

http://cos.io/

Brian Nosek
University of Virginia

http://briannosek.com/



Non-profit, incorporated 2013

3 foundation funders, \$8 million

Fully FOSS technology

No competitors

Mission: Improve openness, integrity, and reproducibility of scientific research

Activities: Infrastructure, community, metascience

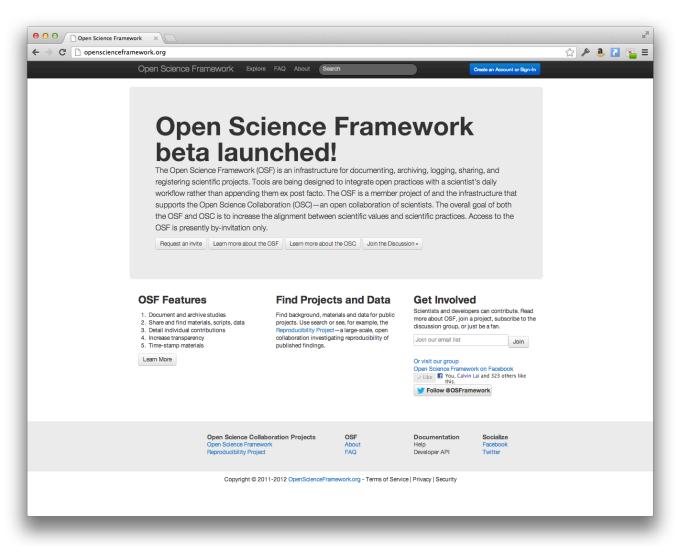
Strategy

1. Services to support existing workflow

2. Enable good practices

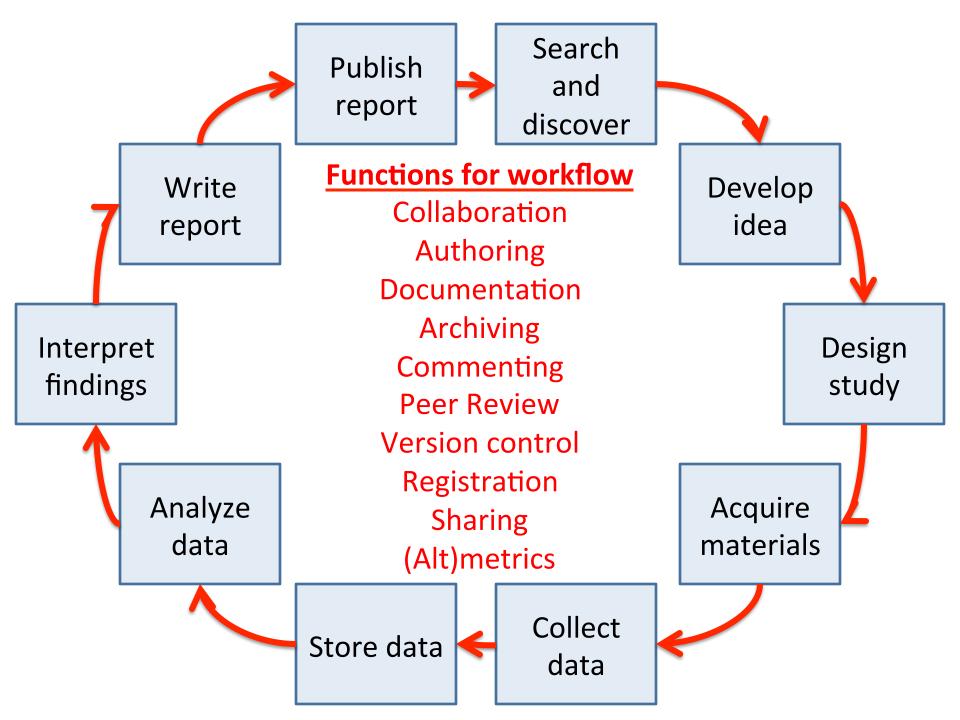
3. Nudge incentives top-down and bottom-up

