

OPEN SCIENCE FRAMEWORK

A BRIEF INTRODUCTION

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

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SOME BACKGROUND



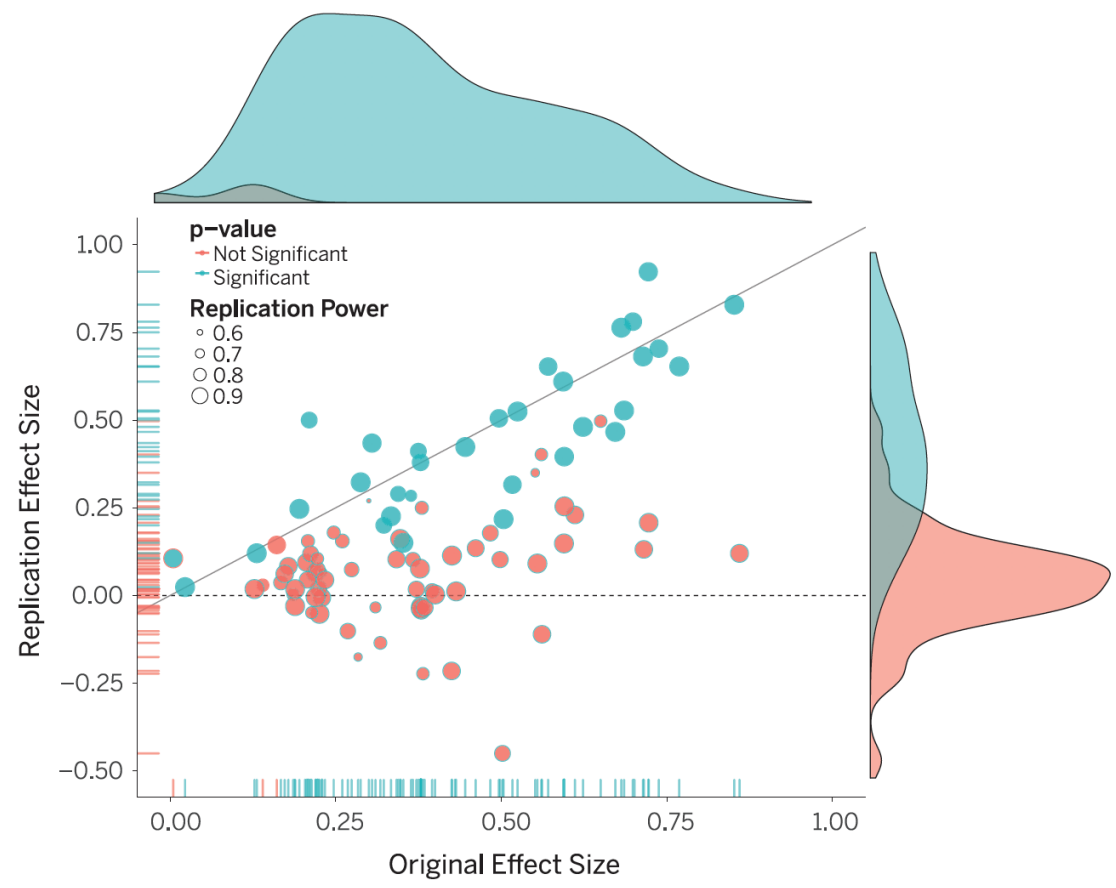
CENTER FOR
OPEN SCIENCE

RESEARCH ARTICLE

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

1, Roland Pepermans¹, Yannick Griep^{1,2}, Joeri Hofmans¹

1 Department of Psychology, Work and Organizational Psychology research unit, 3000 Leuven, Belgium, 2 Department of Psychology, University of Alberta, Edmonton, Alberta, Canada



