

Research Workflow Management

Hans IJzerman
LIP/PC2S
Université Grenoble Alpes

2018/12/11 (updated: 2018-12-11)

We have a problem

To briefly sum up:

We have a problem

To briefly sum up:

- Questionable Research Practices

We have a problem

To briefly sum up:

- Questionable Research Practices
- Publication Bias

We have a problem

To briefly sum up:

- Questionable Research Practices
- Publication Bias
- Reproducibility Problems

Only Psychology?

Only Psychology?

These problems are not unique to psychology,

Only Psychology?

These problems are not unique to psychology, in fact, problems seem to be ubiquitous.

Only Psychology?

These problems are not unique to psychology, in fact, problems seem to be ubiquitous. But psychology has been dealing with the problems.

Solutions

How have we been resolving this?

Solutions

How have we been resolving this?

- Sharing code, data, and materials

Solutions

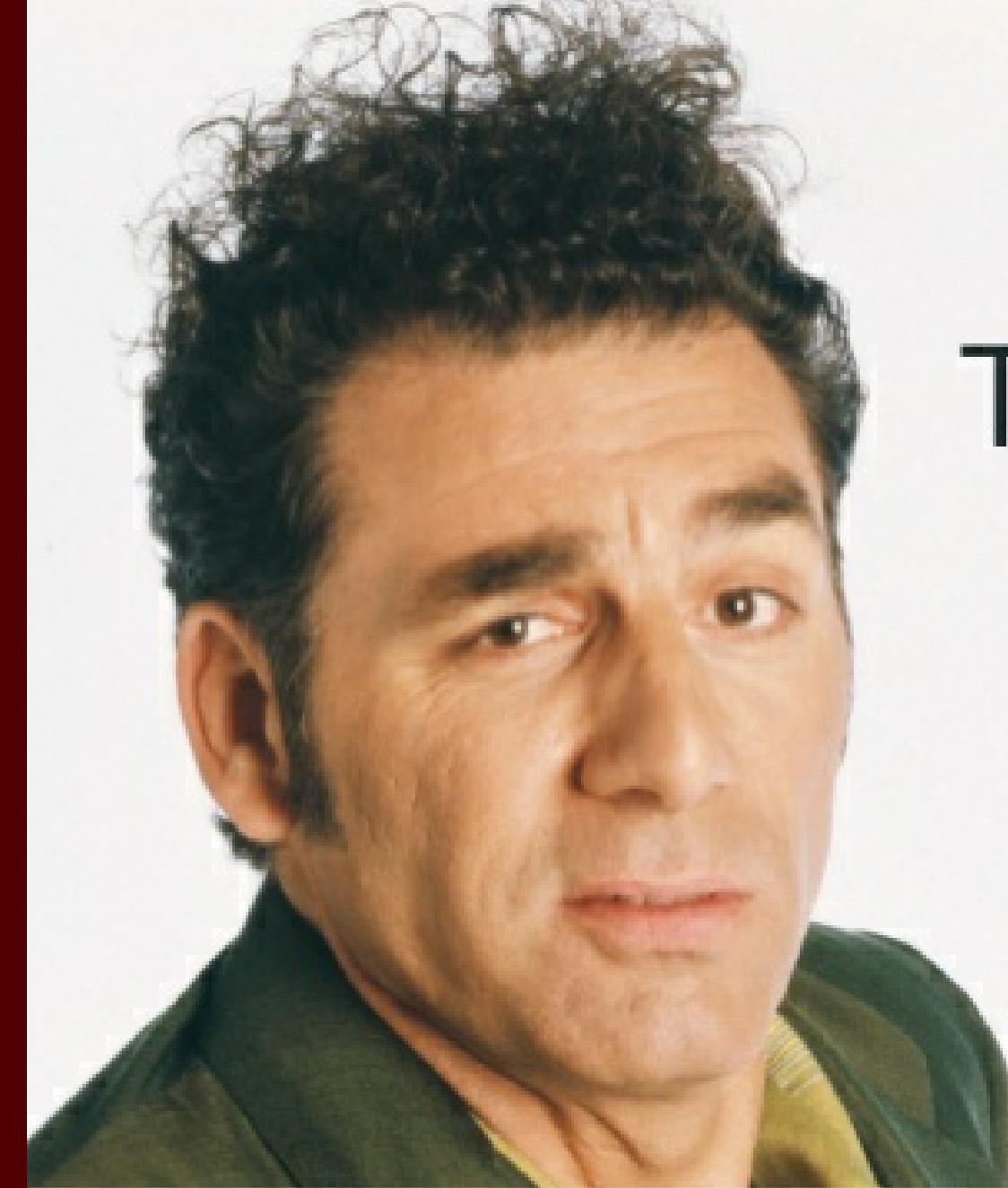
How have we been resolving this?

