OPEN SCIENCE FRAMEWORK

A BRIEF INTRODUCTION

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Slides can be downloaded from: https://osf.io/uq9jk/

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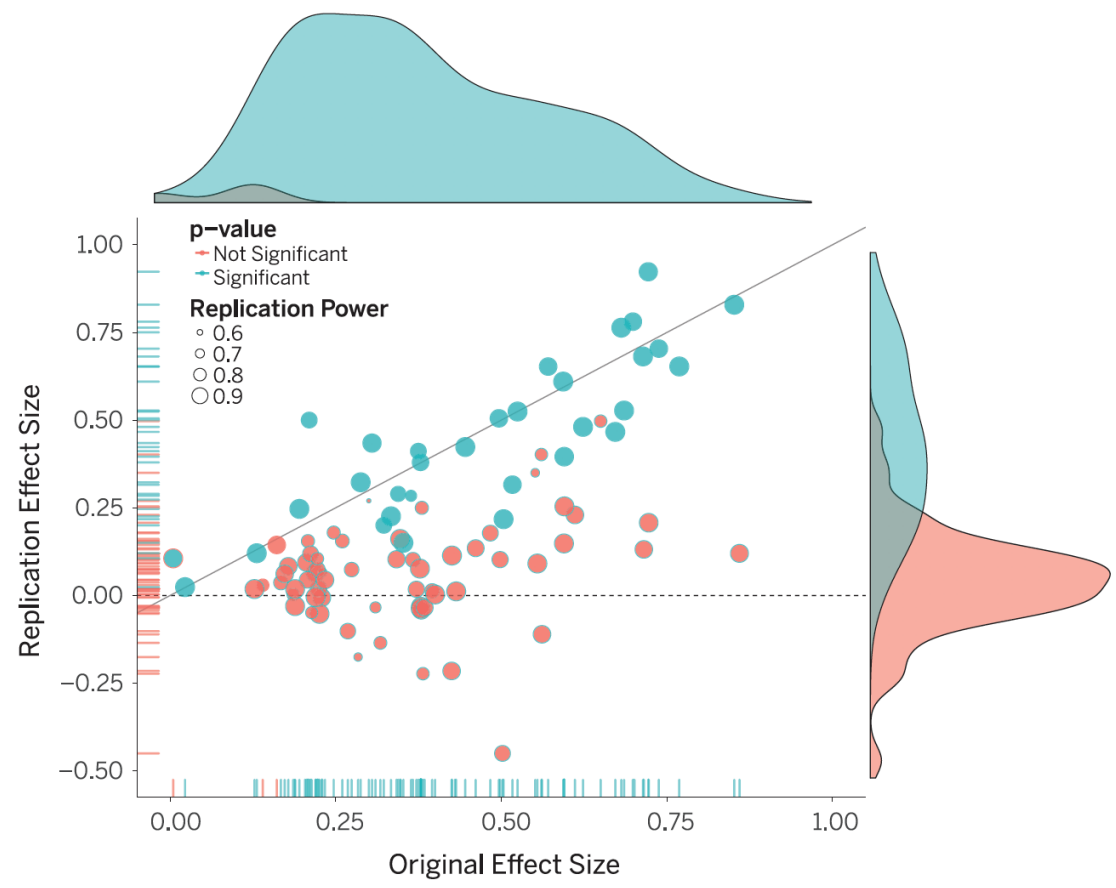PLOS | ONE

RESEARCH ARTICLE

Antecedents of Psychological Contract
Breach: The Role of Job Demands, Job
Resources, and Affect

[1], Roland Pepermans[1], Yannick Griep[1,2], Joeri Hofmans[1]

ed Psychology, Work and Organizational Psychology research unit,
50 Brussel, Belgium, 2 Department of Psychology, University of
st Calgary, AB T2N 1N4, Canada

