

Framework for
Open and
Reproducible
Research Training



FORRT

www.forrt.org



*The replication crisis has led to
positive structural, procedural,
and community changes*

www.forrt.org



Learning from the Replication Crisis

The Problem

Literature assessing the Replication Crisis has focussed on identifying what's wrong (e.g., questionable research practices and unhealthy structures). This is where the discussion often stops.

*Yet, there is much opportunity in learning from mistakes and improving. To move forward, **positive change needs to be acknowledged, encouraged, and build upon.***



Learning from the Replication Crisis

The most cited studies in the context of the Replication Crisis outline the problem. The next logical step is to move towards solving the problem / crisis.

False-positive psychology: Undisclosed flexibility in data collection and analysis allows presenting anything as significant

[JP Simmons, LD Nelson...](#) - Psychological ..., 2011 - journals.sagepub.com

... Finally, a field known for publishing **false positives** ... **false-positive** rate of 5% (ie, $p \leq .05$), current standards for disclosing details of data collection and analyses make **false positives** ...

★ Lagre 77 Referanse Sitert av 7221 Beslektede artikler Alle 51 versjoner

Estimating the **reproducibility** of psychological science

[Open Science](#) Collaboration - Science, 2015 - science.org

... the first **open**, systematic evidence of **reproducibility** from a sample of studies in **psychology**.
... **replication**. However, it is unknown the extent to which these findings extend to the rest of ...

☆ Lagre 77 Referanse Sitert av 7727 Beslektede artikler Alle 44 versjoner



Credibility Revolution

Keeping the opportunity for change in mind, Simine Vazire coined the term **Credibility Revolution** instead.

Key characteristics of the Credibility Revolution:

- greater emphasis on *transparency and openness*
- a move toward *preregistration* of research
- more *direct-replication studies*
- *higher standards* for the quality and quantity of *evidence* needed to make strong scientific claims