Open Science Framework http://osf.io/





Jeff Spies



2. Enable Good Practices

Openness
Registration
Reproducibility

3. Nudge incentives top-down and bottom-up

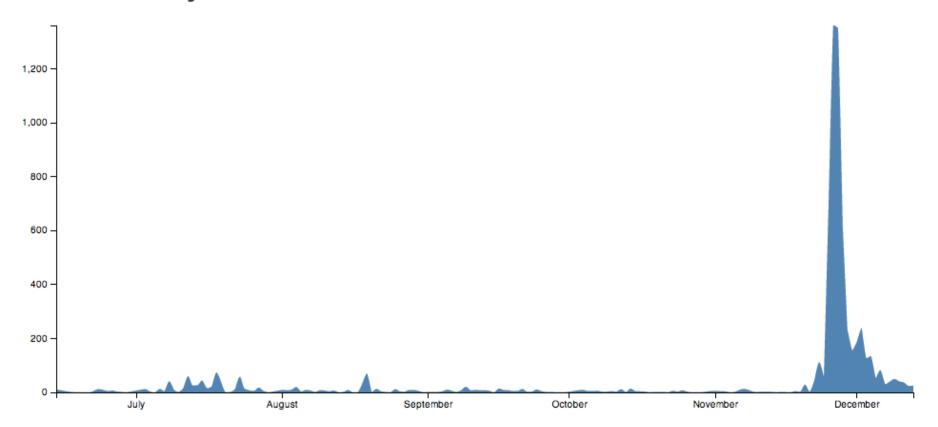
Altmetrics
Disclosure standards
Registered Reports
Crowdsourcing
Badges

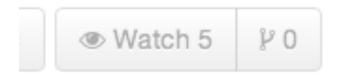
Date Created: 6/14/2013 12:29 PM | Last Updated: 12/12/2013 2:05 PM

Description: We conducted replications of 13 effects in psychological science with 36 samples and more than 6000 participants. We examined heterogeneity in replicability across sample and setting.

Dashboard Wiki Statistics Files Registrations Forks

Visits Per Day





Investigating variation in replicability: The "Many Labs" Replication Project



Contributors: Richard A. Klein, Kate Ratliff, Brian A. Nosek, Michelangelo Vianello, Ronaldo Pilati, Thierry Devos, Elisa Maria Galliani, Mark Brandt, Anna van 't Veer, Abraham M. Rutchick, Kathleen Schmidt, Stepan Bahnik, Marek Vranka, Hans IJzerman, Fred Hasselman, Jennifer Joy-Gaba, Jesse J. Chandler, Leigh Ann Vaughn, Claudia Brumbaugh, Lyn van swol, Aaron Wichman, Grant Packard, Beach Brooks, Zeynep Cemalcilar, Justin Storbeck, Konrad Bocian, Carmel Levitan, Michael Jason Bernstein, Lacy Elise Krueger, Matthew Eisner, William E. Davis, Jason A. Nier, Anthony J. Nelson, Troy G. Steiner, Robyn Mallett, Donna Thompson, Jeffrey R. Huntsinger, Wendy Morris, Jeanine Skorinko

Date Created: 6/14/2013 12:29 PM | Last Updated: 12/12/2013 2:05 PM

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Dashboard Wiki Statistics Files Registrations Forks

Access the full-size figure, proposal, and final manuscript in files.

Citation: osf.io/wx7ck more

1. Self-disclosure

We report all data exclusions, manipulations, and measures, and how we determined our sample sizes



Leif Nelson



Joe Simmons



1. Self-disclosure

2. Voluntary response

PsychDisclosure.org Home About FAQ Contact Us

PsychDisclosure.org provides a platform for authors of recently published articles in Psychology to publicly disclose four categories of methodological details that are not required to be disclosed under current reporting standards, but which are essential for interpreting research findings. Click here for in press article reporting on our initiative.

Learn More

Disclosure categories:

- 1. Exclusions: Disclosed total number of observations excluded and criterion for doing so.
- 2. Conditions: Disclosed all tested experimental conditions, including failed manipulations.
- 3. Measures: Disclosed all administered measures and items.
- 4. Sample size: Disclosed (a) basis for chosen sample sizes and (b) basis for stopping data collection.

Submit your disclosure information for any article in any journal! Please see Contact Us page for more details.

