Transparency and integrity of peer review

Jelte M. Wicherts
Some worrying results (1)

Some worrying results (2)

Australian dog serves on the editorial boards of seven medical journals

May, 24, 2017
Some worrying results (3)

Predatory journals recruit fake editor

Piotr Sorokowski, Emanuel Kulczycki, Agnieszka Sorokowska & Katarzyna Pisanski

22 March 2017

An investigation finds that dozens of academic titles offered 'Dr Fraud' — a sham, unqualified scientist — a place on their editorial board. Katarzyna Pisanski and colleagues report.
A particular problem with (novel) OA journals

Gold Open Access (OA) journals often charge authors and can increase revenue by accepting many articles.

Biased or substandard peer-review processes will not stand full scrutiny by the community.

Hence, transparency concerning the peer-review process can be seen as indicator of good practice.

Lack of transparency

✓ Vague criteria cannot be used to reject manuscripts, possibly leading to low thresholds for acceptance.

✓ Lack of information on decision-makers and procedures allows papers to be reviewed by a single peer (or by none) and be accepted by an editorial assistant who often works for the publisher (COI!)

✓ Lack of information on who acted as reviewers and yearly rejection rates impedes assessment of who did the reviewing and quality thresholds
QOAM: Rating transparency

1. Easy to use
2. Transparent scoring rules
3. Acceptable criteria
4. Broadly applicable
5. Psychometrically homogeneous
### PLoS ONE

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<th>1932-6203</th>
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<tbody>
<tr>
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<td>Disciplines</td>
<td>medicine, science</td>
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#### Editorial Information
- **Aims, scope, and expected readership of the journal**
  - Aims, scope, and expected readership of the journal are clearly specified on the journal’s website.
  - Options: 1: Absent, 2: Poor, 3: Moderate, 4: Good, 5: Excellent

#### Peer Review
- **The names and affiliations of members of the editorial board are listed on the website.**
  - Options: 1: Absent, 2: Poor, 3: Moderate, 4: Good, 5: Excellent

#### Governance
- **The website of the journal indicates how open editorial correspondence and reviewer’s comments are.**
  - Options: 1: Absent, 2: Poor, 3: Moderate, 4: Good, 5: Excellent

#### Workflow
- **The role of members of the editorial board is explicated on the website including who will make final decisions about article acceptance (e.g. editor, associate/action editor).**
  - Options: 1: Absent, 2: Poor, 3: Moderate, 4: Good, 5: Excellent

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**Base Score for this journal:** 4.0

*by* Jorden Esser
Score Card

PLoS ONE

ISSN: 1932-6203
Publisher: Public Library of Science (PLoS)
Language: English
Disciplines: medicine, science

Editorial information

4.0

Peer review

4.8

Governance

5.0

Workflow

4.5

Base Score for this journal:

4.0

by Jorden Esser

The website indicates whether all submissions are sent out for review.

1: Absent  2: Poor  3: Moderate  4: Good  5: Excellent

Criteria used by reviewers to rate submissions are specified on the website.

1: Absent  2: Poor  3: Moderate  4: Good  5: Excellent

The website indicates if authors have a say in suggesting names of (non-)desired reviewers.

1: Absent  2: Poor  3: Moderate  4: Good  5: Excellent

The journal website allows ratings of papers and post-publication commentaries by the community.

1: Absent  2: Poor  3: Moderate  4: Good  5: Excellent
QOAM: Some results

• Ratings of transparency of the peer-review system by different stakeholders are internally consistent and show adequate inter-rater reliability.

• Transparency ratings of 92 established journals by authors predict ($r = .48$) author-rated quality of the review process at these journals.

• Ratings of transparency could predict whether a journal was earmarked as “predatory” by Jeffrey Beal.

• Transparency ratings predict journals’ Impact Factor.

QOAM predicts rejection of hoax paper

Operational data from QOAM

- Editorial: $r = 0.43$, $n = 3486$
- Peer Review: $r = 0.43$, $n = 3486$
- Governance: $r = 0.59$, $n = 3486$
- Process
Valuation scores

Score Card

Valuation Score for this journal:

3.0

By Reinoud Bootsma

Frontiers in Psychology

ISSN: 1664-1078
Publisher: Frontiers Media
Language: psychology

Valuation

I have published an article in this journal less than a year ago

I am an editor of this journal (if 'Yes', please tick the box)

The editor of the journal is responsive.

The peer review of the journal has added value.

I would recommend scholars to submit their work to this journal.

I would deem this journal good value for money.

Additional comments
Predicting valuation by authors
Conclusions

- QOAM allows various stakeholders to rate the transparency and rigor of (OA) journals
- QOAM subscales are homogeneous (reliable) and show good convergent and predictive validity
- Although many other factors predict quality of peer review of academic journals, QOAM can be used to separate the wheat from the chaff of OA journals
Metaresearch.nl

Thanks!

Marcel van Assen
Coosje Veldkamp
Chris Hartgerink
Marjan Bakker
Hilde Augusteijn
Robbie van Aert
Paulette Flore
Michèle Nuijten

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