



Open Science and Preregistration: a multidisciplinary view

Preregistration in Psychology

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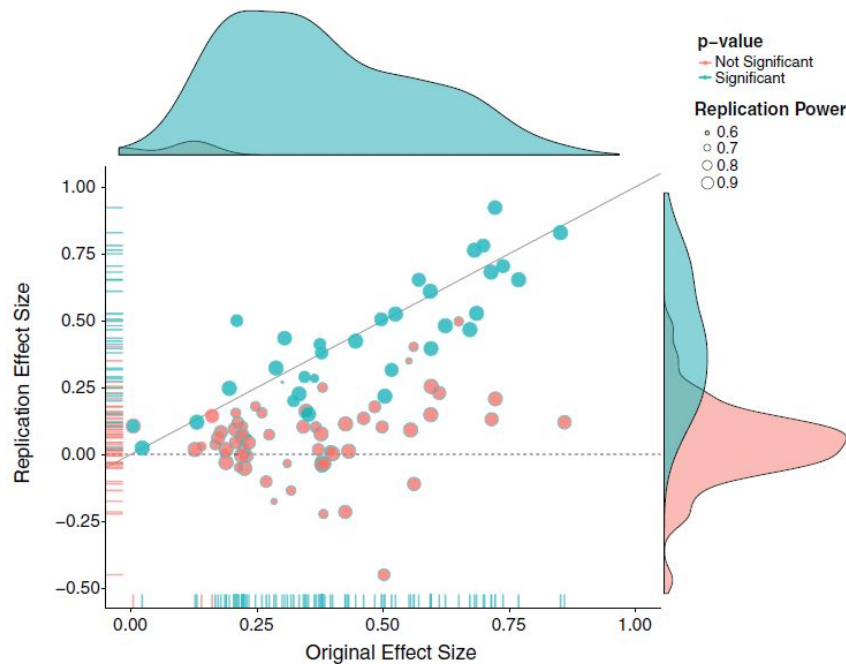
ls@leibniz-psychology.org



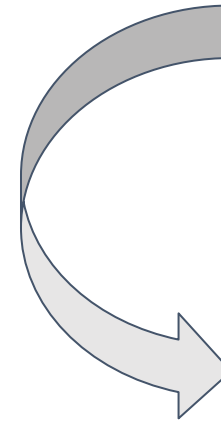
@lspitzer95

Preregistration as a strategy to increase credibility

Credibility crisis → Credibility *revolution*



OSC (2015)