Current response rate overall = 49% (275/567); PS = 42%, JPSP = 54%, JEPLMC = 50%, JEPG = 57%. [Website up-to-date as of Dec 3, 2013]

- 1. Self-disclosure
- 2. Voluntary response
- 3. Journal Requirement



- 1. Self-disclosure
- 2. Voluntary response
- 3. Journal Requirement
- 4. Reviewer Request

I request that the authors add a statement to the paper confirming whether, for all experiments, they have reported all measures, conditions, data exclusions, and how they determined their sample sizes. The authors should, of course, add any additional text to ensure the statement is accurate. This is the standard reviewer disclosure request endorsed by the Center for Open Science [see http://osf.io/hadz3]. I include it in every review.

Registered Reports



Replication of Experiments Evaluating Impact of Psychological Distance on Moral Judgment (Eyal, Liberman & Trope, 2008; Gong & Medin, 2012)

- Replication Authors: Iris Zezeli, Biljana Jokic
- Original Articles: Judging near and distant virtue and vice (Eyal, Liberman & Trope, 2008), Construal levels and moral judgment: Some complication (Gong & Medin, 2012)

Forming Impressions of Personality: A Replication and Review of Asch's (1946) Evidence for a Primacy-of-Warmth Effect in Impression Formation

- Replication Authors: Sanne Nauts, Daniel Wigboldus, Oliver Langner, Inge Huijsmans, Roos Vonk
- Original Articles: Forming impressions of personality (Asch, 1946)

Replication of "Experiencing physical warmth promotes interpersonal warmth" by Williams & Bargh (2008, Science)

- · Replication Authors: Dermot Lynott, Katherine S. Corker
- · Original Articles: Experiencing physical warmth promotes interpersonal warmth (Williams & Bargh, 2008)

Cleanliness Reduces the Severity of Moral Judgments: A Direct Replication of Schnall, Benton, and Harvey (2008)

- · Replication Authors: Felix Cheung
- Original Articles: With a clean conscience: Cleanliness reduces the severity of moral judgments (Schnall, Benton, & Harvey, 2008)

Review of intro and methods prior to data collection; published regardless of outcome

In use:

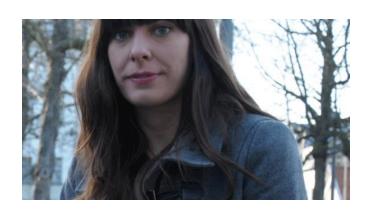
- Perspectives on Psychological Science
- Social Psychology
- Cortex
- Frontiers in Cognition
- Attention, Perception, & Psychophysics
- Experimental Psychology
- AIMS Neuroscience

