# Transparency and integrity of peer review



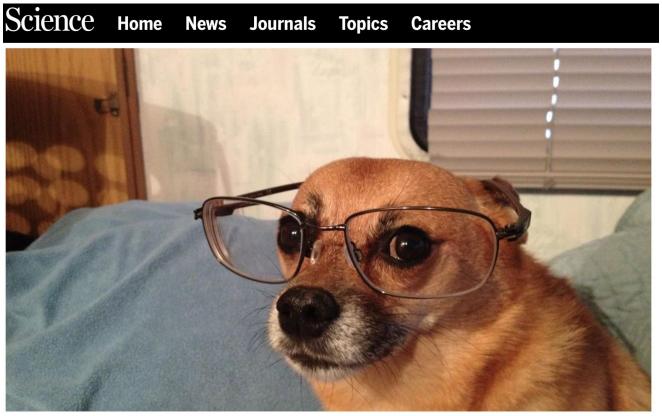
Jelte M. Wicherts



## Some worrying results (1)



## Some worrying results (2)



Thomas Rendleman/Pexels

#### **SHARE**



Australian dog serves on the editorial boards of seven

medical journals



## 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.

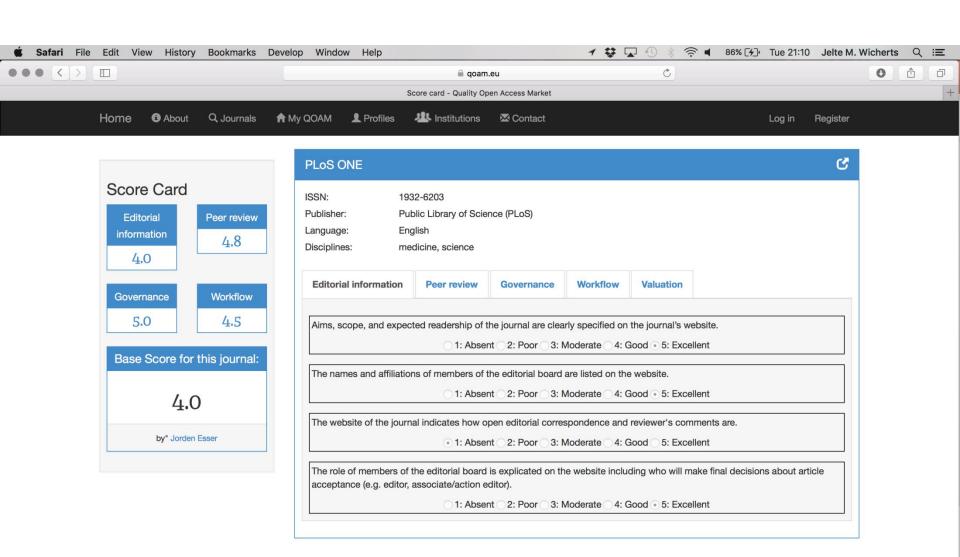
#### Lack of transparency

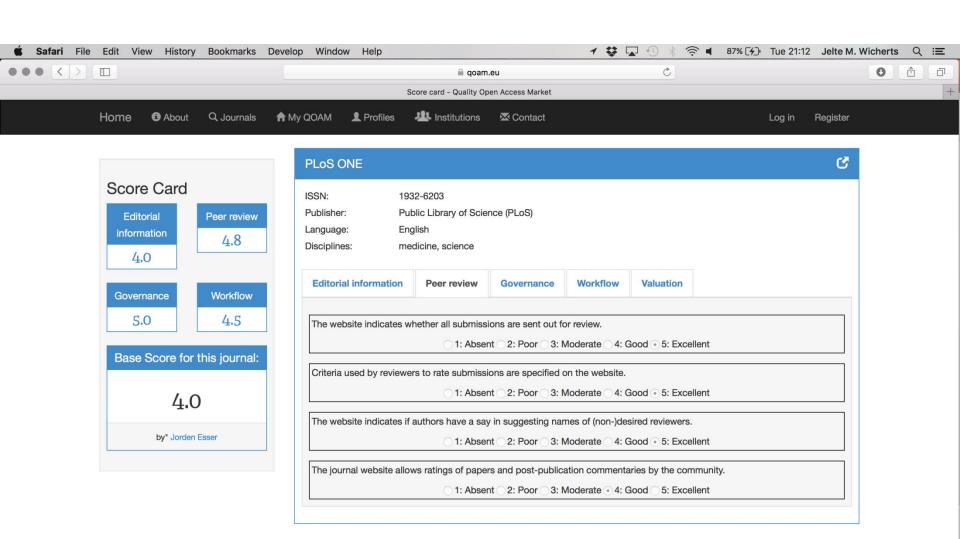
- ✓ Vague criteria cannot be used to reject manuscripts, possibly leading to low thresholds for acceptance.
- ✓ Lack of information on decision-makers and procedures allows papers to be reviewed by a single peer (or by none) and be accepted by an editorial assistant who often works for the publisher (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