Open Science
Collaboration. (2015).
Estimating the
reproducibility of
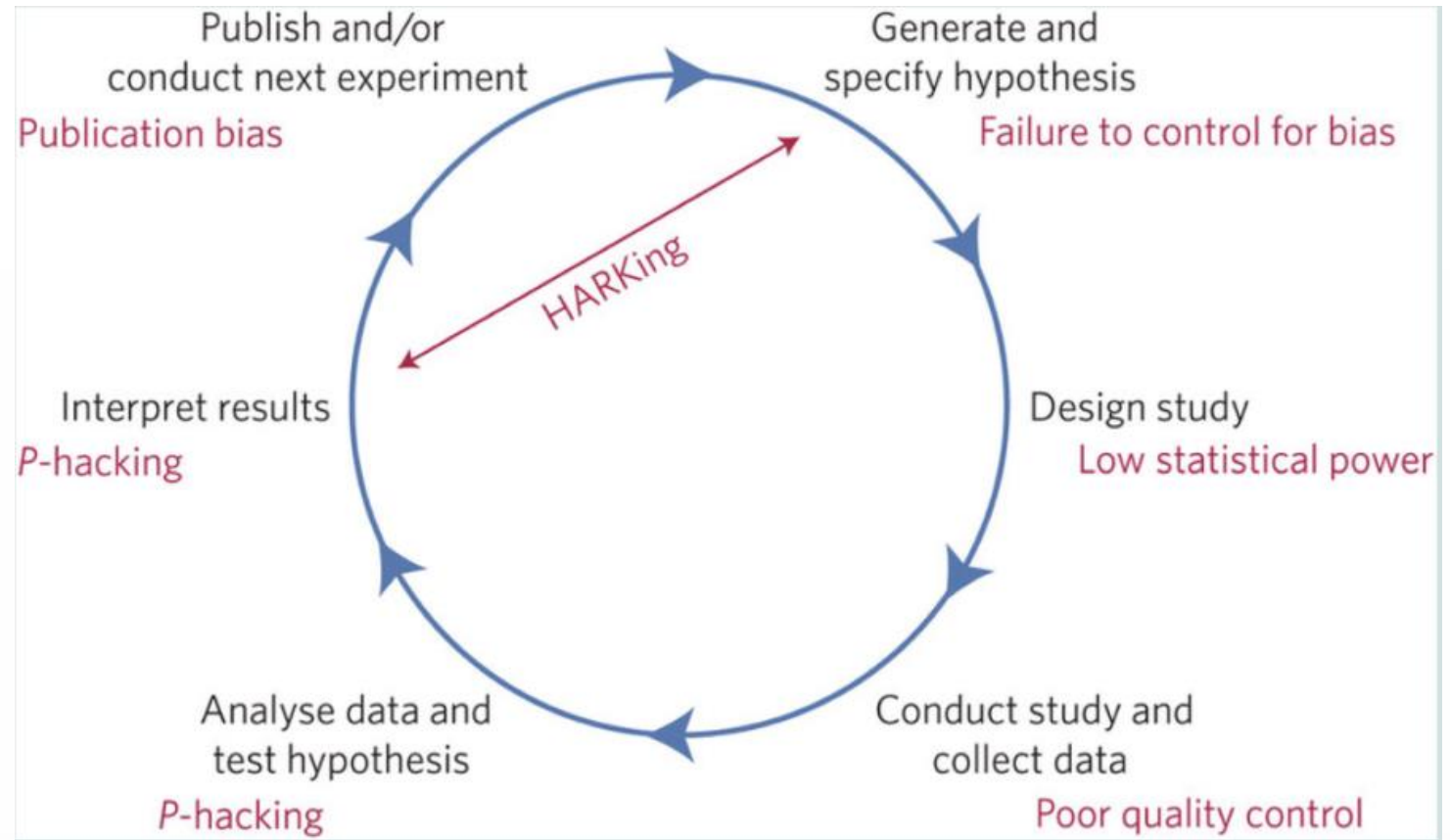psychological science.
Science, 349(6251),
aac4716–aac4716.
https://doi.org/10.1126/sci
ence.aac4716