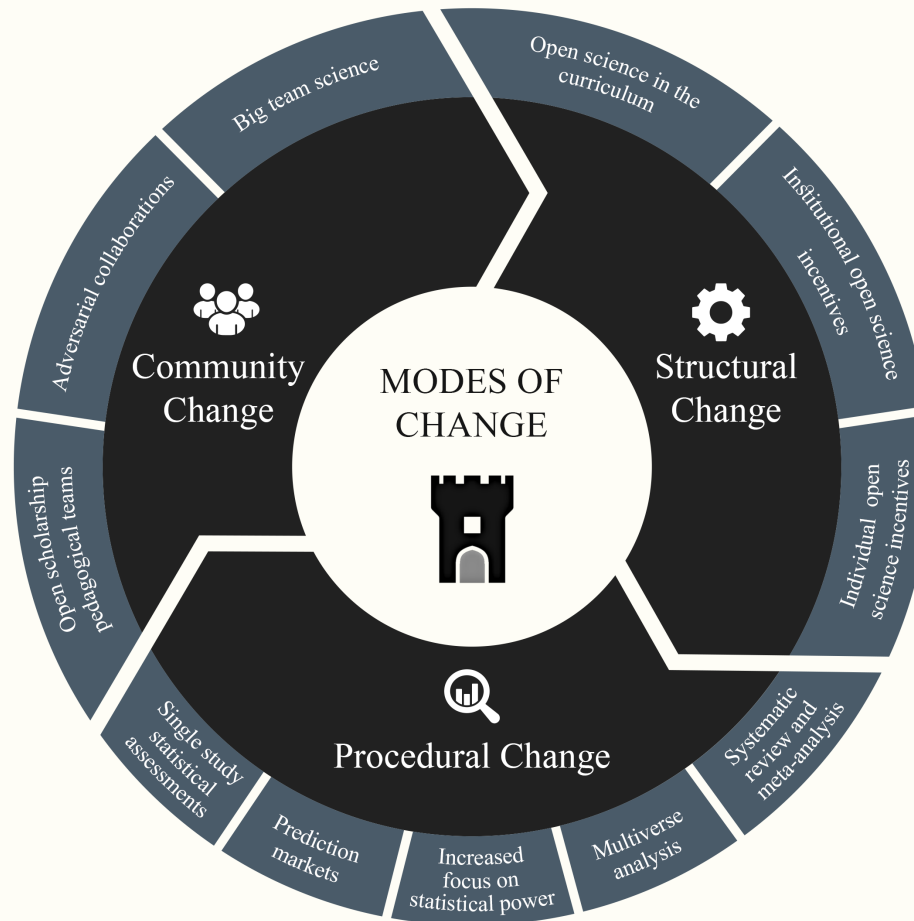


Credibility Revolution

In other words, the change is already happening. A resource structuring and presenting the developments just had to be established.



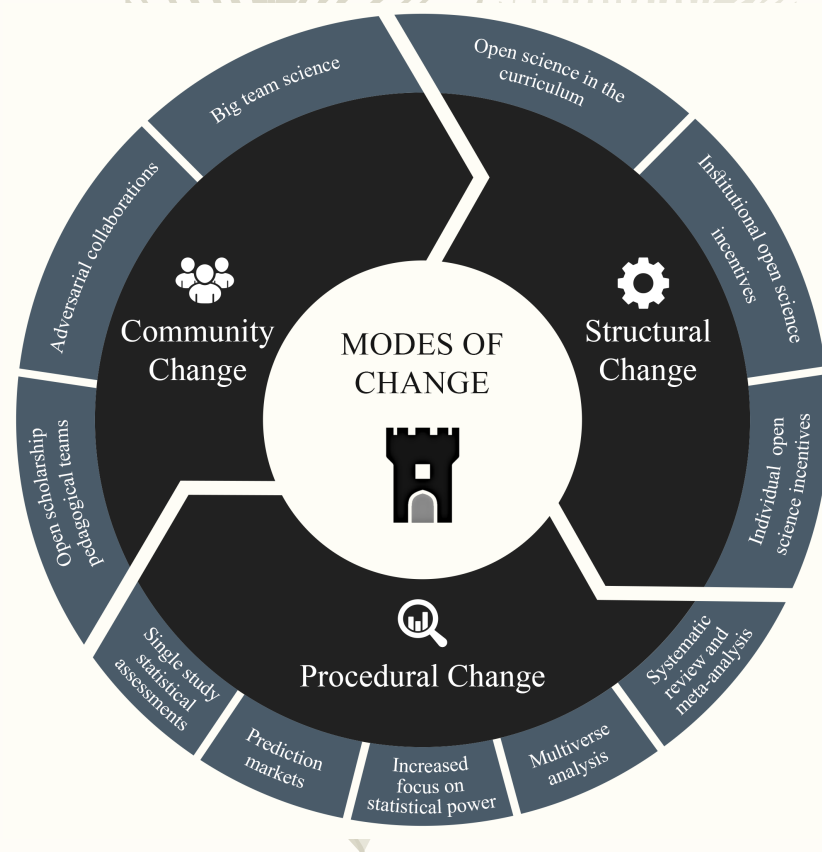
Providing an overview of changes in the field



Structural, procedural and community-level change as a consequence of the replication crisis.



A resource to build upon



Overview of the paper:

- Short introduction to the replication crisis
- Overview of positive changes in the field
- Outlook on what's next



What next?

Educational resources in preparation:

- General presentation of the paper
 - Slides for short presentation at your initiative, e.g. ReproducibiliTea
- Syllabus to facilitate the teaching of a positive/constructive view of the replication crisis
 - Slides & script for several lectures: here is a start for it ([link](#))
- **Come and join us!**
 - Your help is very appreciated & will be credited on FORRT's website



Thank you!



Dorothy Bishop Prize 2023 Winners



<https://forrt.org>



info@forrt.org



[@FORRTproject](https://twitter.com/FORRTproject)



<https://forrt.org/publications>

Cited by

	All	Since 2018
Citations	115	115
h-index	5	5
i10-index	4	4