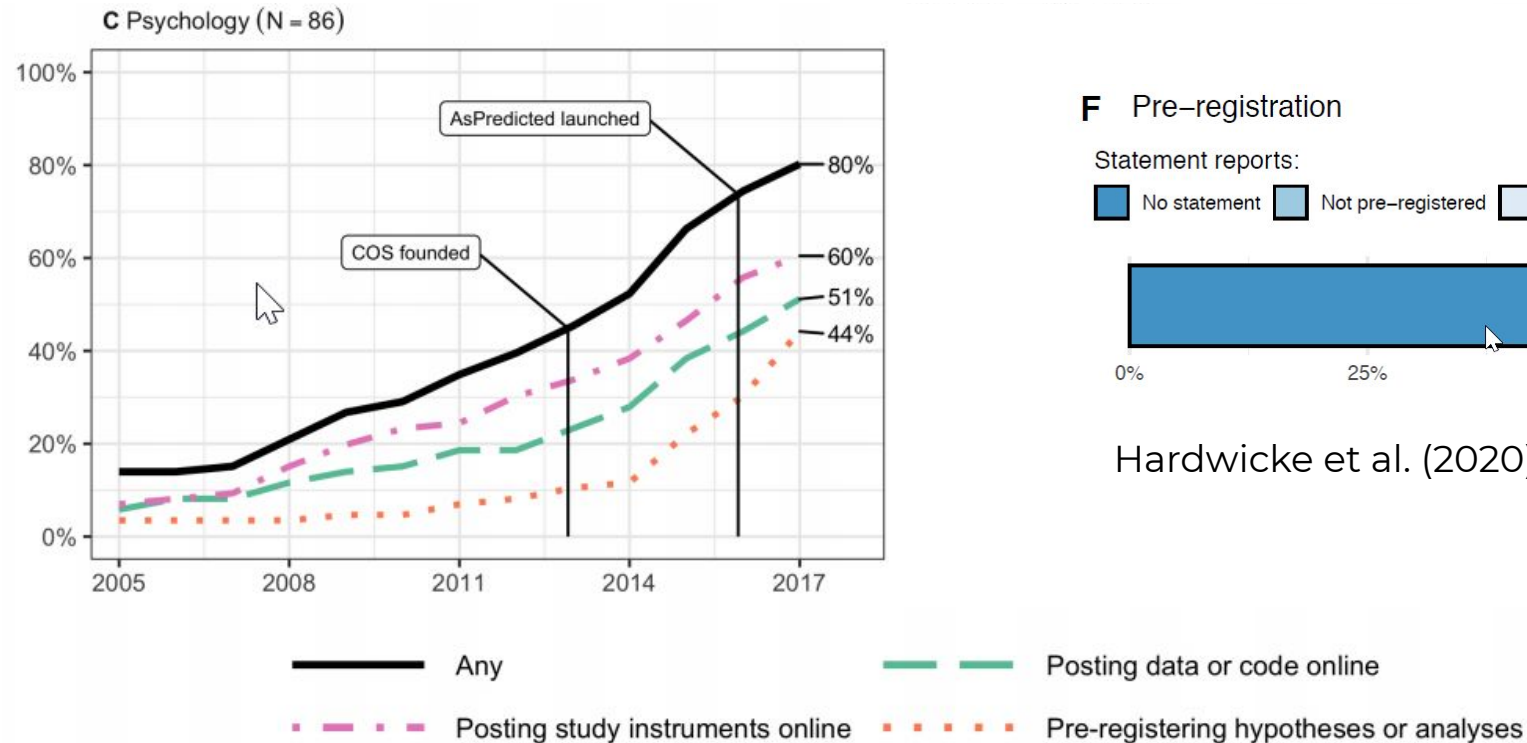
Open science

Preregistration of
studies

Advantages of preregistration

- Increases transparency
- Decreases QRPs
- Allows for a clear differentiation of confirmatory and exploratory analyses
- Can serve as a plan to adhere to during study administration
- Helps gather feedback by others and supports collaboration

Adoption of preregistration in psychology



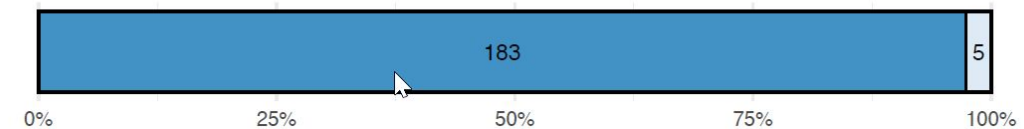
Christensen et al. (2019)

F Pre-registration

Statement reports:

No statement Not pre-registered Pre-registered

N = 188



Hardwicke et al. (2020)