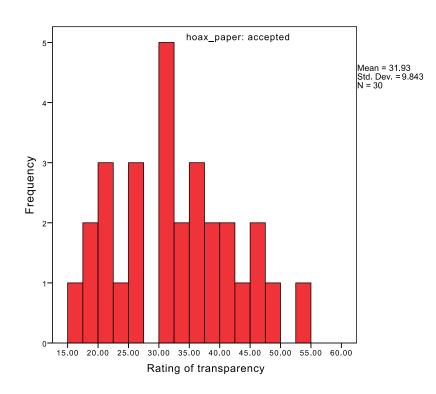


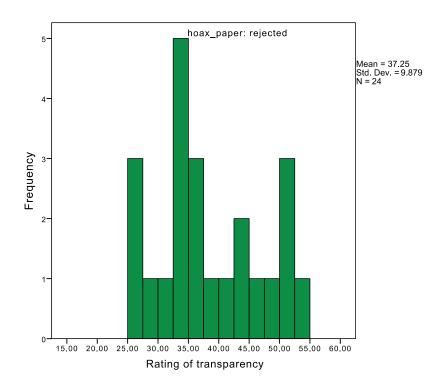


#### QOAM: Some results

- 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

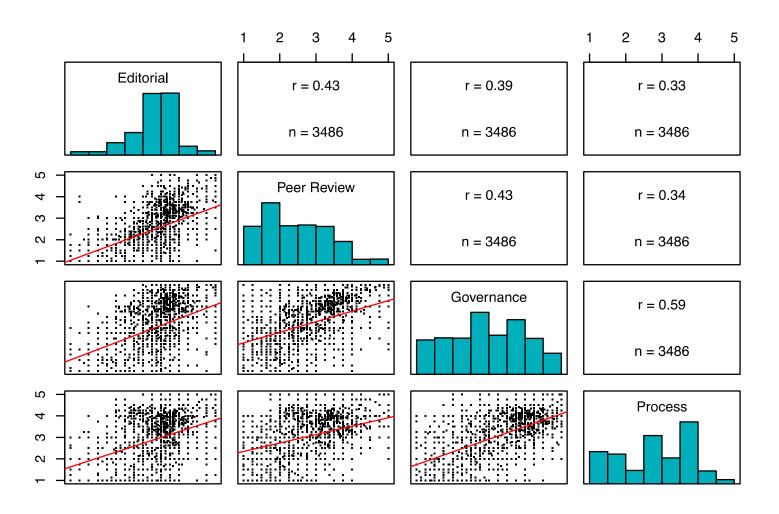
#### QOAM predicts rejection of hoax paper



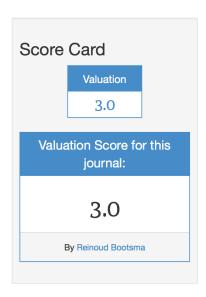


Source: Wicherts, J. M. (2016). Peer review quality and transparency of the peer-review process in open access and subscription journals. *PLOS ONE, 11,* e0147913.