Many Labs Project

Rick Klein



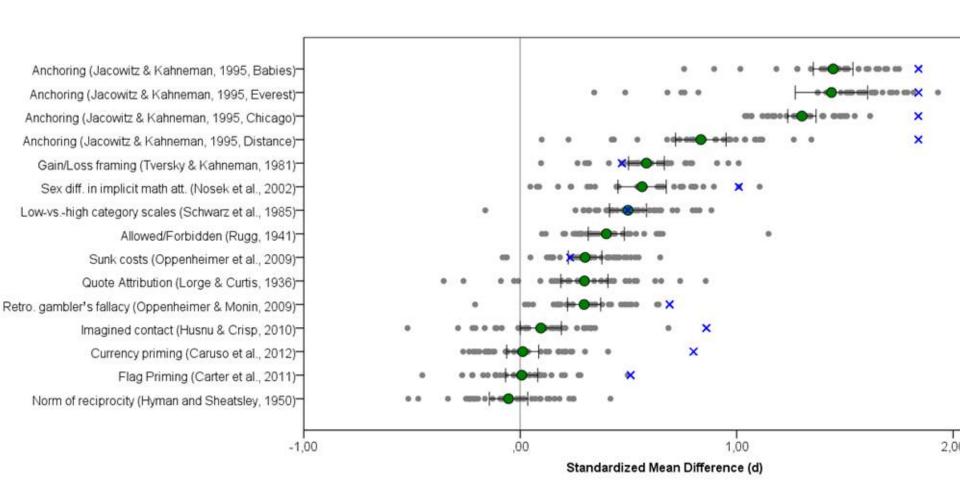
Kate Ratliff

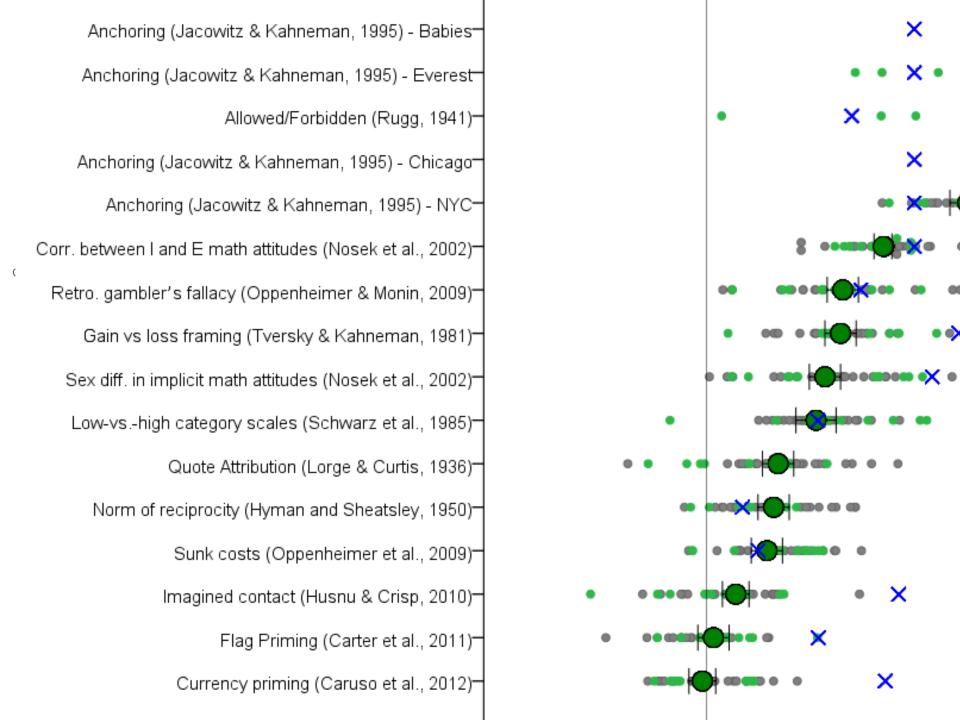


Michelangelo Vianello



+ Stepan Bahnik, Michael J. Bernstein, Konrad Bocian, Mark Brandt, Claudia Chloe Brumbaugh, Zeynep Cemalcilar, Jesse Chandler, Winnee Cheong, William E. Davis, Thierry Devos, Matthew Eisner, Natalia Frankowska, David Furrow, Elisa Maria Galliani, Fred Hasselman, Joshua A. Hicks, James F. Hovermale, S. Jane Hunt, Jeffrey R. Huntsinger, Hans IJzerman, Melissa-Sue John, Jennifer A. Joy-Gaba, Heather Kappes, Lacy E. Krueger, Jaime Kurtz, Carmel A. Levitan, Robyn Mallett, Wendy L. Morris, Anthony J. Nelson, Jason A. Nier, Grant Packard, Ronaldo Pilati, Abraham M. Rutchick, Kathleen Schmidt, Jeanine L. Skorinko, Robert Smith, Justin Storbeck, Lyn M. Van Swol, Donna Thompson, Anna van 't Veer, Leigh Ann Vaughn, Marek Vranka, Aaron Wichman, Julie Woodzicka







Charter Adopting Journals

Cortex
European Journal of Personality
Human Computation
Journal of Research in Personality

Journal of Social Psychology Journal of Vision Psi Chi Journal Psychological Science