- Sharing code, data, and materials
- Separating Exploratory and Confirmatory Research

Solutions

How have we been resolving this?

- Sharing code, data, and materials
- Separating Exploratory and Confirmatory Research
- Building in accuracy checks



That seems like a
lot of work.
Why Bother?

Challenges

The challenges are often about:

Challenges

The challenges are often about:

- Technology

Challenges

The challenges are often about:

- Technology
- Habits

Challenges

The challenges are often about:

- Technology
- Habits
- Continuous Development

Our Approaches

How have we been resolving this?

Our Approaches

How have we been resolving this?

- Local level (Lab): Workflow/Lab Philosophy

Our Approaches

How have we been resolving this?

- Local level (Lab): Workflow/Lab Philosophy
- Teaching open practices

Our Approaches

How have we been resolving this?

- Local level (Lab): Workflow/Lab Philosophy
- Teaching open practices
- Yearly workflow updates

Workflow/Lab Philosophy

Co-Regulation (CORE) Lab.

We study co-regulation in romantic relationships. We study social thermoregulation. We rely on open science ideals. We collaborate with researchers around the world, but are located at the Université Grenoble Alpes.

Lab Philosophy at www.corelab.io



Papers

Check out publications and/or preprints from the lab. We try to ensure all our work is available to the public, so if you can't find a paper let us know!

[ACCESS PAPERS](#)



Open Data/Materials

To the extent possible we make materials, data, and analysis scripts publicly available on the Open Science Framework. These may be used for re-analysis or for novel hypotheses.

[FIND OUR DATASETS](#)



Lab Philosophy

Doing science is really hard. Here, we document the workflow of the lab and expectations for lab members. Includes templates for OSF projects to make open science easier.

[DOWNLOAD](#)

Research Workflow

Hosted at the Open Science Framework (www.osf.io)

Open Science Framework

A scholarly commons to connect the entire research cycle

Research Workflow

The image shows a composite screenshot of the Open Science Framework (OSF) website. On the left, a browser window displays the OSF homepage with a sidebar for 'Projects' and a main area for managing files and collections. A large orange play button icon is overlaid on this screen. On the right, a separate sign-up form is shown against a dark background with a network of white dots and lines. The form includes fields for 'Full name' (containing 'Albert Einstein'), 'Confirm email' (containing 'albert.einstein@gmail.com'), and a password field ('*****'). It features a checkbox for accepting 'Terms of Use and Privacy Policy', a reCAPTCHA verification box ('I'm not a robot'), and a green 'Sign up' button.

Hosted at the Open Science Framework (www.osf.io)

FREE AND OPEN SOURCE. START NOW.

Full name
albert.einstein@gmail.com

Confirm email

I have read and agree to the [Terms of Use](#) and [Privacy Policy](#).

I'm not a robot

reCAPTCHA

Privacy - Terms

Sign up

Research Workflow

Hosted at the Open Science Framework (www.osf.io)

Research Workflow

Hosted at the Open Science Framework (www.osf.io)

- Allows (local) data-sharing

Research Workflow

Hosted at the Open Science Framework (www.osf.io)

- Allows (local) data-sharing
- Allows separation exploratory and confirmatory research

Research Workflow

Hosted at the Open Science Framework (www.osf.io)

- Allows (local) data-sharing
- Allows separation exploratory and confirmatory research
- Allows easy collaboration (e.g., ManyLabs 1, 2)

OSF HOME · My Quick Links · My Projects · Search · Support · Donate · Help · GitHub · Logout

CO-RE Lab Workspace Files Wiki Analytics Registrations Contributors Add-ons Settings

CO-RE Lab Workspace

Contributors: Hans Ijzerman, Richard A. Klein, Lison Neyroud
Date created: 2017-11-17 09:26 AM | Last Updated: 2018-10-02 01:53 PM
Create DOI
Category: Project
Description: Add a brief description to your project
License: Add a license

Wiki

This OSF page is the homepage for researchers working in the CO-RE lab. You can find the necessary tools to build up your project in this page. The place to start is with the [Research Milestones Sheet](#) (RMS). Once you have started the RMS, please start a new OSF project by using the Research Template for [Exploratory](#) or [Confirmatory Studies](#).