How to create a preregistration?

A lot of options!

Templates

Formats

Platforms

Templates



Preregistration Standards for Psychology

A collaborative effort between the American Psychological Association,
British Psychological Society, and German Psychological Society



In partnership with the
Leibniz Institute for Psychology and Center for Open Science

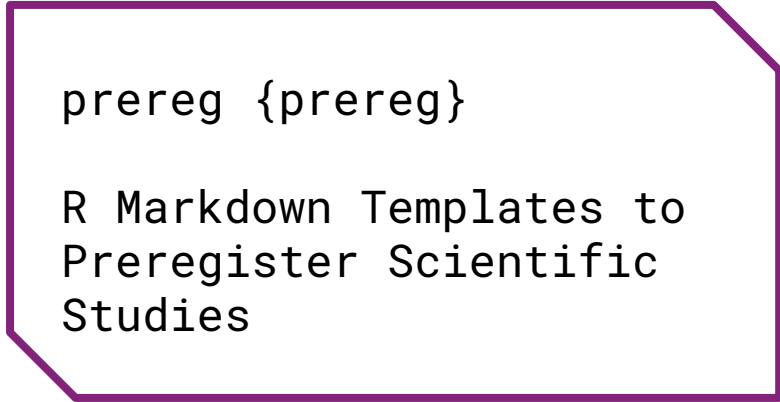


Preregistration for Quantitative Research in Psychology Template

- T Title and Title Page
- A Abstract
- I Introduction
- M Method
- AP Analysis Plan
- O Other Information (optional)