#### Operational data from QOAM

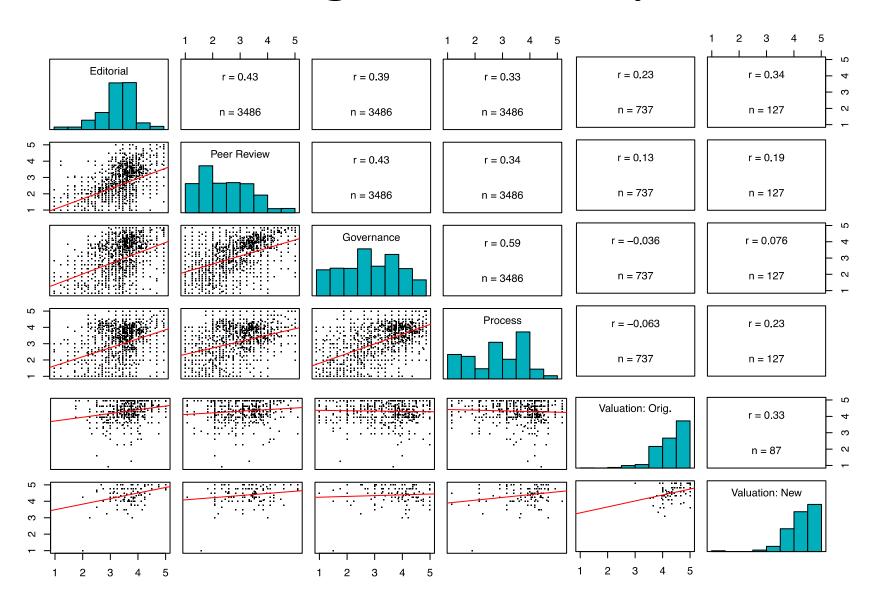


#### Valuation scores



|                                   | Psychology                                                                                                                                                                                                                                                                    |  |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| SSN:                              | 1664-1078                                                                                                                                                                                                                                                                     |  |
| Publisher:                        | Frontiers Media                                                                                                                                                                                                                                                               |  |
| Language:                         |                                                                                                                                                                                                                                                                               |  |
| Disciplines:                      | psychology                                                                                                                                                                                                                                                                    |  |
| Valuation                         |                                                                                                                                                                                                                                                                               |  |
| ✓ I have publis                   | shed an article in this journal less than a year ago                                                                                                                                                                                                                          |  |
|                                   |                                                                                                                                                                                                                                                                               |  |
| ☐ I am an edit                    | or of this journal (If 'Yes', please tick the box)                                                                                                                                                                                                                            |  |
|                                   | or of this journal (If 'Yes', please tick the box) he journal is responsive.                                                                                                                                                                                                  |  |
|                                   |                                                                                                                                                                                                                                                                               |  |
| The editor of the                 | he journal is responsive.                                                                                                                                                                                                                                                     |  |
| The editor of the                 | he journal is responsive.  1: Absent 2: Poor 3: Moderate 4: Good 5: Excellent                                                                                                                                                                                                 |  |
| The editor of the                 | he journal is responsive.  1: Absent 2: Poor 3: Moderate 4: Good 5: Excellent  w of the journal has added value.                                                                                                                                                              |  |
| The editor of the                 | he journal is responsive.  1: Absent 2: Poor 3: Moderate 4: Good 5: Excellent  w of the journal has added value.  1: Absent 2: Poor 3: Moderate 4: Good 5: Excellent                                                                                                          |  |
| The editor of the The peer review | he journal is responsive.  1: Absent 2: Poor • 3: Moderate 4: Good 5: Excellent  w of the journal has added value.  1: Absent 2: Poor • 3: Moderate 4: Good 5: Excellent  mend scholars to submit their work to this journal.                                                 |  |
| The editor of the The peer review | he journal is responsive.  1: Absent 2: Poor 3: Moderate 4: Good 5: Excellent  w of the journal has added value.  1: Absent 2: Poor 3: Moderate 4: Good 5: Excellent  mend scholars to submit their work to this journal.  1: Absent 2: Poor 3: Moderate 4: Good 5: Excellent |  |

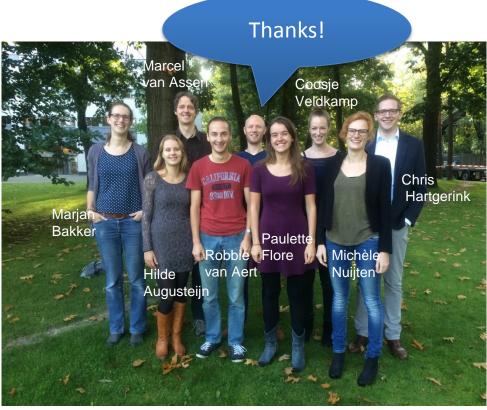
### Predicting valuation by authors



#### 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

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