

TEN SIMPLE RULES FOR OPEN PEER REVIEW



Source: Malegría, <http://bit.ly/2tpOjL4>

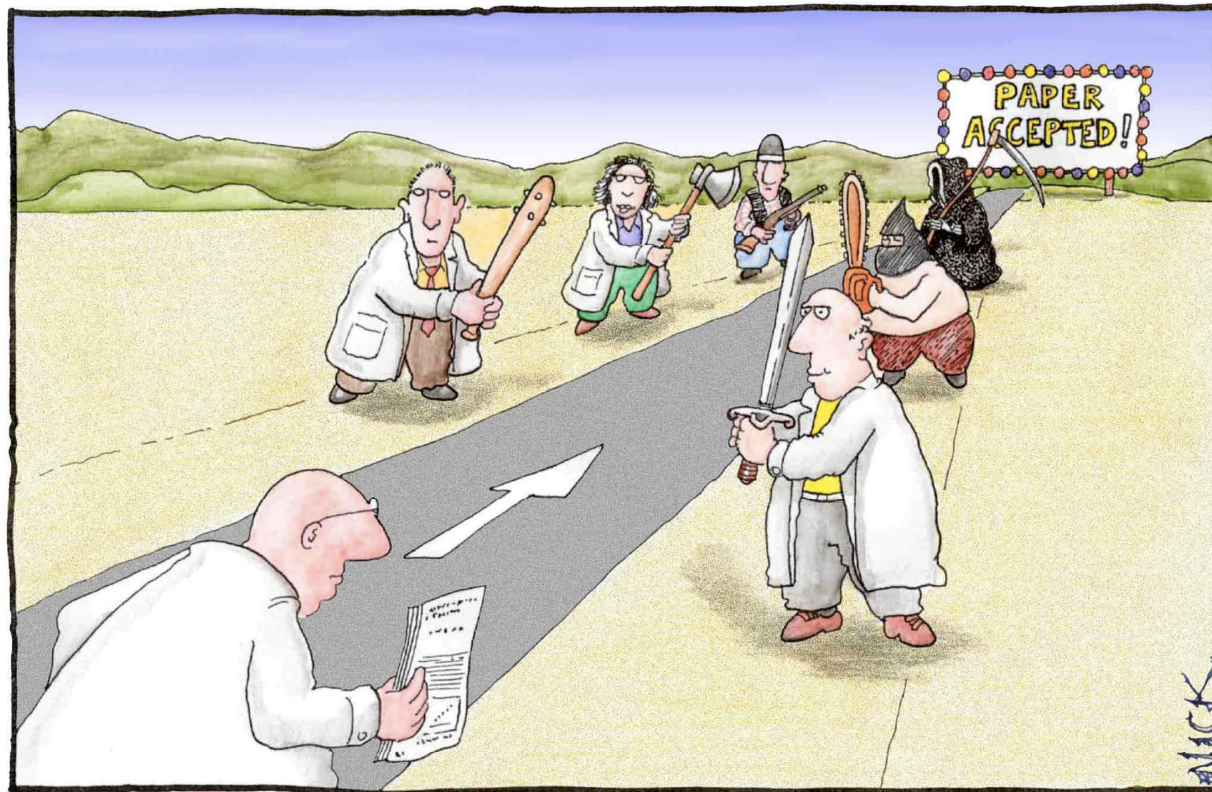
**Birgit Schmidt, Göttingen State and
University Library**

Tony Ross-Hellauer, KNOW-CENTER;
Xenia van Edig, Copernicus Publications; &
Elizabeth Moylan, BioMedCentral *

PEERE Conference, Rome, 8 March 2018

* Many thanks to our reviewers!

Today's peer review is a mix of open and blind



Most scientists regarded the new streamlined peer-review process as 'quite an improvement.'