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

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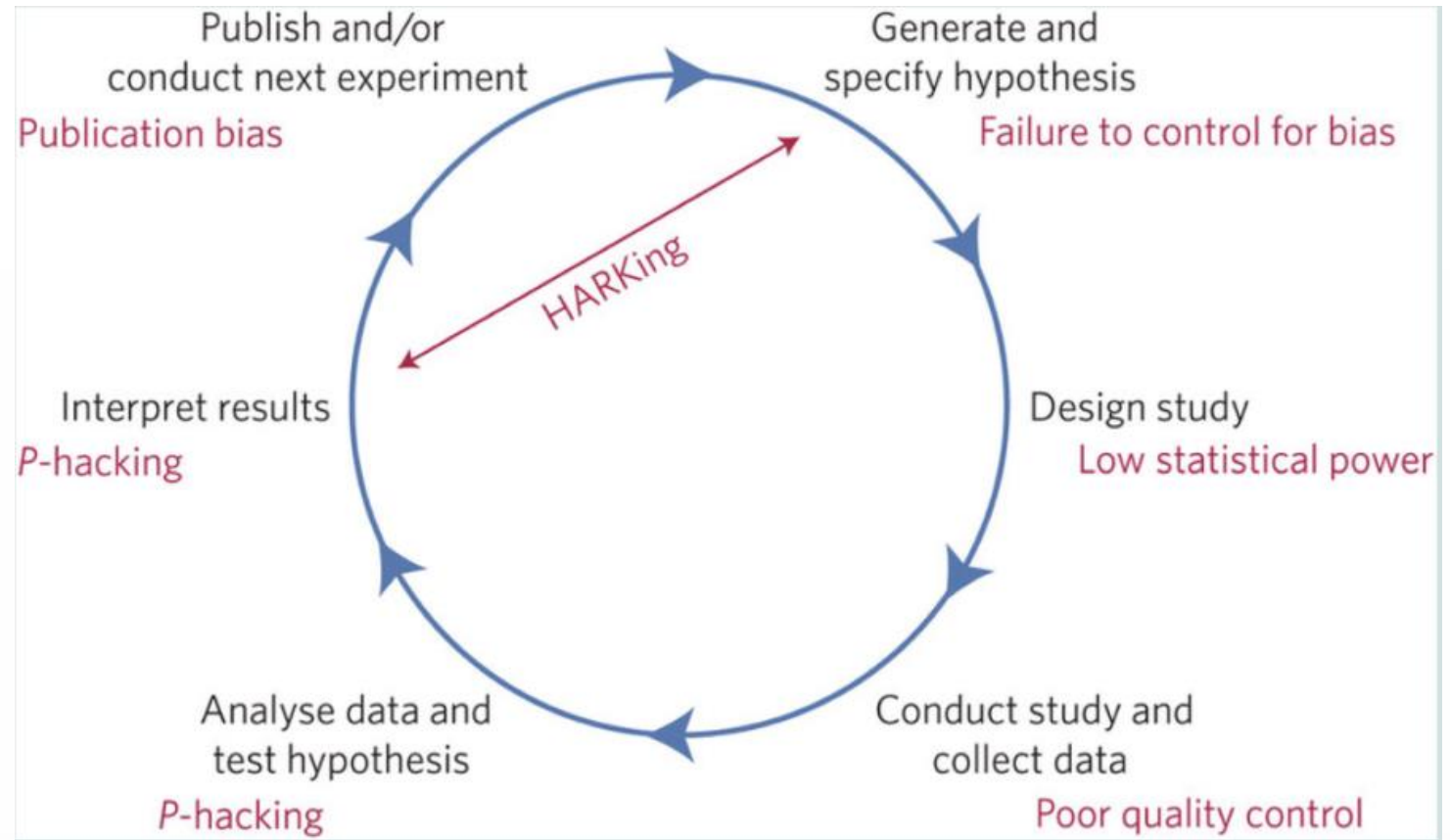
MISSION