MISSION

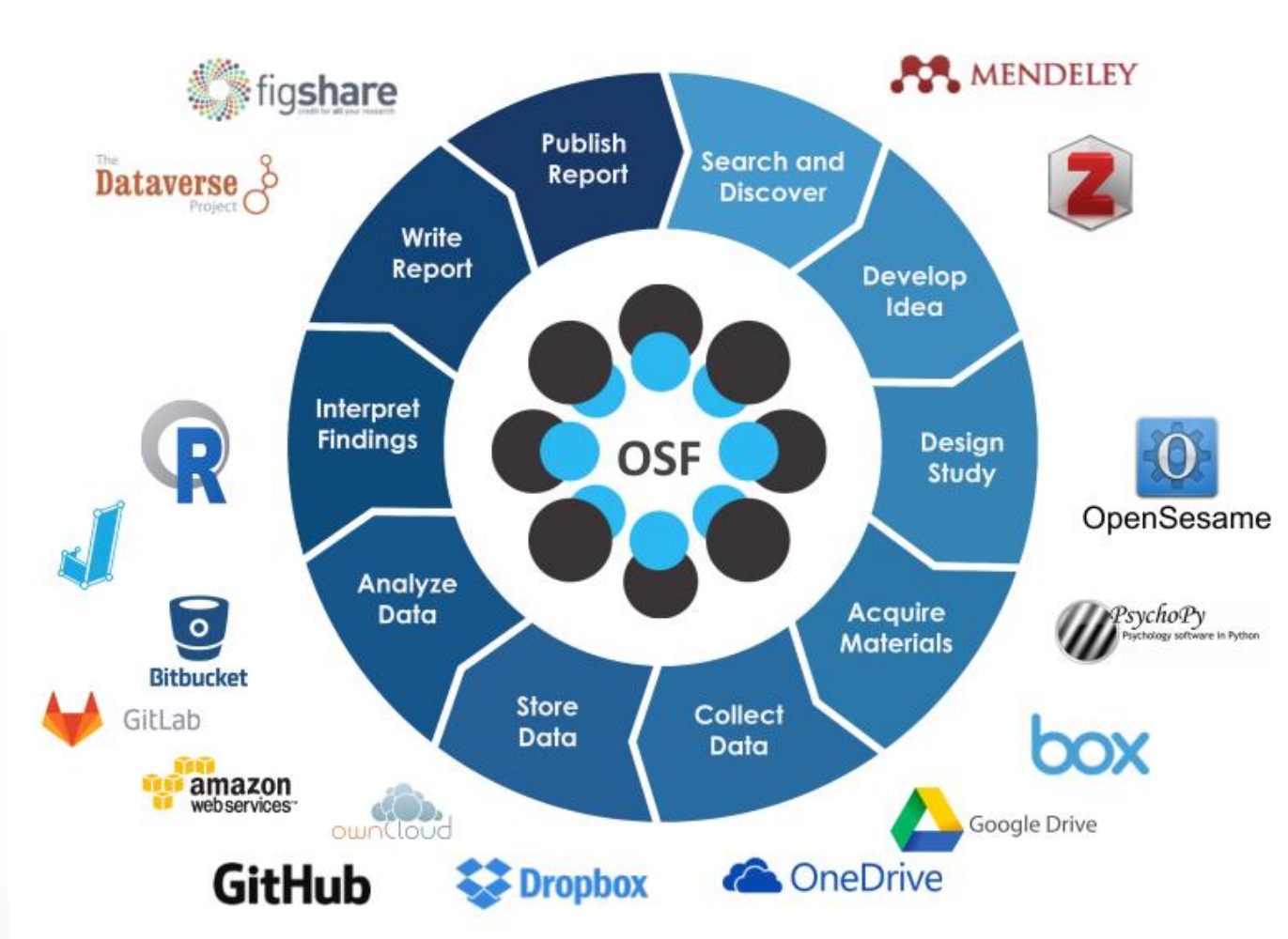# Increase openness, reproducibility, and integrity of scientific research

Munafò, M. R., Nosek, B. A., Bishop, D. V., Button, K. S., Chambers, C. D., Du Sert, N. P., ... & Ioannidis, J. P. (2017). A manifesto for reproducible science. *Nature Human Behaviour*, *1*(1), 0021.

RESEARCH LIFECYCLE

OPEN SCIENCE FRAMEWORK

SOME BENEFITS

- Free

- Open-source

- Discipline agnostic

- Key tools:

  - Online projects
  - Data storage
  - Support for preregistration of research and registered reports
  - Preprint service
  - And much more…

