True Impact Function (TIF), which measures citation velocity; (2) the Journal Integrity Score (JIS), which evaluates editorial practices; and (3) a transparency and accountability layer incorporating data verification, mediation, and a living repository of journal evaluations.

Within this broader model, JIS serves as the process-oriented complement to citation-based assessment. Whereas citation metrics indicate how published work is used, JIS evaluates the conditions under which that work reaches publication.

Methods

The Journal Integrity Score consists of seven binary pillars. Each pillar is assigned a value of 1 if the journal meets the stated criterion and 0 if it does not. A journal can therefore be expressed as a seven-bit code and, where useful, by the sum of the seven binary values.

- **Retractions:** 1 = zero retractions in the prior 12 months; 0 = one or more retractions
- **Formatting:** 1 = standard scientific structure without rigid proprietary requirements; 0 = substantial formatting burden
- **Limits:** 1 = no arbitrary word, figure, or table limits that constrain scientific clarity; 0 = meaningful restrictions imposed
- **Forms:** 1 = no redundant manual metadata re-entry at initial submission; 0 = substantial manual re-entry required
- **Speed:** 1 = mean time to first decision less than or equal to 21 days; 0 = longer mean time to first decision
- **Copyright:** 1 = author-retained copyright or comparably open arrangement; 0 = restrictive transfer or control
- **Cost:** 1 = article processing charge equal to $0; 0 = material author-facing publication fee

The equal weighting of pillars is intentional. It favors interpretability and transparency over hidden aggregation. The current version is designed for immediate use and straightforward comparison, while leaving open the possibility of future refinement.

Data Sources and Assessment

JIS assignments are derived from publicly available journal information, including instructions for authors, editorial policies, submission systems, copyright agreements, and fee schedules. Where ambiguity exists, conservative classification is recommended until sufficient clarification is available. Transparent documentation of the basis for each assigned binary value is encouraged.

In future implementations, transparent policies regarding the use and disclosure of artificial intelligence in manuscript preparation may also be incorporated as part of the broader ethical and editorial context in which journals are assessed.

Results (Conceptual)

The JIS framework allows journals to be compared not by prestige alone, but by how they treat authors and structure the publication process. A journal with a high JIS offers more favorable conditions for accessibility, efficiency, and author autonomy than one with a lower score, regardless of citation performance.

Because the score is represented as a binary code, users can inspect not only the cumulative score but also the specific dimensions that contributed to it. This makes the framework transparent and practically interpretable.

Discussion

The Journal Integrity Score complements citation-based systems by focusing on process rather than outcome. Citation metrics evaluate the use and influence of published work, whereas JIS evaluates the editorial environment through which work is published. The combination of JIS and TIF therefore enables a broader and more balanced assessment of journals.

The simplicity of the binary framework is a strength. It allows rapid implementation, reproducibility, and clear explanation to authors and readers. At the same time, the model is extensible. Future versions may incorporate partial weighting, continuous scoring, or additional dimensions as practical experience accumulates.

Conclusion

The Journal Integrity Score provides a transparent and reproducible framework for evaluating scientific journals based on editorial practices and author experience. By focusing on process-related dimensions that are often omitted from citation-based evaluation, the JIS contributes a complementary perspective to journal assessment.

Used alongside metrics such as the True Impact Function, it supports a more comprehensive, transparent, and author-centered understanding of journal quality.

Keywords

journal evaluation, editorial policy, peer review, scientific publishing, author experience, open access, bibliometrics