Reactions to peer review also depend on familiarity

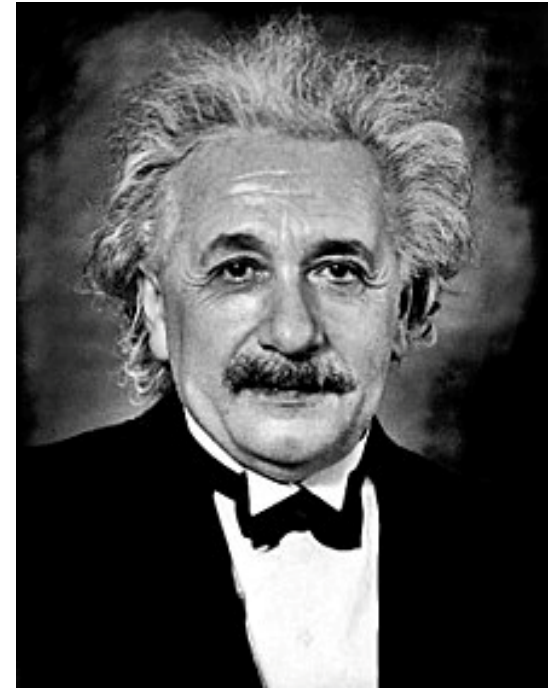
Dear Sir,

We (Mr. Rosen and I) had sent you our manuscript for publication and had not authorized you to show it to specialists before it is printed. I see no reason to address the in any case erroneous comments of your anonymous expert. On the basis of this incident I prefer to publish the paper elsewhere.

Respectfully,

P.S. Mr. Rosen, who has left for the Soviet Union, has authorized me to represent him in this matter.

(Albert Einstein to the editor of Physical Review in 1936)



Source: Wikipedia

“Open Peer Review” encompasses diverse constellations of many distinct aspects

**** 122 definitions collected and analysed ****

**** 22 distinct configurations of 7 traits identified ****

Primary aspects

- Open identities
- Open reports
- Open participation

Secondary aspects

- Open interaction
- Open pre-review manuscripts
- Open final-version commenting
- Open platforms



Image CC BY AC McCann, w/ amendment (by TRH)

See: Ross-Hellauer, R. (2017). What is open peer review? A systematic review. F1000Research. <https://doi.org/10.12688/f1000research.11369.2>

Why ten rules?

- **Open peer review (OPR) is on the rise.**

Both as an **established practice** at some journals and via several **experiments and studies** over the last years.

- **Greater transparency and participation.**

Not an end in itself but to **deliver greater value** of a peer review process which is not meeting expectations (e.g. undiscovered errors, conflicts of interest and misconduct, too little follow-up).

Ten rules for whom & what

- **Authors, reviewers**, editors, readers, & service providers (e.g. submission platforms)
- **Some differences by discipline** (long vs. short form publication, pre/post reviewing, review criteria, etc.)
- Primarily for **journal papers but also conference proceedings**
- May also be applied to books or book chapters
- Not so much for conference abstracts (somewhat lighter review)

Ten simple rules for OPR (1)

1. Understand **what kind of open peer review you're dealing with**
2. Open peer relies on **mutual trust and respect**
3. Open peer review enables **constructive and efficient quality assurance**
4. Open peer review increases **transparency and accountability**
5. Open peer review facilitates **wider discussion**

Ten simple rules for OPR (2)

6. Open peer review **gives reviewers recognition**
7. Open peer review offers **learning opportunities** and facilitates training
8. Open peer review is already **moving mainstream**
9. There is **room to practice** open peer review even if it hasn't been formally introduced
10. We need **more research** into open peer review