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OPEN SCIENCE FRAMEWORK

PROJECTS

- Private (default) or public

- DOI

- Versatile components

  - Data files
  - Wiki pages
  - …

- Link to preprints

- Link to preregistrations

- Recent activity

- Analysis of activity

Click on image to go to OSF project page
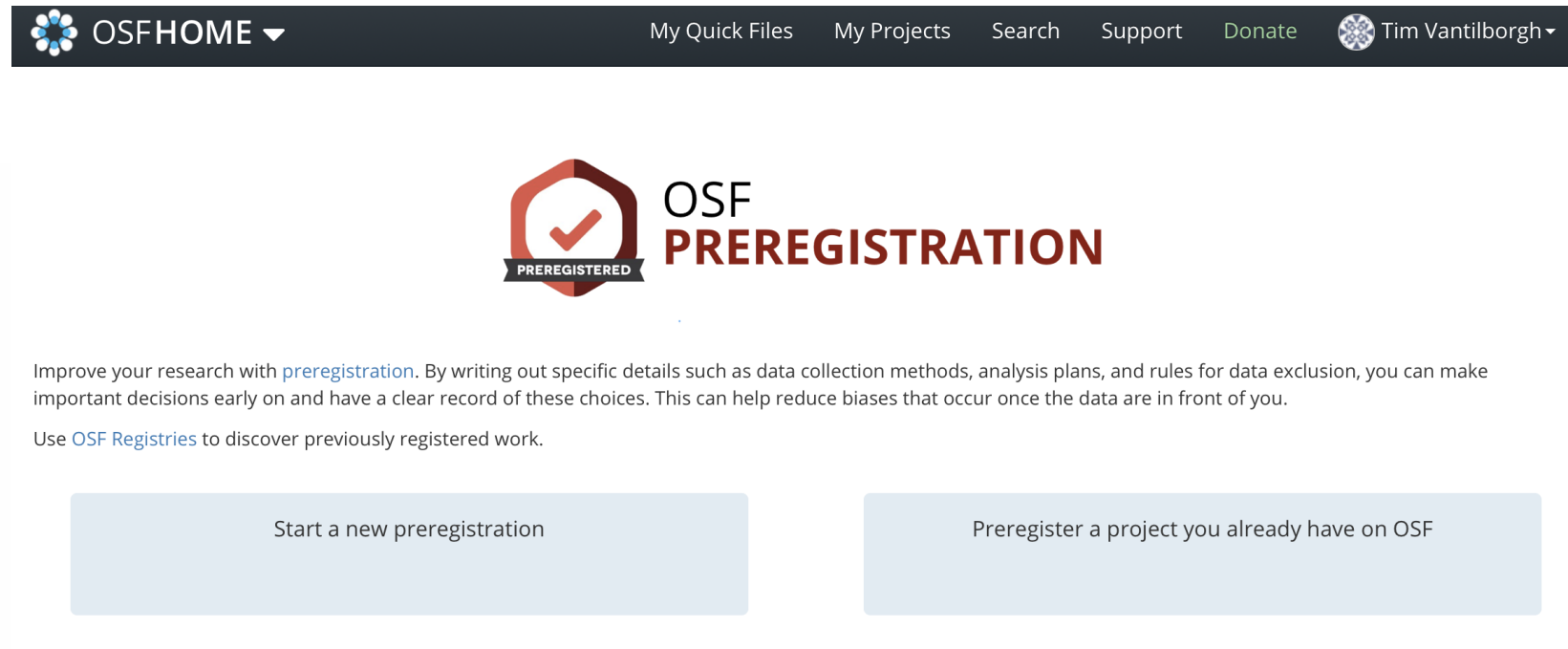
OPEN SCIENCE FRAMEWORK
DATA STORAGE

- Accepts all common filetypes

- Limit: individual files cannot be larger than 5GB

- Files render directly in browser

- Integrates with various software solutions (e.g., OneDrive, Google Drive, Dropbox, Github, …)

- Automatic version control

- GDPR compliant!

- Back-ups made daily

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PREREGISTRATION

Preregister your research

- Use existing template

- Add attachments

- Set embargo period or make public

- Approved by administrators
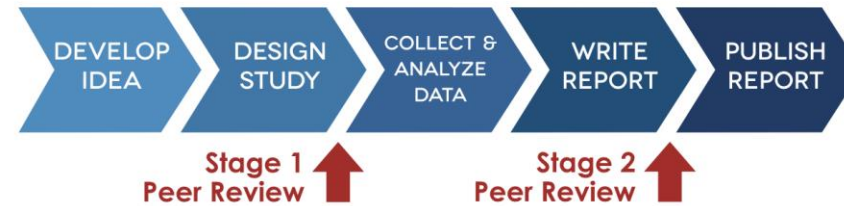

https://osf.io/prereg/

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REGISTERED REPORTS

Submit a registered report

- After in-principal acceptance of study by journal

- Submit accepted preregistration plan

Simple Registered Report Protocol Preregistration

DEVELOP IDEA → DESIGN STUDY → COLLECT & ANALYZE DATA → WRITE REPORT → PUBLISH REPORT

Stage 1 Peer Review

Stage 2 Peer Review

Registered Reports benefit science by improving rigor and reducing publication bias.