**Increase openness, reproducibility, and
integrity of scientific research**

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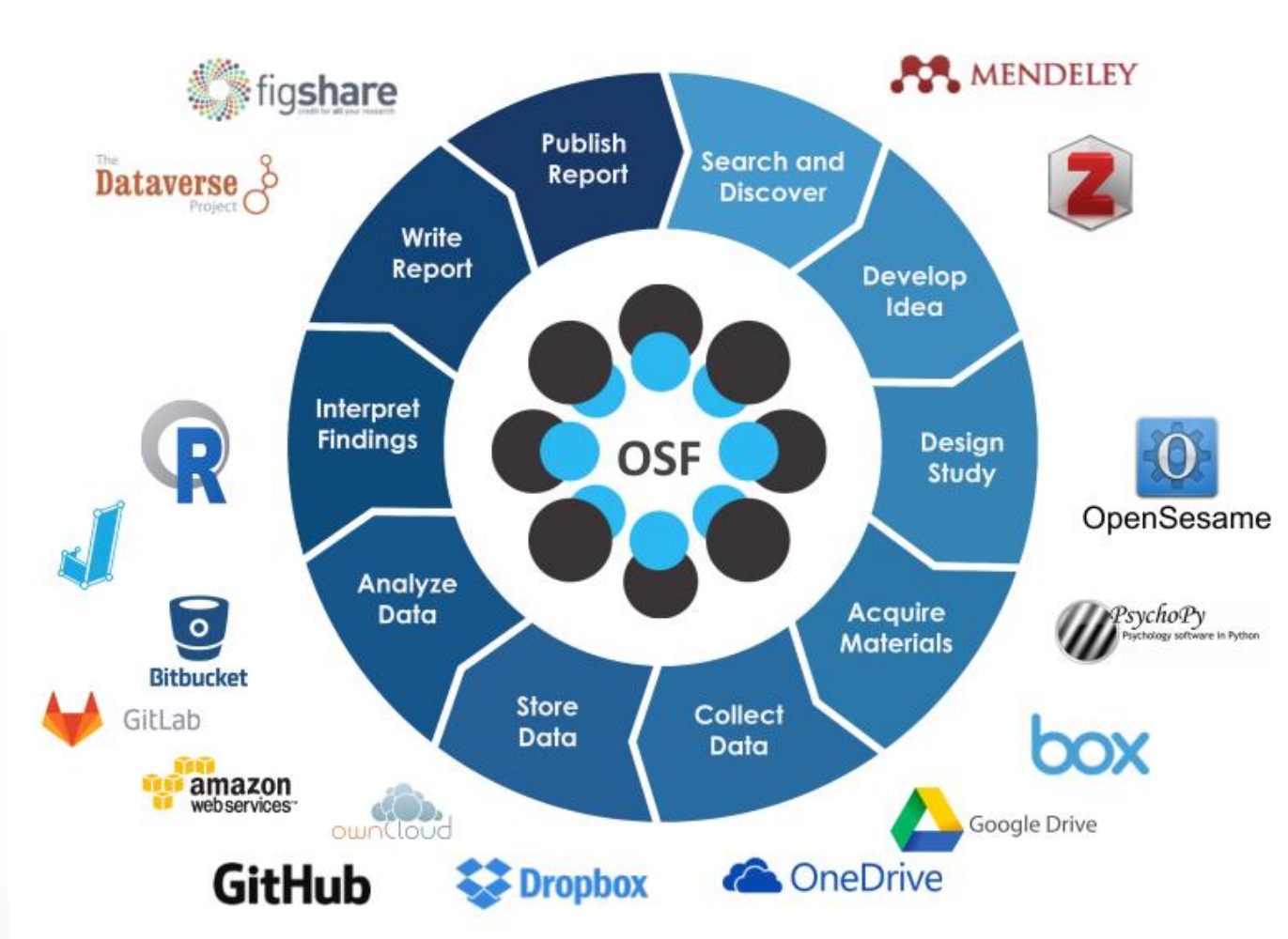
MISSION

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.