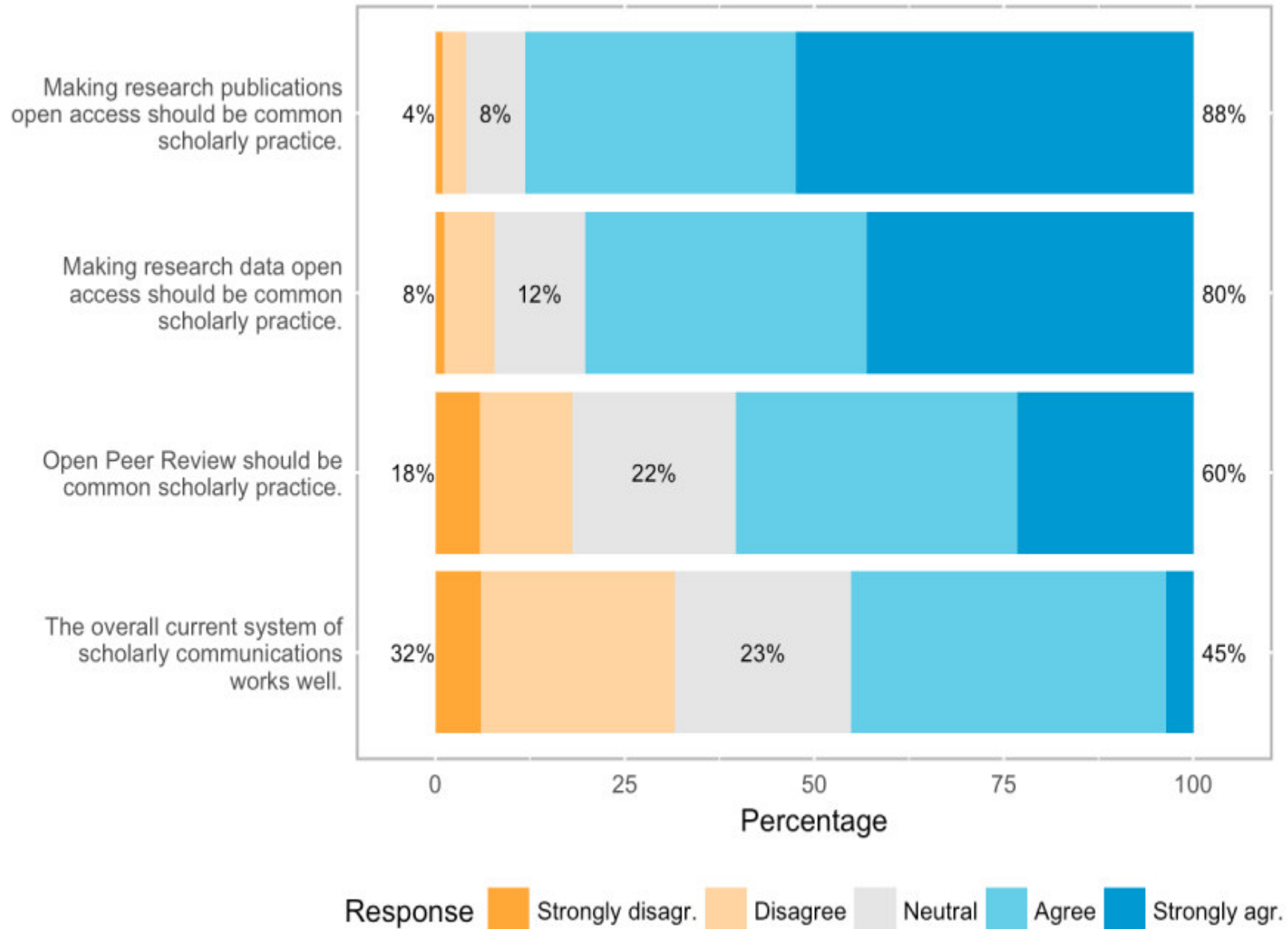


Survey on attitudes to OPR

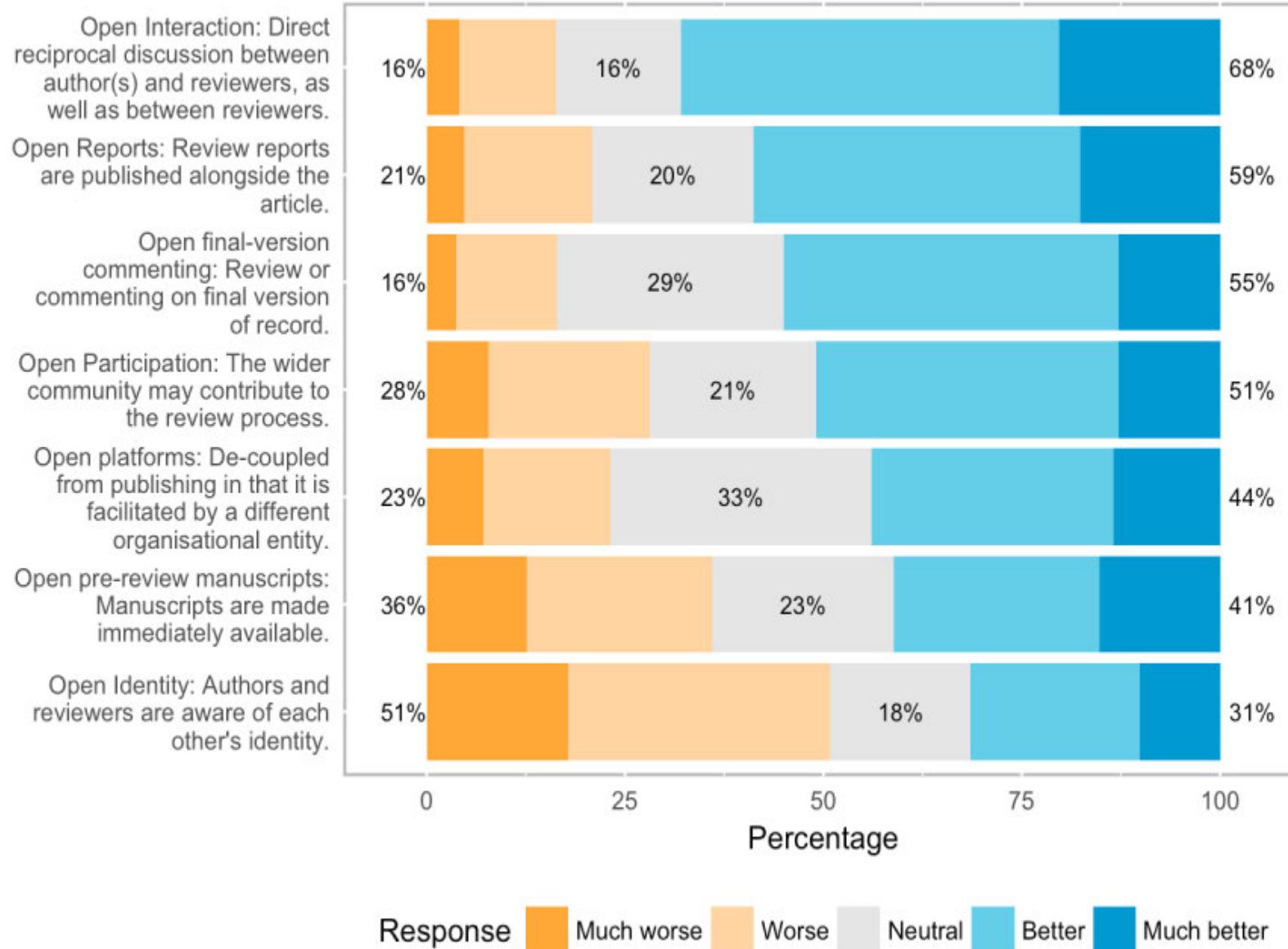
- Online survey for OpenAIRE project
- Sept-Oct 2016
- 3,062 complete responses from authors, reviewers and editors

Ross-Hellauer T., Deppe A., & Schmidt B. (2017). Survey on open peer review: Attitudes and experience amongst editors, authors and reviewers. PLOS ONE 12(12): e0189311.
<https://doi.org/10.1371/journal.pone.0189311>