Files

Click on a storage provider or drag and drop to upload

Name Modified

- CO-RE Lab Workspace
- OSF Storage (United States)
- Research Template to Start New Project (Exploratory)
- OSF Storage (United States)
- + Theoretical Background (Before data collection)
- + Methods, Procedures, Scales (Before data collection)
- + Data (After data collection)
- + Analytic Code (After data collection)
- Research Template to Start New Project (Confirmatory)
- OSF Storage (United States)
- + Study Rationale + Hypotheses (Before registration)
- + Methods, Procedures, Scales (Before registration)
- + Power Calculation (Before registration)
- + Data Analysis Plan (Before registration)

Citation

Components

Add Component Link Projects

Research Template to Start New Project (Exploratory) ✖ ⓘ
Ijzerman, Klein & Neyroud
This template is intended to guide researchers in the CO-RE lab to run exploratory studies. Please use this template alongside the Research Milestone ...

Research Template to Start New Project (Confirmatory) ✖ ⓘ
Ijzerman, Klein, Neyroud & 3 more
This template is intended to guide researchers in the CO-RE lab to run confirmatory studies. Please use this template alongside the Research Miles she...

Tags

corelabdat x workflow x Add a tag

Recent Activity

Richard A. Klein added tag corelabdat to CO-RE Lab Workspace 2018-10-02 01:53 PM

Richard A. Klein removed tag corelab from CO-RE Lab Workspace 2018-10-02 01:53 PM

Richard A. Klein added tag corelab to CO-RE Lab Workspace 2018-09-17 02:21 PM

CO-RE Lab Workspace

Contributors: Hans Ijzerman, Richard A. Klein, Lison Neyroud

Date created: 2017-11-17 09:26 AM | Last Updated: 2018-10-02 01:53 PM

Create DOI

Category: Project

Description: Add a brief description to your project

License: Add a license

Wiki

This OSF page is the homepage for researchers working in the CO-RE lab. You can find the necessary tools to build up your project in this page. The place to start is with the [Research Milestones Sheet](#) (RMS). Once you have started the RMS, please start a new OSF project by using the Research Template for [Exploratory](#) or [Confirmatory Studies](#).

Name ▾ ▾

- CO-RE Lab Workspace
- OSF Storage (United States)
- Research Template to Start New Project (Exploratory)
- OSF Storage (United States)
- + ? Theoretical Background (Before data collection)
- + O Methods, Procedures, Scales (Before data collection)
- + O Data (After data collection)
- + O Analytic Code (After data collection)
- Research Template to Start New Project (Confirmatory)
- OSF Storage (United States)
- + ? Study Rationale + Hypotheses (Before registration)
- + O Methods, Procedures, Scales (Before registration)
- + O Power Calculation (Before registration)
- + Data Analysis Plan (Before registration)

Modified ▾ ▾

Citation

Components

Add Component Link Projects

Research Template to Start New Project (Exploratory)

Ijzerman, Klein, Neyroud & 3 more
This template is intended to guide researchers in the CO-RE lab to run exploratory studies. Please use this template alongside the Research Miles...

Research Template to Start New Project (Confirmatory)

Ijzerman, Klein, Neyroud & 3 more
This template is intended to guide researchers in the CO-RE lab to run confirmatory studies. Please use this template alongside the Research Miles she...

Tags

corelabdat x workflow x Add a tag

Recent Activity

Richard A. Klein added tag corelabdat to CO-RE Lab Workspace 2018-10-02 01:53 PM

Richard A. Klein removed tag corelab from CO-RE Lab Workspace 2018-10-02 01:53 PM

Richard A. Klein added tag corelab to CO-RE Lab Workspace 2018-09-17 02:21 PM

Workspace at <https://osf.io/q29nf/>.

CO-RE Lab Workspace

Contributors: Hans Ijzerman, Richard A. Klein, Lison Neyroud
Date created: 2017-11-17 09:26 AM | Last Updated: 2018-10-02 01:53 PM
Create DOI
Category: Project
Description: Add a brief description to your project
License: Add a license

Wiki

This OSF page is the homepage for researchers working in the CO-RE lab. You can find the necessary tools to build up your project in this page. The place to start is with the [Research Milestones Sheet](#) (RMS). Once you have started the RMS, please start a new OSF project by using the Research Template for [Exploratory](#) or [Confirmatory Studies](#).

Citation

Components

[Research Template to Start New Project \(Exploratory\)](#)
Ijzerman, H., Klein, R.A., & Neyroud, L. This template is intended to guide researchers in the CO-RE lab to run exploratory studies. Please use this template alongside the Research Miles...

[Research Template to Start New Project \(Confirmatory\)](#)
Ijzerman, Klein, Neyroud & 3 more
This template is intended to guide researchers in the CO-RE lab to run confirmatory studies. Please use this template alongside the Research Miles she...