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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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PROJECTS

- Private (default) or public
- DOI
- Versatile components
 - Data files
 - Wiki pages
 - ...
- Link to preprints
- Link to preregistrations
- Recent activity
- Analysis of activity



The screenshot shows the OSFHOME interface for a project titled "Forensic psychology and correctional psychology: Distinct but related subfields of psychological science and practice". The page includes a navigation bar with "OSFHOME" and a dropdown arrow, along with "Search", "Support", "Donate", "Sign Up", and "Sign In" buttons. Below the navigation bar, there are tabs for "Files", "Wiki", "Analytics", and "Registrations". The project title is displayed in a large font, followed by a "Public" status indicator and a "0" comment count. The contributors list includes "Tess M.S. Neal". The date created is "2018-11-12 04:37 AM" and the last updated date is "2018-11-12 06:19 PM". The category is "Project". The description states: "This paper delineates two separate but related subfields of psychological science and practice applicable across all major areas of the field (e.g., clinical, counseling, developmental, social, cognitive, community). Forensic and correctional psychology are related by their historical roots, involvement in the justice system, and the shared population of people they study and serve. The practical and ethical contexts of these subfields is distinct from other areas of psychology – and from one another – with important implications for ecologically valid research and ethically sound practice. Forensic psychology is a subfield of psychology in which basic and applied psychological science or scientifically-oriented professional practice is applied to the law to help resolve legal, contractual, or administrative matters. Correctional psychology is a subfield of psychology in which basic and applied psychological science or scientifically-oriented professional practice is applied to the justice system to inform the classification, treatment, and management of offenders to reduce risk and improve public safety. There has been and continues to be great interest in both subfields – especially the potential for forensic and correctional psychological science to help resolve practical issues and questions in legal and justice settings. This paper traces the shared and separate developmental histories of these subfields, outlines their important distinctions and implications, and provides a common understanding and shared language for psychologists interested in applying their knowledge in forensic or correctional contexts." Below the description, it notes: "Has supplemental materials for Forensic psychology and correctional psychology: Distinct but related subfields of psychological science and practice on PsyArXiv".

Click on image to go to OSF project page

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DATA STORAGE

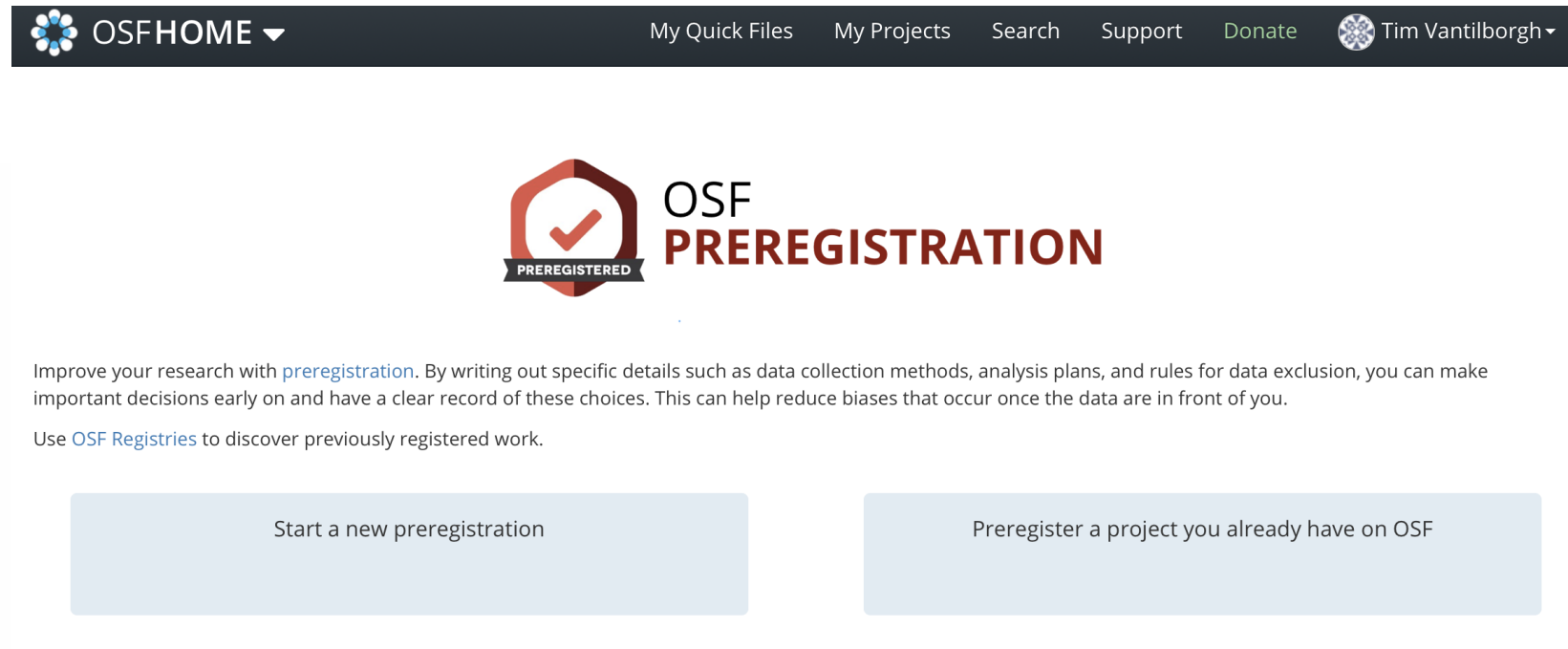
- Accepts all common filetypes
- Limit: individual files cannot be larger than 5GB
- Files render directly in browser
- Integrates with various software solutions (e.g., OneDrive, Google Drive, Dropbox, Github, ...)
- Automatic version control
- GDPR compliant!
- Back-ups made daily