Charter Endorsing Organizations

Bio, Tech and Beyond

Center for Open Science

Databrary

DataONE

DuraSpace

European Association for Personality Psych

figshare

Laura and John Arnold Foundation

Mozilla Science Lab

Network for Open Scientific Innovation

Open Science Federation

OpenfMRI

Prometheus Research

Psi Chi

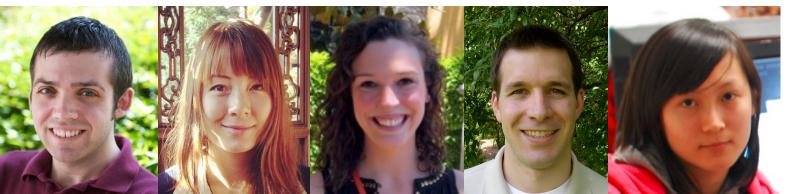
PsychoPy

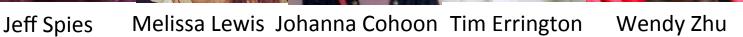
Reproducibility Initiative

Science Exchange



Chun Wang Josh Carp Sam Portnow Denise Holman Alex Schiller





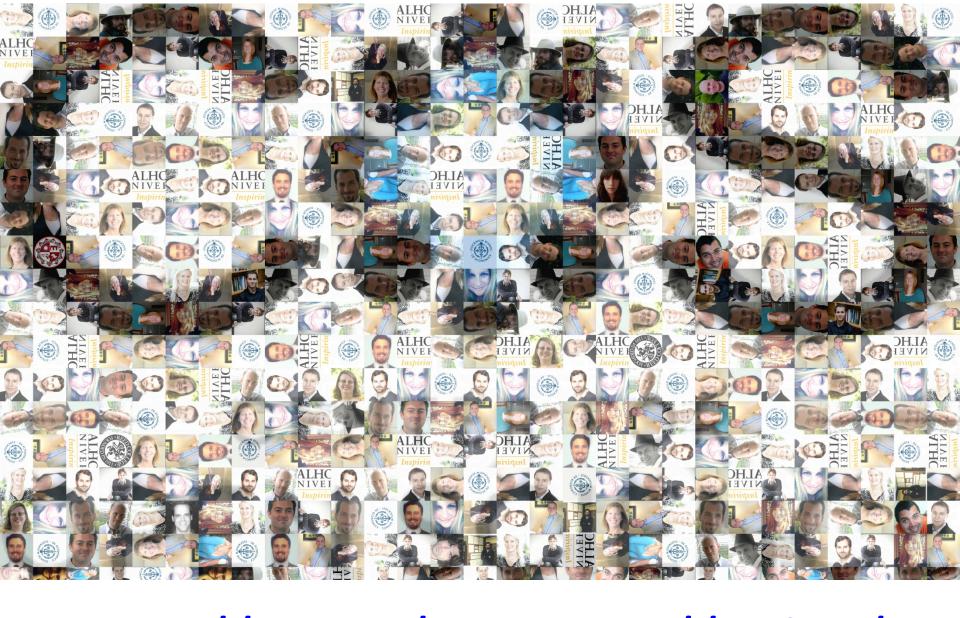


OPEN SCIENCE http://cos.io/

Jake Rosenberg

Nan Chen

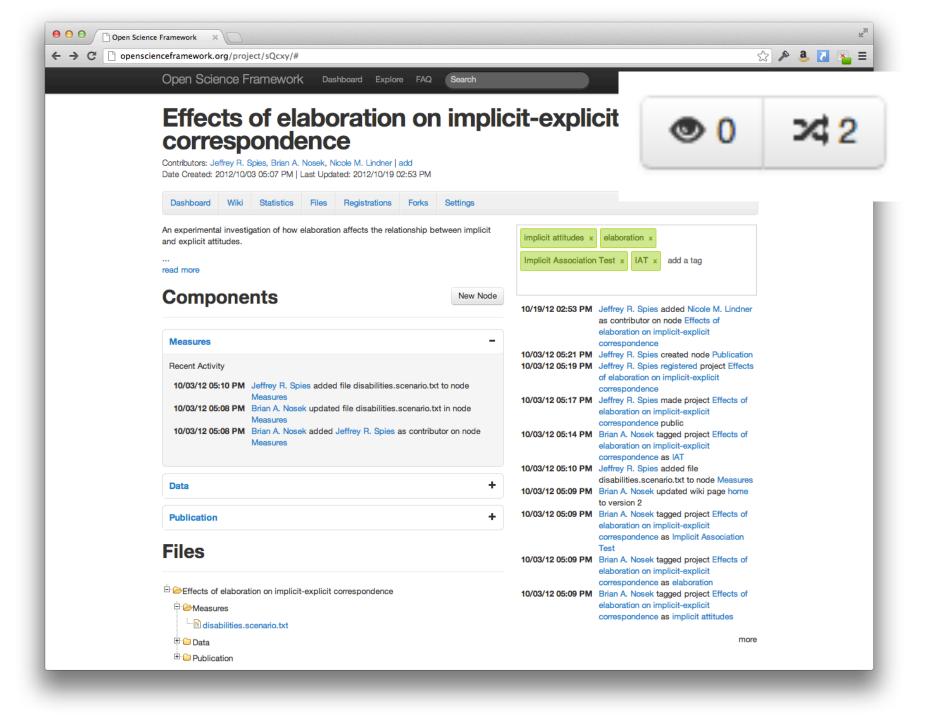
Lyndsy Simon Andrew Sallans Michael Lapuz Saul Brodsky Steve Loria