Statements on scholarly communication



Statements on how peer review may be modified



Responses by discipline

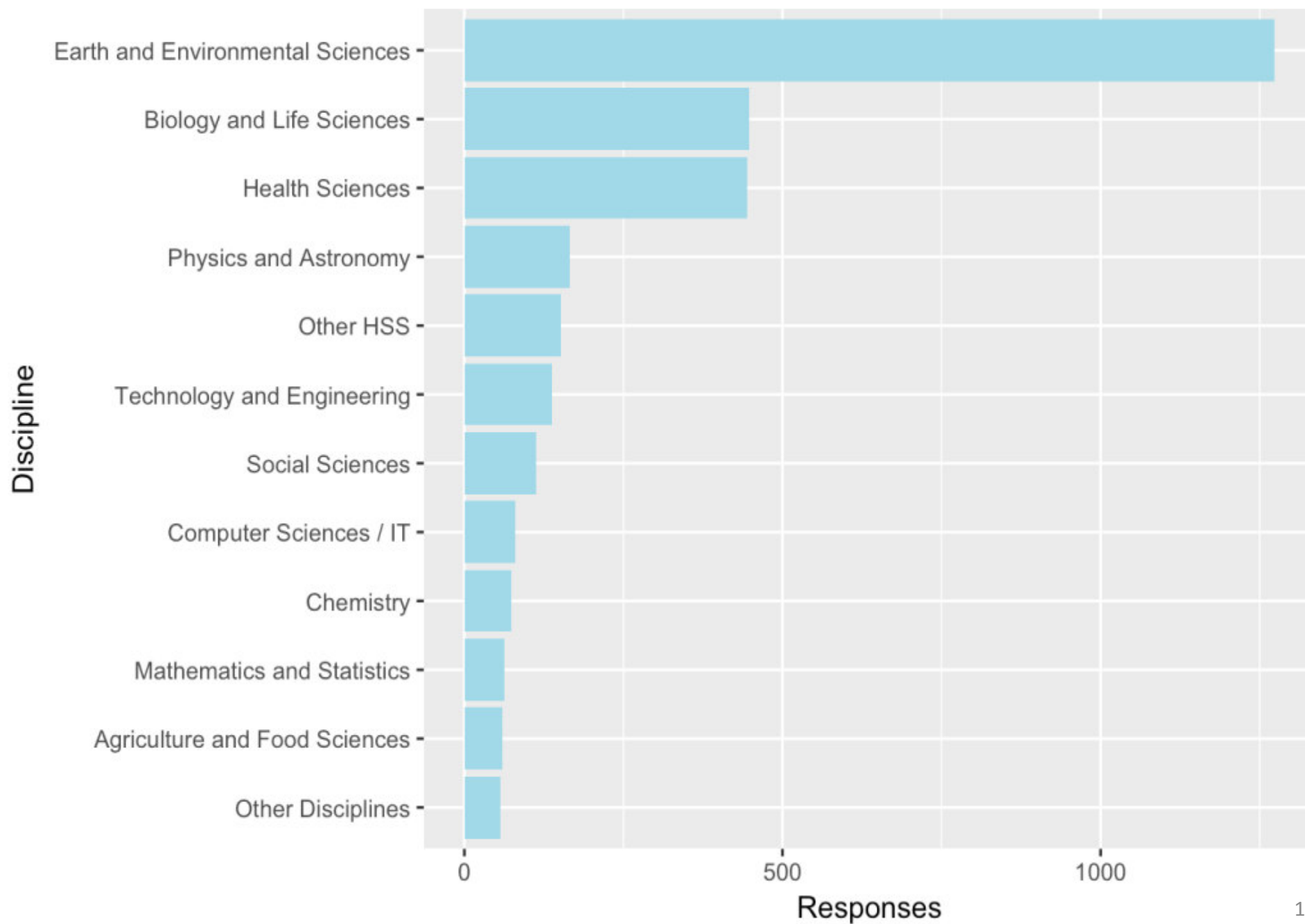
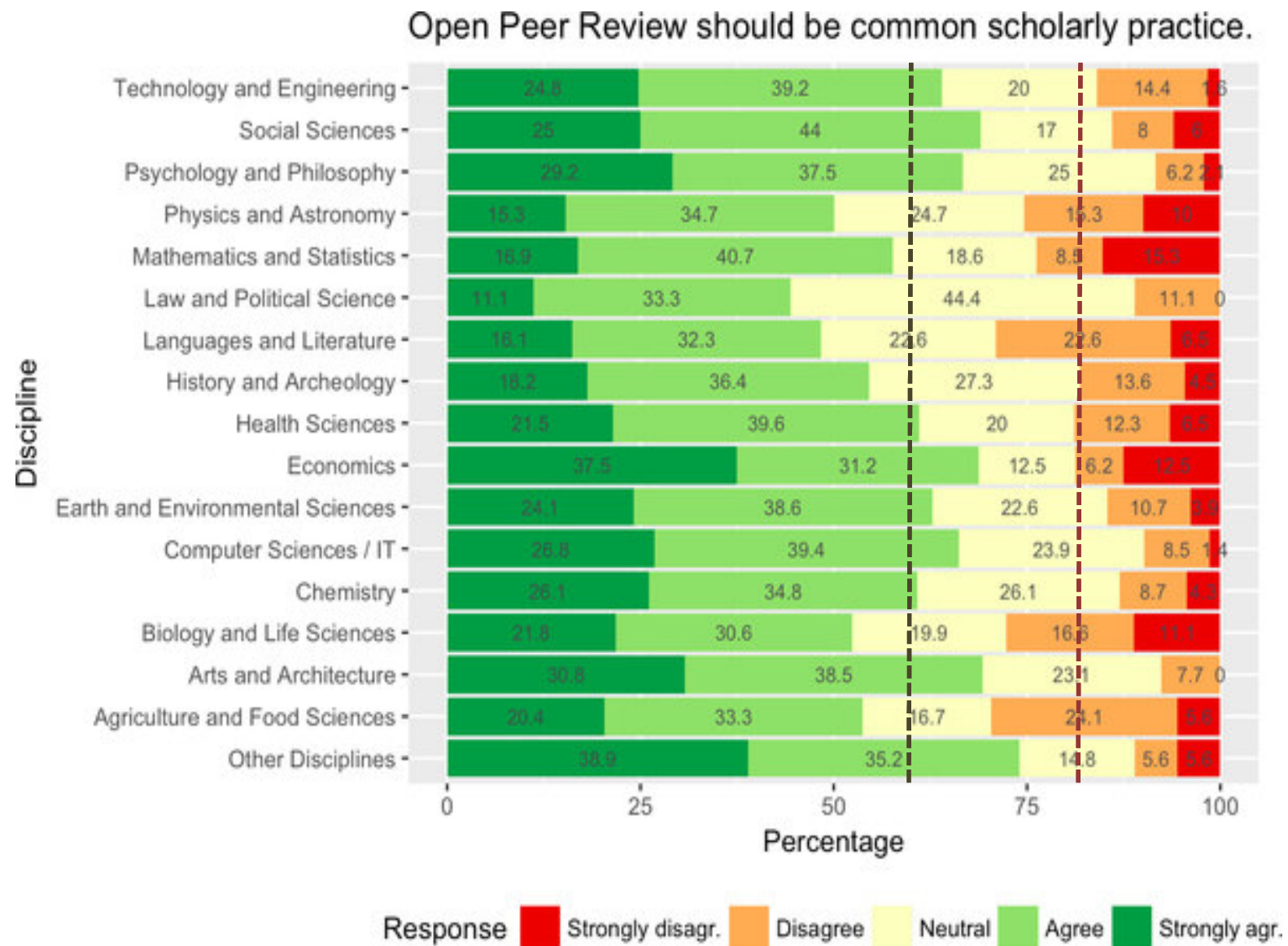


