

Symposium: “Open Access, Open Review, Language Diversity & Online Publishing - New paradigms and challenges for European Psychology”

Peer reviewing: How can EPPP innovate and still guarantee high quality scientific standards?

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The question at the heart of this paper



**Peer reviewing: How to innovate
keeping high quality standards?**

1. Uncontroversial aspects



Why is it there for?

2. Major critiques



What needs to be changed

3. How to innovate



Some ideas on how to change

Peer Review ⇒ uncontroversial aspects:

- ✓ is at the heart of science and deemed central to scientific progress
- ✓ was designed to ensure all published materials met a certain standard of quality
- ✓ has a positive impact on publications reputation
- ✓ is widely supported by academics (namely as a control system)
- ✓ editors (manuscript management) and expert reviewers (manuscript assessment) are its cornerstones

Peer review ⇒ is so ingrained in the publication process, it would be impractical, even detrimental/unwise to abolish it



Why?

Peer review ⇒ “evaluation of research findings for competence, significance, and originality by qualified experts. These peers act as sentinels on the road of scientific discovery and publication. Their reviews attempt to ensure the quality of scientific information, an act essential to reducing misinformation and confusion” (Benos

However...

“there is something rotten in the state of scientific publishing” (BMJ, 1997)



Major critiques:

- ✓unequal evidence on deficiencies & benefits (even if it actually works)
- ✓is slow & unreliable
- ✓tends to be conservative & biased (subjectivity + COI)
- ✓allows abuse (authors + reviewers)
- ✓is open to fraud and plagiarism
- ✓anonymity can be hard to achieve

✓reviewers are overloaded & there's no differentiation

HOW TO INNOVATE?

WHAT TO CHANGE AND HOW?



Implementing a system making use of the new ICT technologies:

- ✓ less time and money consuming
- ✓ development of an enduring work protocol



Design of a structured, standardized training course for reviewers, defining:

- ✓ protocols for reviewing
- ✓ criteria to apply

✓ development of a system based on a formal review process that provides feedback both in a written and in a numeric format (tracking of reviewer performance)



More effective control over editorial board participation, timeliness & quality

✓ creation of high-level peer discussion forums to which only authors and reviewers have access (> interactive)



Masking of reviewers & authors (nicknames)

Minimal self-referential writing (software)

IMPROVE BLINDING

✓ peer commentary (valuable adjunct)

Author/reviewer discussion forums:

- ✓ articles submitted are assigned to reviewers**
- ✓ reviewers post their reviews as comments to a private site**
- ✓ authors then, may respond to these comments, and reviewers in turn (not necessarily in agreement) may comment again**
- ✓ all takes place during an agreed period, being authors and reviewers able to respond in a timely manner**
- ✓ additional benefit: more lively, productive discussions**

Innovation index (peer review) ⇒ algorithm:

- ✓ number of visitors/readers, downloads, citations
- ✓ (if peer commentary) ⇒ number & quality of readers comments
- ✓ author's comments on reviewers
- ✓ reviewer track score (pct of rejects/acceptance; pct of (dis)agreements; outlier/mean)
- ✓ editorial assessment of reviews and articles submitted:
 - (i) established checklists of performance and qualitative assessment
 - (ii) annual best of selected by independent reviewing committees
- ✓ efficiency and efficacy in fulfilling deadlines (scoring system)
- ✓ reviewer scores on mock articles



Indexation of reviewers + (international) pool of reviewers

Thank you!

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