http://cos.io/

http://osf.io/

Open Science Framework BETA Explore → Help → Sear	ch	Create an Account or Sign-In
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laurier.zip	2013/12/11 04:51 PM 10	0 MB 3
■ swps.zip	2013/12/11 04:51 PM 15	5 MB 6
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Figure1.Colored.png	2013/12/11 04:55 PM 11	17 KB 10
ManyLabsManuscript.pdf	2013/12/11 04:44 PM 49	95 KB 1068



Central issue

Incentives for individual success are focused on getting it published, not getting it right

Scientific Utopia: II. Restructuring Incentives and Practices to Promote Truth Over Publishability

Perspectives on Psychological Science 7(6) 615–631 © The Author(s) 2012 Reprints and permission: sagepub.com/journalsPermissions.nav DOI: 10.1177/1745691612459058 http://pps.sagepub.com



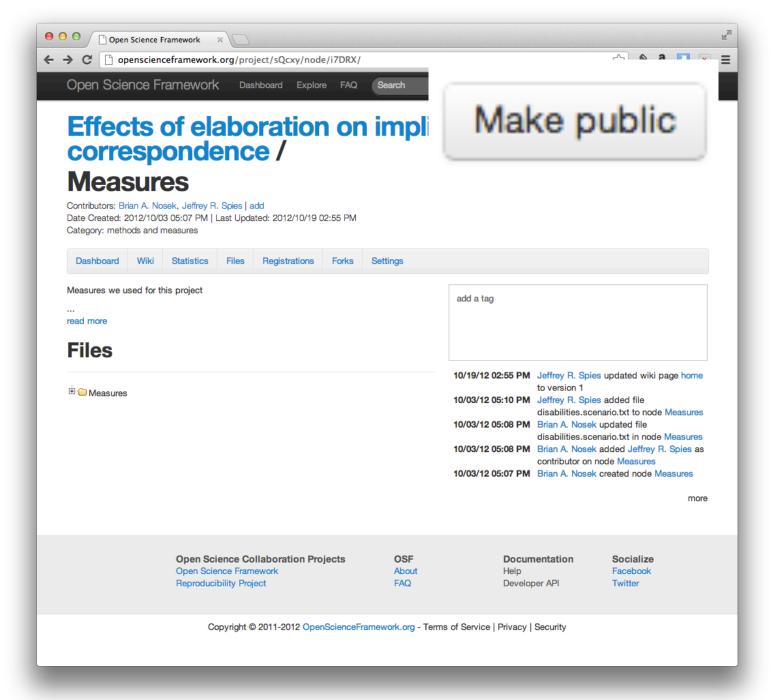
Brian A. Nosek, Jeffrey R. Spies, and Matt Motyl University of Virginia