Fig 14. Views on OPR by scientific discipline.



Attitudes to Open Peer Review

- **OPR is already mainstream** (in the given sample)
 - Over 3/4 have practical experience
 - 60% believe OPR should be common practice
- **Positive reactions to most OPR traits** (esp. open interaction, reports, participation)
- However, **strong rejection of open identities** (every second against)
- Generational differences: younger researchers more supportive

Interim conclusion

- **Open Reports supported by a strong majority**
- **More interaction, more visibility** for peer review processes wanted
- **Open Identities is met with reservations** (even among those with OPR experiences)
- **Disciplinary differences** need to be better researched and understood

Ten simple rules for OPR (1)

1. **Understand what kind of open peer review you're dealing with**
2. **Open peer relies on mutual trust and respect**
 - >> civil dialogue essential, some monitoring needed
 - >> acknowledge the effort, even if you disagree
 - >> respond in kind, i.e. PR is a dialogue, not a monologue
3. **Open peer review enables constructive and efficient quality assurance**
 - >> in particular when the paper is made available as a preprint
 - >> some improvement of quality of review reports has been observed (in particular by editors)
4. **Open peer review increases transparency and accountability**
 - >> you can follow the discussion, how points of comment/criticism have been addressed
 - >> reviewers are accountable for their comments
 - >> editors for their choice of reviewers and the final decision
5. **Open peer review facilitates wider discussion**
 - >> in particular in case of Open Comments
 - >> editors can encourage discussion & moderate comments

Ten simple rules for OPR (2)

6. **Open peer review gives reviewers recognition**
>> enables direct acknowledgement (however, ORCID and Publons allow to collect reviewer evidence even if not OPR)
7. **Open peer review offers learning opportunities and facilitates training**
>> e.g. journal clubs can use preprints or post-pub review, review quality of review reports
8. **Open peer review is already moving mainstream**
>> established resp. studies and experiments for journals, books & conferences
9. **There is room to practice open peer review even if it hasn't been formally introduced**
>> Open Science Peer Review Oath
>> A radical approach: only review if the paper is available as a preprint, sign & publish review reports
10. **We need more research into open peer review**