Formats

- Word/Google Doc
- Excel/Google Spreadsheet (table format)
- Online form
- RMarkdown
- Jupyter Notebook

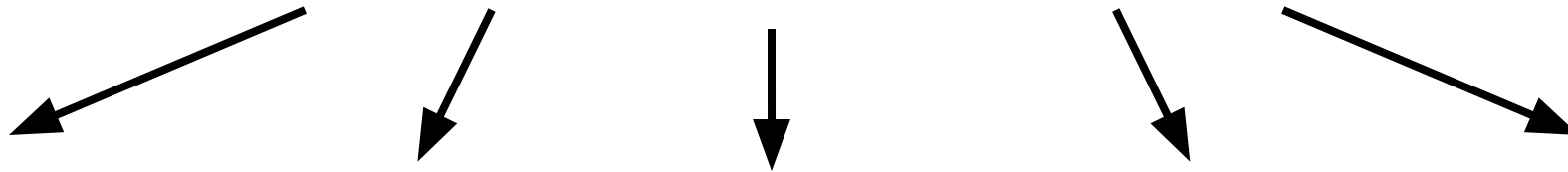


prereg {prereg}

R Markdown Templates to
Preregister Scientific
Studies

Formats

Preregistration for Quantitative Research in Psychology Template



Google
Spreadsheet

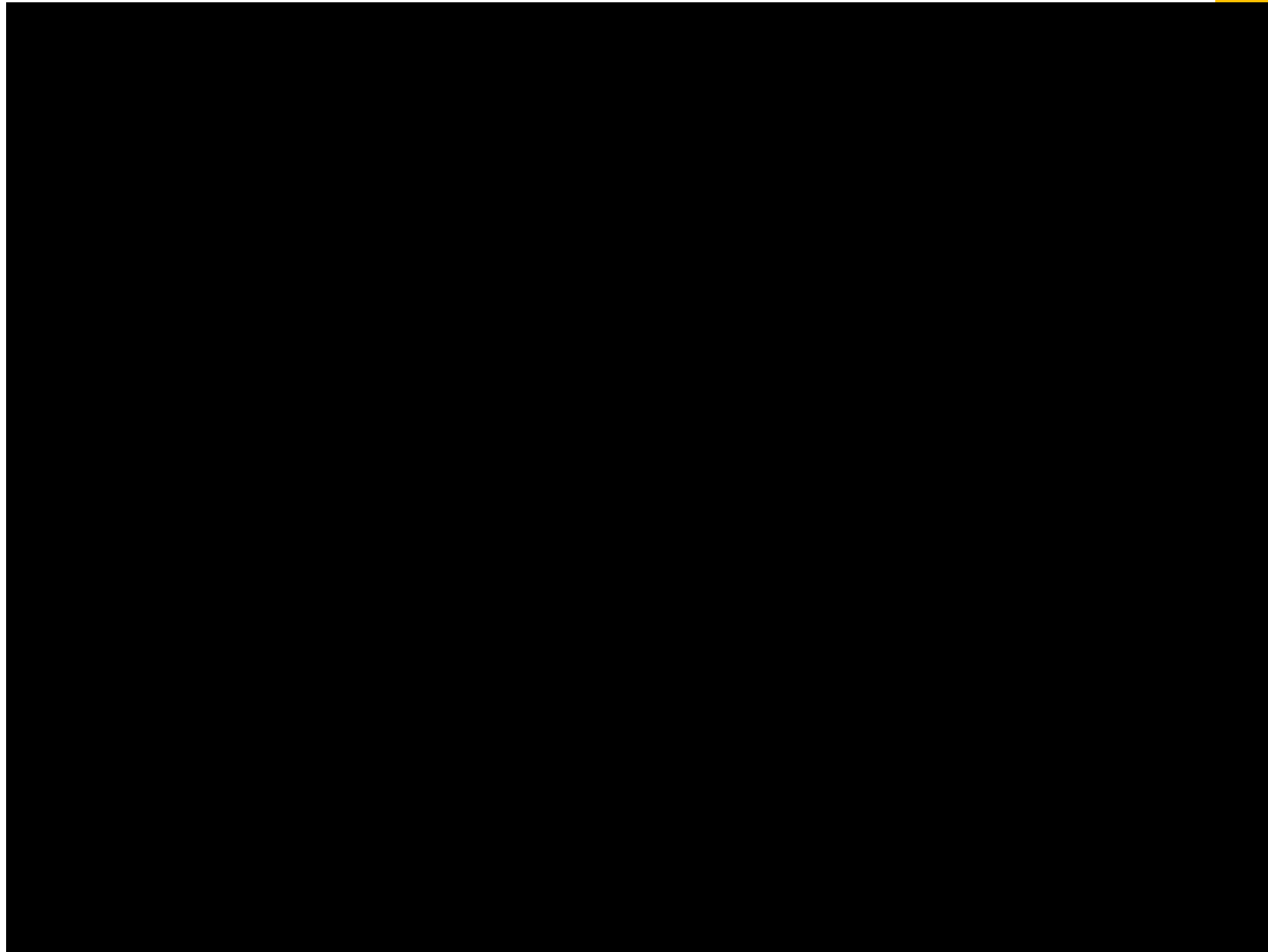
Google
Doc

Google
Form


Jupyter
Notebook

R Markdown
(coming soon)

Using the Template as
Google Form
(provided by PreReg)



The formatted PDF is
then sent to you via
email



T1 Title: The project's title

T2 Contributors, Affiliations, and Persistent IDs (recommend ORCID iD)
Author 1 (Leibniz Institute for Psychology, orcid : 0000-0002-4925-7291)
Author 2 (Leibniz Institute for Psychology, orcid: ...)
...

T3 Date of Preregistration
13/11/2020 08:29:36

T4 Versioning information

T5 Identifier

T6 Estimated duration of project
one year (end of 2021)

T7 IRB Status

T8 Conflict of Interest Statement

T9 Keywords
meta-research, open science, preregistration

T10 Data accessibility statement and planned repository
Data access via download; usage of data for all purposes (public use file)

T11 Optional: Code availability
Data access via download; usage of data for all purposes (public use file)