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PREREGISTRATION

Preregister your research

- Use existing template
- Add attachments
- Set embargo period or make public
- Approved by administrators



The screenshot shows the OSF Preregistration page. At the top, there is a dark navigation bar with the OSFHOME logo and a dropdown arrow, followed by links for My Quick Files, My Projects, Search, Support, and Donate. On the right side of the navigation bar, there is a user profile for Tim Vantilborgh. The main content area features the OSF Preregistration logo, which consists of a red hexagon with a white checkmark and the word 'PREREGISTERED' in a black banner below it. To the right of the logo, the text 'OSF PREREGISTRATION' is displayed in a large, bold, dark red font. Below the logo and text, there is a paragraph of text: 'Improve your research with [preregistration](#). By writing out specific details such as data collection methods, analysis plans, and rules for data exclusion, you can make important decisions early on and have a clear record of these choices. This can help reduce biases that occur once the data are in front of you.' Below this paragraph, there is a line of text: 'Use [OSF Registries](#) to discover previously registered work.' At the bottom of the main content area, there are two light blue buttons: 'Start a new preregistration' and 'Preregister a project you already have on OSF'.

<https://osf.io/prereg/>

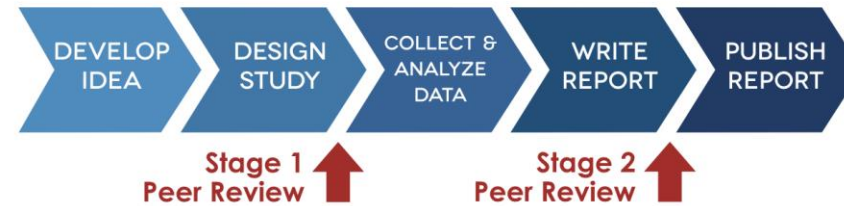
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REGISTERED REPORTS

Submit a registered report

- After in-principal acceptance of study by journal
- Submit accepted preregistration plan

