TD COST Action TD1306
“New Frontiers of Peer Review”

Large-scale exploration of peer review across research domains

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PEERE aims to improve efficiency, transparency and accountability of peer review

The objectives of this Action are:
(i) to analyze peer review in different scientific areas by integrating quantitative and qualitative research and incorporating recent experimental and computational findings;
(ii) to evaluate implications of different models of peer review and to explore new incentive structures, rules and measures to improve collaboration in all stages of the peer review process;
(iii) to involve science stakeholders in data sharing and testing initiatives;
(iv) to define collaboratively a joint research agenda that points to an evidence-based peer review reform
«Community building»: a transdisciplinary community
A protocol for data sharing

1. Preamble

TD1306 COST Action “New frontiers of peer review” (PEERE) aims to improve the efficiency, transparency and accountability of peer review through a trans-disciplinary, cross-sectoral collaboration. The objectives of this Action are: (i) to analyse peer review in different scientific areas by integrating quantitative and qualitative research and incorporating recent experimental and computational findings; (ii) to evaluate implications of different models of peer review and to explore new incentive structures, rules and measures to improve collaboration in all stages of the peer review process; (iii) to involve science stakeholders in data-sharing and testing initiatives; (iv) to define collaboratively a joint research agenda that points to an evidence-based peer review reform.

To achieve these objectives, PEERE established collaboration with a group of publishers to define a data sharing strategy aimed to provide data on internal peer review processes in a sample of journals. This will allow PEERE to study peer review across different fields and identify important factors that could help to improve quality, transparency and accountability of the process.
The PEERE dataset
Something new is coming!

180 journals (Elsevier, Wiley and Royal Society)
8 years
+2 million scholars

Different domains

Different management models

Different publication models

Gender and ethnicity by machine learning

Semantic analysis

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Fig. 8: The citation network of peer review (inspec data).
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PEERE “New Frontiers of Peer Review”
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EASE 2018 Bucharest
The emergence of a field: a network analysis of research on peer review

Vladimir Batagelj¹,² · Anuška Ferligoj³ · Flaminio Squazzoni⁴
Fig. 2. Referee–paper network. (a) Complete affiliation network. Papers are drawn as blue squares, authors as red circles. (b) Bipartite projection on papers. Colours indicate journals in which papers were submitted. (For interpretation of the references to colour in this figure legend, the reader is referred to the web version of the article.)
Does transparency come at a cost? The impact of publishing peer review reports on referee behavior in five scholarly journals

Giangiacomo Bravo*, Francisco Grimaldo*, Emilia López-Infesta*, Bahar Mehmami*, and Flaminio Squazzoni*

Fig. 3. Gender and status distribution of referees by review condition.
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Undisclosed review

Open review

Subjectivity

Polarity

count

100
10
1
What is next?

Promoting data sharing across publishers, journals, and contexts

Showing benefits of evidence-based journal management attitudes

Identifying resources, schemes and actors that can help strengthen and expand the PEERE community

Defending and promoting a scientific, rationalistic, pragmatic culture of peer review across stakeholders and at the society at large

If you are interested, we are organizing a «PEERE after PEERE» meeting on 9-10 October 2018! Stay tuned on www.peere.org and @PEERE_reVIEW
What is next?

I prefer beer to peer review ... drink a beer with the editor ...