When to use this form:

Use this form **after** you have received "in principle acceptance" (IPA) by a journal following Stage 1 Peer Review, and **before** you have begun the study.
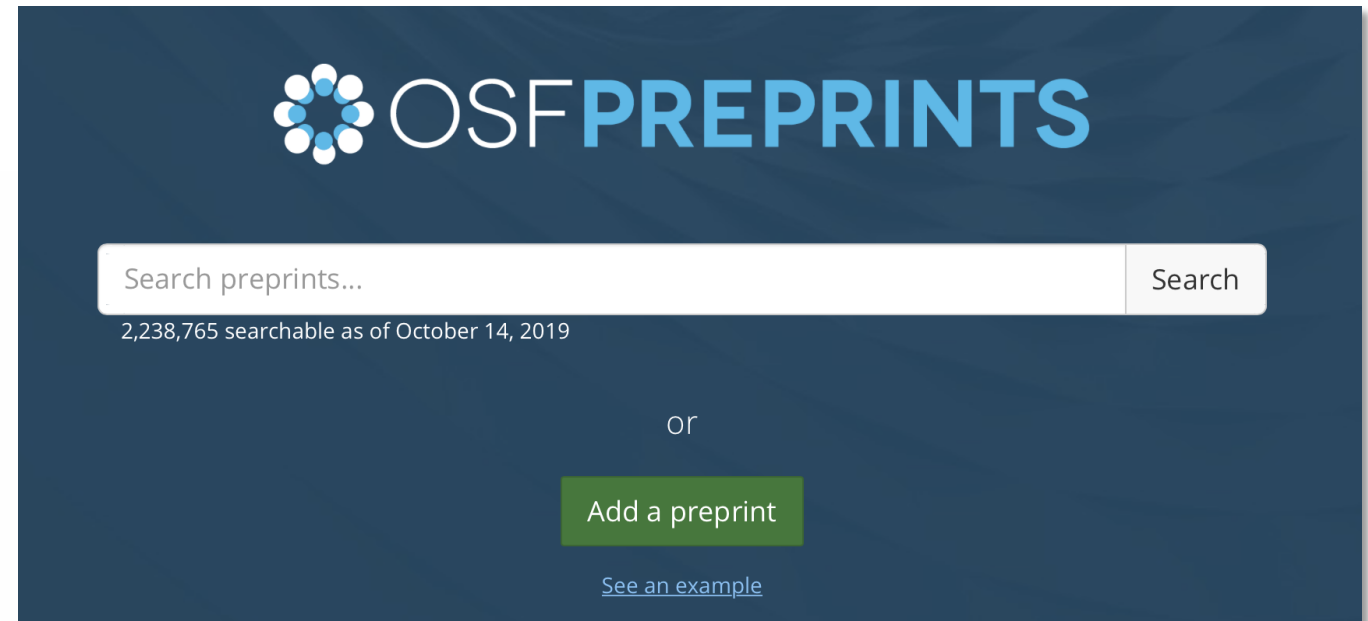
| Submit your approved Registered Report | Preregister an analysis plan for an OSF Project |

https://osf.io/rr/

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PREPRINTS

- OSF preprints

- Various communities have partnered with OSF to support preprints, e.g.:
  - PsyArxiv
  - SocArxiv
  - engrXiv

- Want to know more – Read OSF preprint FAQ: https://help.osf.io/hc/en-us/articles/360019930493-Preprint-FAQs

https://osf.io/preprints/

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OSF MEETINGS

- Tool for conference organizers

- Gives attendees access to posters and talks

- Events get a dedicated page on OSF

    - Includes a submission system

- https://osf.io/meetings

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TAKE AWAY MESSAGE

- If you want to adopt open science practices, then using OSF will help tremendously!

- Are there downsides?

  - Time?

- Using OSF has:

  - Helped me to be more transparent towards collaborators, peers, and the general public
  - Helped to get rid of poor version control
  - Helped me to make sense of analyses years later
  - Helped me to communicate ideas more directly
  - Helped me to reflect more on research ideas prior to running a study
  - Made me a better researcher

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