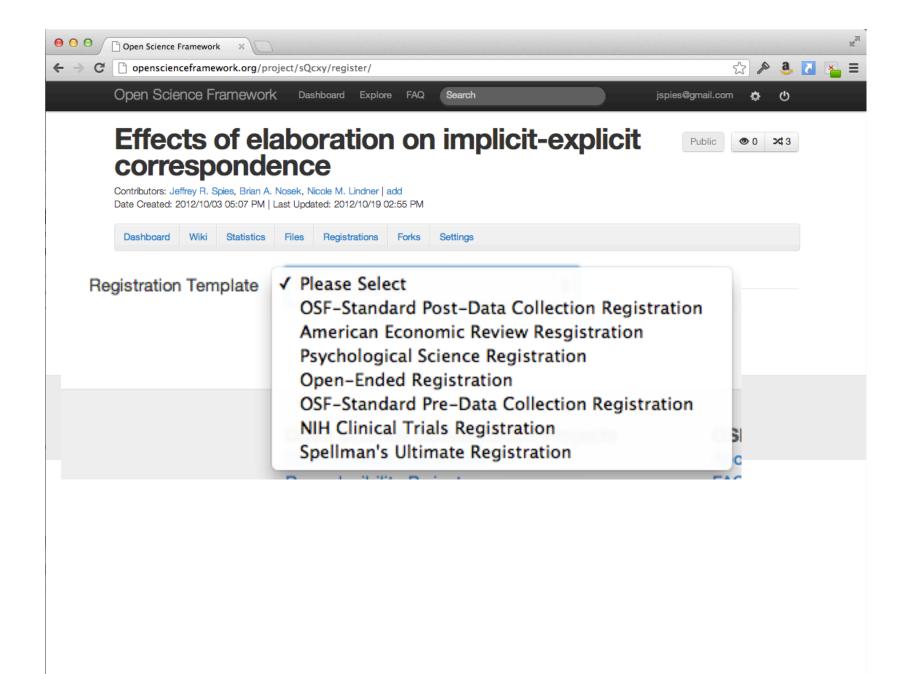
Solutions

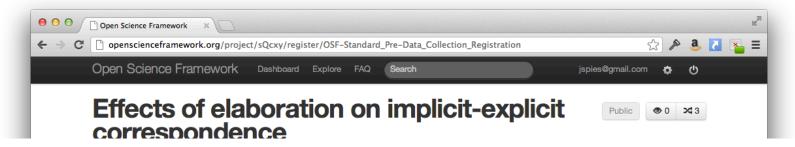
- Transparency
- Distinguish confirmatory v. exploratory
- Replication
- Aggregate evidence
- Narrow use of NHST

Challenges

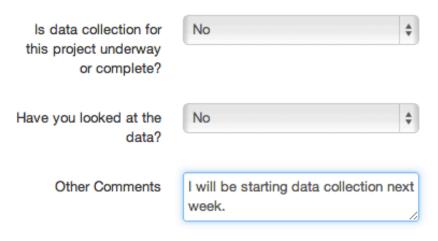
- Perceived norms (Anderson, Martinson, & DeVries, 2007)
- Motivated reasoning (Kunda, 1990)
- Minimal accountability (Lerner & Tetlock, 1999)
- I am busy (Me & You, 2013)





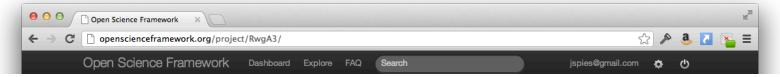


Register



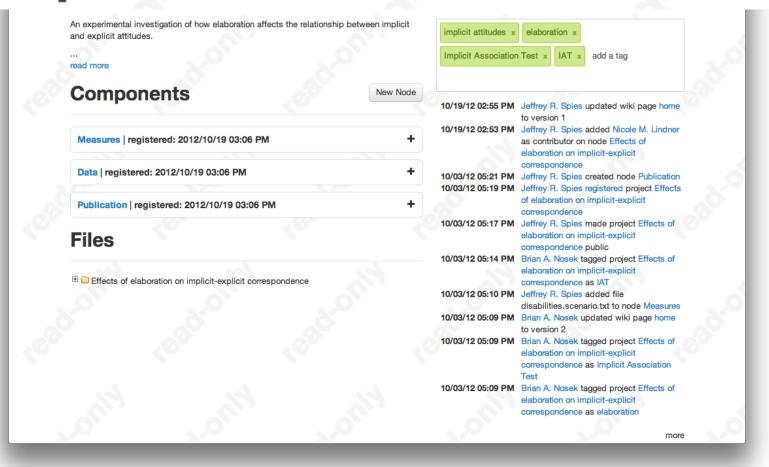
Registration cannot be undone, and the archived content and files cannot be deleted after registration. Please be sure the project is complete and comprehensive for what you wish to register.





This node is a registration of this node; the conent of the node has been frozen and cannot be edited.

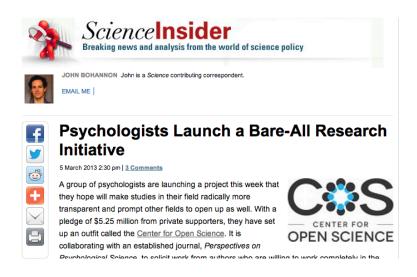
Effects of elaboration on implicit-explicit correspondence



New Problems?