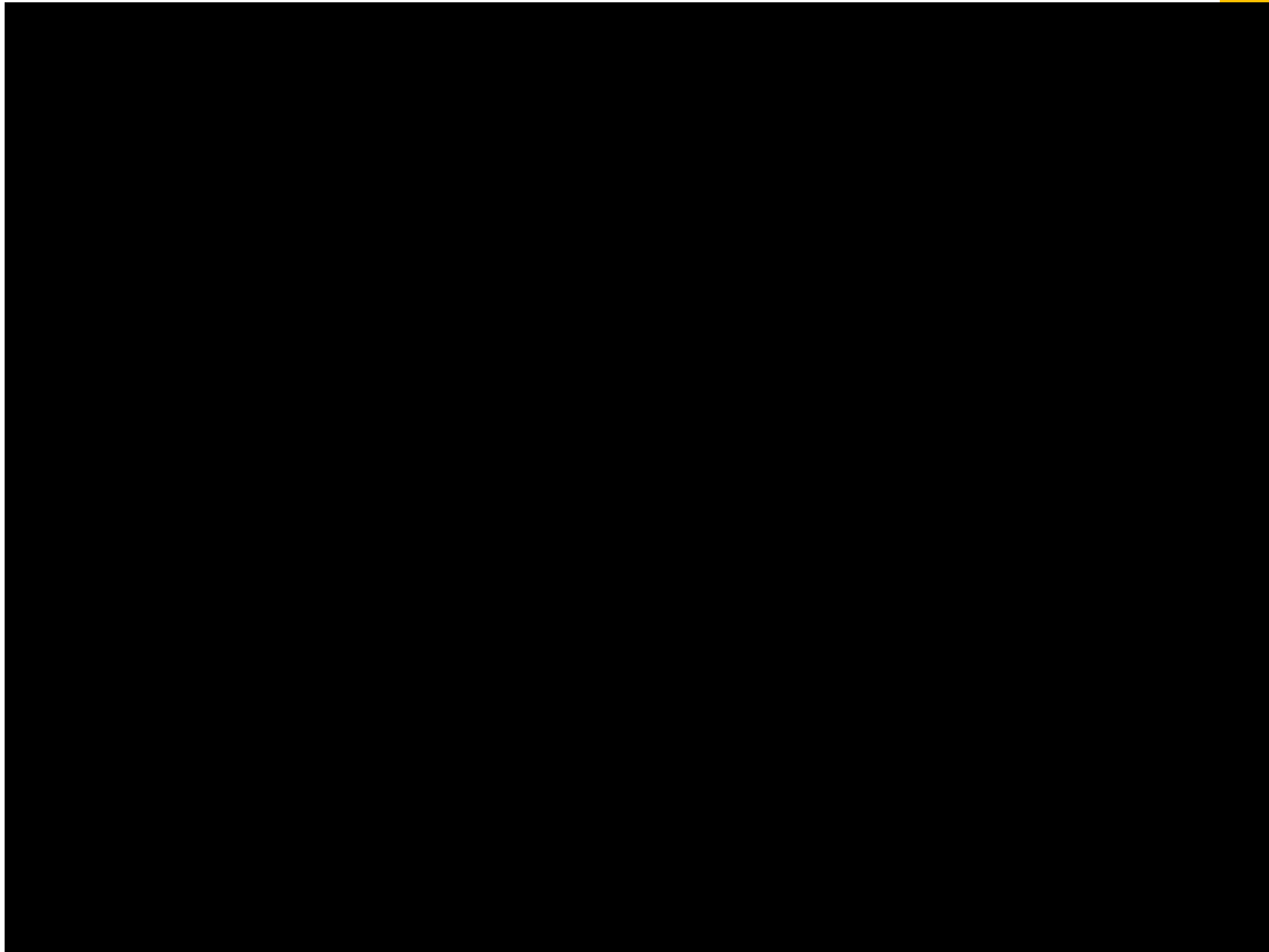
Platforms: PreReg in Psychology

- Repository Track
 - Archived in PsychArchives
 - Timestamped
 - Assigned a DOI
 - Certified by the ZPID
- Lab Track
 - Protocol is reviewed by external reviewers
 - Successful applications are awarded a *free-of-charge data collection* by ZPID's service PsychLab (online or offline)



prereg-psych.org

You can then easily
submit the
preregistration on
PreReg (demo)




Links

- ZPID: leibniz-psychology.org
- Preregistration for Quantitative Research in Psychology Template:
 - [Google Spreadsheet](#)
 - [Google Doc](#)
 - [Google Form](#)
 - [Jupyter Notebook](#)
 - [Webcast](#)
- PreReg in Psychology: prereg-psych.org
- Slides are available on PsychArchives

Thank you!

Do you have any questions?

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References

Christensen, G., Wang, Z., Paluck, E. L., Swanson, N., Birke, D. J., Miguel, E., & Littman, R. (2019, October 18). Open Science Practices are on the Rise: The State of Social Science (3S) Survey. <https://doi.org/10.31222/osf.io/5rksu>

Hardwicke, T. E., Thibault, R. T., Kosie, J. E., Wallach, J. D., Kidwell, M., & Ioannidis, j. (2020, January 2). Estimating the prevalence of transparency and reproducibility-related research practices in psychology (2014-2017). <https://doi.org/10.31222/osf.io/9sz2y>

Open Science Collaboration (2015). Estimating the reproducibility of psychological science. *Science (New York, N.Y.)*, 349(6251), aac4716. <https://doi.org/10.1126/science.aac4716>