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September 07, 2017

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-  **PREreview Team**
-  **Josh Nicholson** (Authorea Team)
-  **Daniela Saderi** (Oregon Health & Science University)
-  **Samantha Hindle** (University of California, San Francisco)



Our Pledge

In the interest of fostering an open and welcoming environment we, as contributors and maintainers, pledge to making participation in our project and our community a harassment-free experience for everyone, regardless of age, body size, disability, ethnicity, gender identity and expression, level of experience, nationality, personal appearance, race, religion, or sexual identity and orientation.

Our Responsibilities:

Project maintainers are responsible for clarifying the standards of acceptable behavior and are expected to take appropriate and fair corrective action in response to any instances of unacceptable behavior.

Open Science Peer Review Oath

#1 I will sign my name to my review

#2 I will review with integrity

#3 I will treat the review as a discourse with you; in particular, I will provide constructive criticism

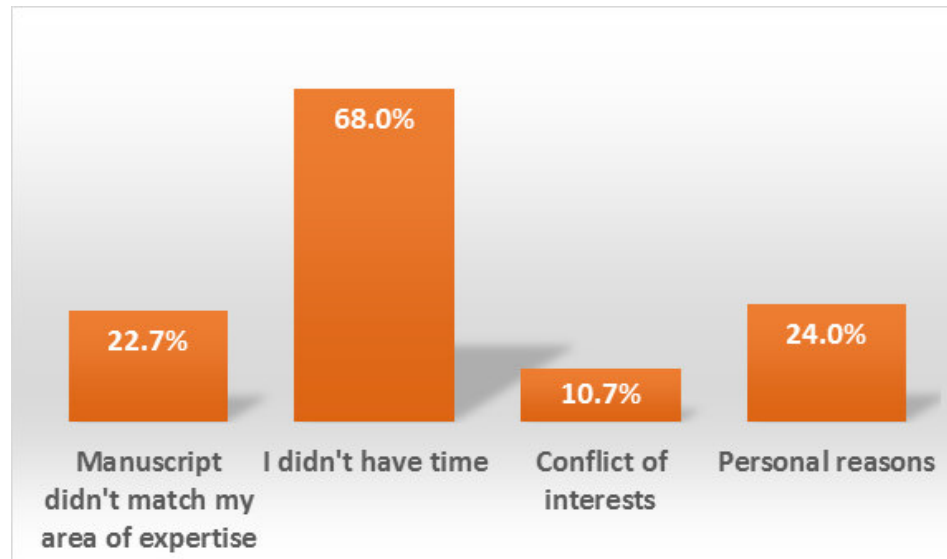
#4 I will be an ambassador for the practice of open science

Aleksic, J., Alexa, A., Attwood, T. K., Chue Hong, N., Dahlö, M., ... Davey, R. (2015). An Open Science Peer Review Oath. F1000Research. doi:10.12688/f1000research.5686.2

Are there any rules missing?

#? Opt out if there is a sound reason to do so

In experiments, about 1/10 opted out for conflict of interest and 1/4 for personal reasons. However, time was the most important factor (over 2/3).



Publishing Peer Review Pilot, Elsevier 2015/2016 (Mehmani, 2016)
PEERE, 6-8 March 2018, Rome

Open questions

- **Who benefits most** from OPR?
e.g. more positive reviews for those already in power, in-crowd, & trendy topics
- **Which biases play out** in OPR? Which get stronger, which weaker?
e.g. English language skills, underprivileged authors/reviewers shy away, only strong papers are submitted for OPR, gender bias, etc.
- How can such **effects be controlled/mitigated**?
e.g. role of policies, editors, education
- Is Open Reports the best we can have given the strong competition in academia?