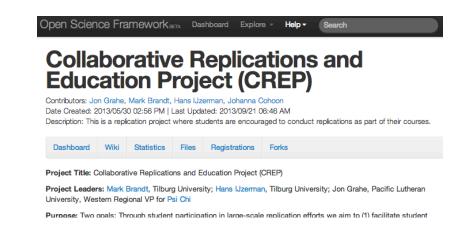
- Low power
- Questionable research practices
- Overabundance of positive results
- Ignoring null results
- Lack of replication
- Limitations of NHST

Support for Metascience and Open Tools







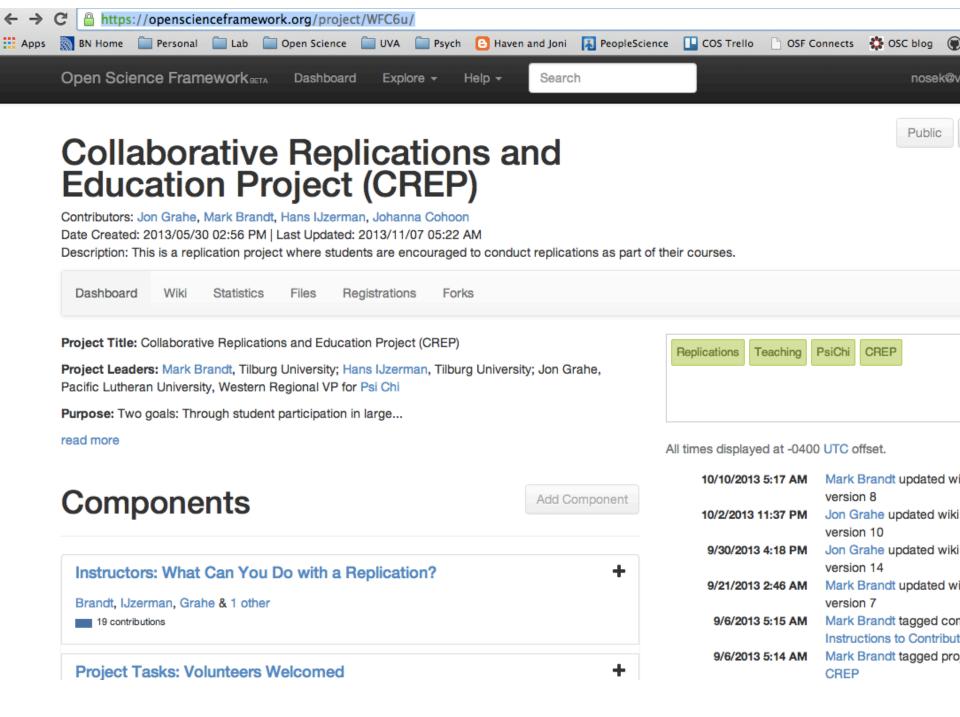


How to change the scientific culture

1. Technology to enable change

2. Training to enact change

3. Incentives to embrace change



Collaborative Replications and Education Project

- Facilitate student research training
- Increase precision in effect estimates
- Eight feasible, high impact studies
- Sponsored by Psi Chi and COS
 - \$200-\$500 CREP Awards
- Contact: Jon Grahe, graheje@plu.edu



Mark Brandt



Jon Grahe



Hans IJzerman

Reproducibility Project: Psychology



An Open, Large-Scale, Collaborative Effort to Estimate the Reproducibility of Psychological Science

Perspectives on Psychological Science 7(6) 657–660 © The Author(s) 2012 Reprints and permission: sagepub.com/journalsPermissions.nav DOI: 10.1177/1745691612462588 http://pps.sagepub.com



Open Science Collaboration¹

Abstract

Reproducibility is a defining feature of science. However, because of strong incentives for innovation and weak incentives for confirmation, direct replication is rarely practiced or published. The Reproducibility Project is an open, large-scale, collaborative effort to systematically examine the rate and predictors of reproducibility in psychological science. So far, 72 volunteer researchers from 41 institutions have organized to openly and transparently replicate studies published in three prominent psychological journals in 2008. Multiple methods will be used to evaluate the findings, calculate an empirical rate of replication, and investigate factors that predict reproducibility. Whatever the result, a better understanding of reproducibility will ultimately improve confidence in scientific methodology and findings.

Reproducibility Project: Psychology

- 178 contributors
- 79 replications underway or completed
- Grants up to \$2,000 per study available

Contact: johanna@cos.io

Support for Metascience and Open Tools