Simple Registered Report Protocol Preregistration



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

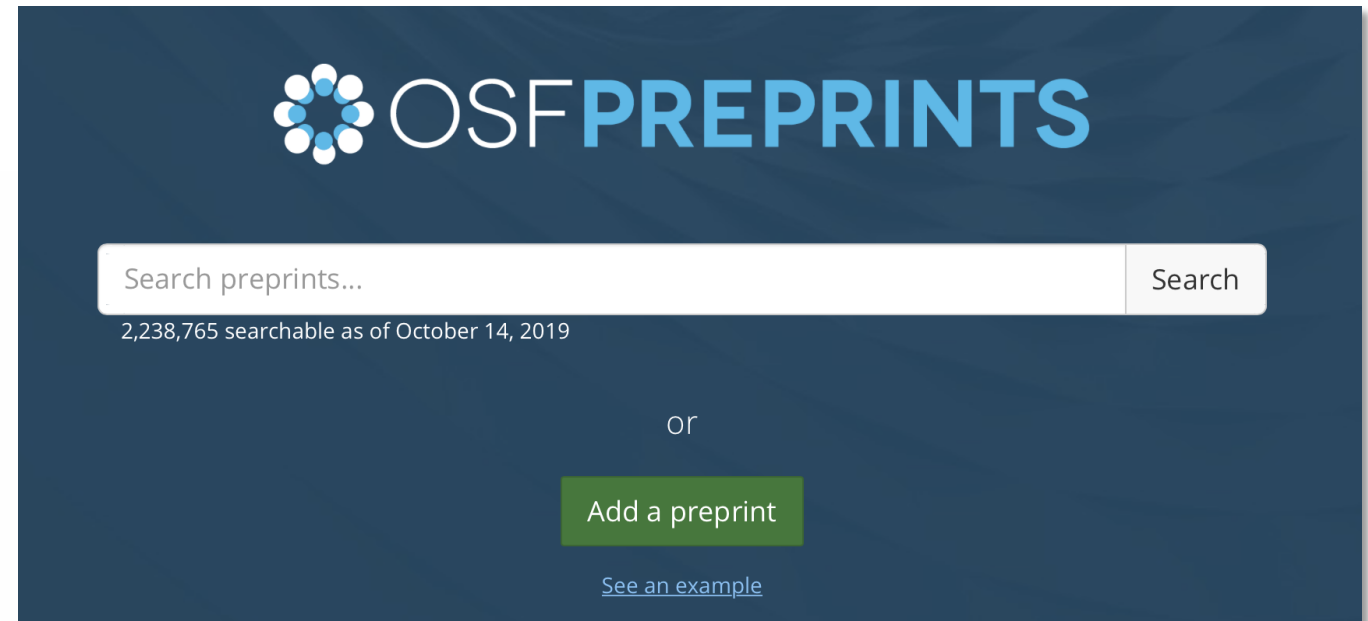
Preregister an analysis plan for an OSF Project

<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>

The screenshot shows the OSF Meetings interface for the Association for Psychological Science 2018 conference. The page features a header with the OSF logo, navigation links for 'Support', 'Donate', and the user 'Rebecca Rosenblatt'. Below the header, the conference title 'Association for Psychological Science 2018' is displayed, along with the location 'San Francisco, CA, USA' and dates 'May 23, 2018 - May 27, 2018'. A large banner image shows the Golden Gate Bridge with the 'aps' logo and 'SAN FRANCISCO MAY 24-27, 2018'. Below the banner, there is a search bar and a table of submitted posters and talks.

Title ^ v	Author ^ v	Category ^	Date Created ^ v	Downloads ^ v
Posters to be added to Center for Open Science	Hunter	poster	2018-06-28 11:37 AM	0
symposium	Sokolowska	talk	2018-06-26 04:30 PM	0
symposium	Pohorille	talk	2018-06-26 04:28 PM	0
Effects of Sleep Problems on Cognitive Performance in the Stroop T...	Jia	poster	2018-06-26 12:05 PM	0
Negative Affect, Borderline Personality Disorder Symptoms, and Em...	Mackesy-A...	poster	2018-06-25 12:04 PM	0
Expectations May Influence the Effects of Transcranial Direct Curren...	Rabipour	poster	2018-06-22 02:21 PM	0
Seeking Gender Fair Measurement of STEM Reasoning Among Middl...	Rittschof	poster	2018-06-20 03:55 PM	1
The Effects of Gratitude and Mood on Performance in a Flanker Task	Owens	poster	2018-06-20 12:16 PM	0
Exposure to Biased Media and Performance on an Implicit Associati...	Eltiti	poster	2018-06-20 12:14 PM	0
Sexual Vs Non-Sexual Abuse, Religion, and PTSD	Scholl	poster	2018-06-20 11:53 AM	1

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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