However, biases can be better monitored via OPR

A recent study revealed that **all-female economics papers remain 6 months longer in peer review than all-male papers** (Hengel, 2017)

>> in OPR settings such behavior can be monitored & inform interventions

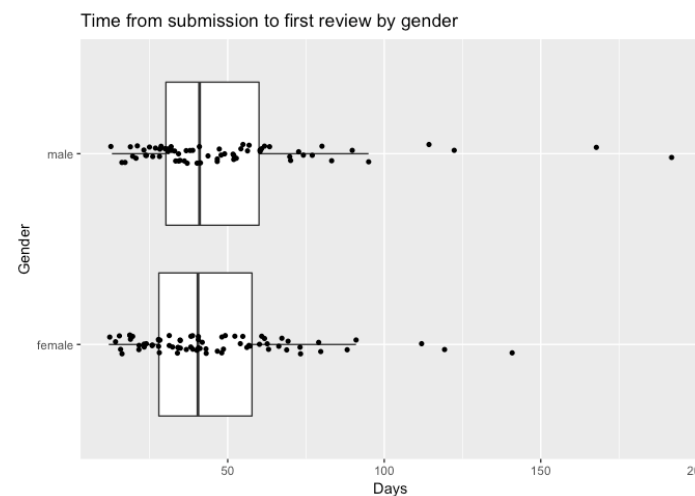
Wellcome Open Research Year One

Data: 142 papers (gender of first author)
(Schmidt, 2018)

>> time from submission to publication to first review etc.

>> about the same time from submission to first review (see figure)

>> reviewers took about 5.5 more days to review papers of female first authors (19.5 vs. 14 days for female vs. male first authors)

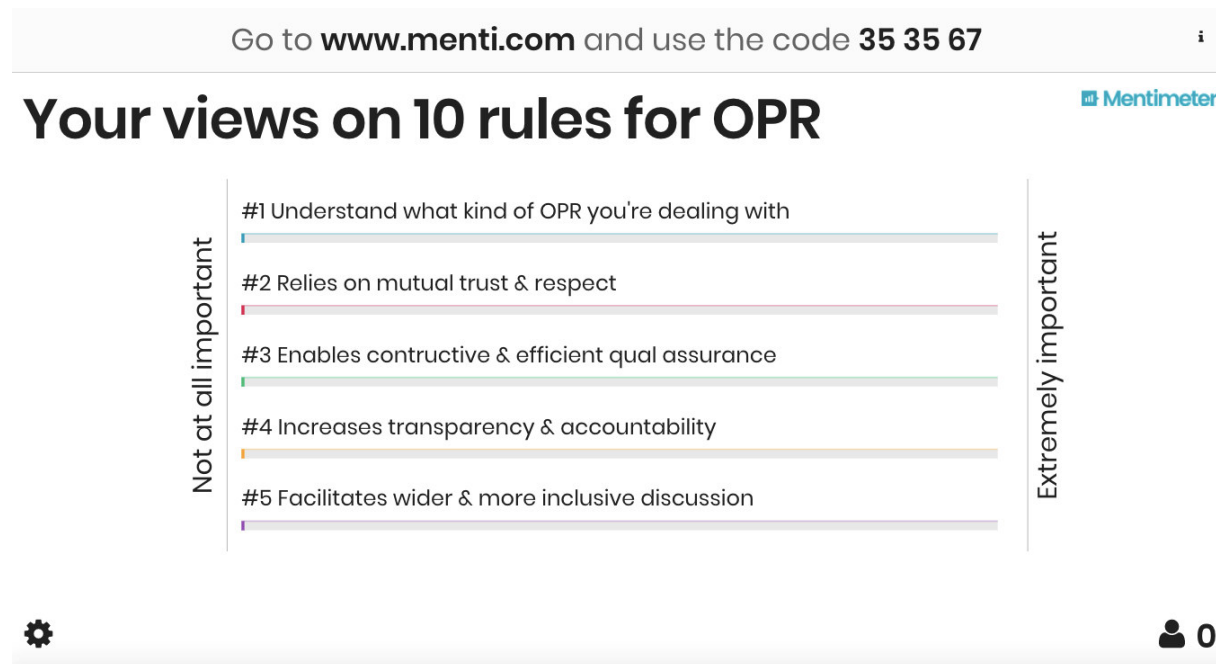


gender	n	msubpub	msubfrev	msubsrev	msubarev	msubind
<chr>	<int>	<time>	<time>	<time>	<time>	<time>
female	75	21 days	40.5 days	49 days	7 days	63 days
male	67	27 days	41.0 days	55 days	8 days	62 days

2 rows

Thank you for your attention

- Your comments?
- Any rules missing?
- Which are most essential vs. not so much?



References

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