Tags

corelabdat x workflow x Add a tag

Recent Activity

Richard A. Klein added tag corelabdat to CO-RE Lab Workspace 2018-10-02 01:53 PM
Richard A. Klein removed tag corelab from CO-RE Lab Workspace 2018-10-02 01:53 PM
Richard A. Klein added tag corelab to CO-RE Lab Workspace 2018-09-17 02:21 PM

The screenshot shows the OSF Home page with the following details:

- Project Title:** CO-RE Lab Workspace
- Contributors:** Hans Ijzerman, Richard A. Klein, Lison Neyroud
- Date created:** 2017-11-17 09:26 AM | **Last Updated:** 2018-10-02 01:53 PM
- Create DOI:** Create DOI
- Category:** Project
- Description:** Add a brief description to your project
- License:** Add a license

Wiki: This OSF page is the homepage for researchers working in the CO-RE lab. You can find the necessary tools to build up your project in this page. The place to start is with the [Research Milestones Sheet](#) (RMS). Once you have started the RMS, please start a new OSF project by using the Research Template for [Exploratory](#) or [Confirmatory Studies](#).

Files: Click on a storage provider or drag and drop to upload

Name	Modified
CO-RE Lab Workspace	
- OSF Storage (United States)	
- Research Template to Start New Project (Exploratory)	
- OSF Storage (United States)	
+ Theoretical Background (Before data collection)	
+ Methods, Procedures, Scales (Before data collection)	
+ Data (After data collection)	
+ Analytic Code (After data collection)	
- Research Template to Start New Project (Confirmatory)	
- OSF Storage (United States)	
+ Study Rationale + Hypotheses (Before registration)	
+ Methods, Procedures, Scales (Before registration)	
+ Power Calculation (Before registration)	
+ Data Analysis Plan (Before registration)	

Citation: Components

- Research Template to Start New Project (Exploratory) [View](#) [Edit](#)
Ijzerman, Klein & Neyroud
This template is intended to guide researchers in the CO-RE lab to run exploratory studies. Please use this template alongside the Research Milestone ...
- Research Template to Start New Project (Confirmatory) [View](#) [Edit](#)
Ijzerman, Klein, Neyroud & 3 more
This template is intended to guide researchers in the CO-RE lab to run confirmatory studies. Please use this template alongside the Research Miles she...

Tags: corelabdat x workflow x Add a tag

Recent Activity:

- Richard A. Klein added tag corelabdat to CO-RE Lab Workspace 2018-10-02 01:53 PM
- Richard A. Klein removed tag corelab from CO-RE Lab Workspace 2018-10-02 01:53 PM
- Richard A. Klein added tag corelab to CO-RE Lab Workspace 2018-09-17 02:21 PM

OSF HOME · My Quick Links · My Projects · Search · Support · Donate · Help · Log In · Register

CO-RE Lab Workspace Files Wiki Analytics Registrations Contributors Add-ons Settings

CO-RE Lab Workspace

Contributors: Hans Ijzerman, Richard A. Klein, Lison Neyroud
Date created: 2017-11-17 09:26 AM | Last Updated: 2018-10-02 01:53 PM
Create DOI
Category: Project
Description: Add a brief description to your project
License: Add a license

Wiki

This OSF page is the homepage for researchers working in the CO-RE lab. You can find the necessary tools to build up your project in this page. The place to start is with the [Research Milestones Sheet](#) (RMS). Once you have started the RMS, please start a new OSF project by using the Research Template for [Exploratory](#) or [Confirmatory Studies](#).

Citation

Components [Add Component](#) [Link Projects](#)

Exploratory/confirmatory

Tags
corelabdat x workflow x Add a tag

Recent Activity

- Richard A. Klein added tag corelabdat to CO-RE Lab Workspace 2018-10-02 01:53 PM
- Richard A. Klein removed tag corelab from CO-RE Lab Workspace 2018-10-02 01:53 PM
- Richard A. Klein added tag corelab to CO-RE Lab Workspace 2018-09-17 02:21 PM

OSF HOME · My Quick Links · My Projects · Search · Support · Donate · Help · GitHub · Logout

CO-RE Lab Workspace Files Wiki Analytics Registrations Contributors Add-ons Settings

Make Private Public P 9 ...

CO-RE Lab Workspace

Contributors: Hans Ijzerman, Richard A. Klein, Lison Neyroud
 Date created: 2017-11-17 09:26 AM | Last Updated: 2018-10-02 01:53 PM
[Create DOI](#)
 Category: Project
 Description: Add a brief description to your project
 License: Add a license

Wiki

This OSF page is the homepage for researchers working in the CO-RE lab. You can find the necessary tools to build up your project in this page. The place to start is with the [Research Milestones Sheet](#) (RMS). Once you have started the RMS, please start a new OSF project by using the Research Template for [Exploratory](#) or [Confirmatory Studies](#).

Citation

Components [Add Component](#) [Link Projects](#)

[Research Template to Start New Project \(Exploratory\)](#) [Edit](#) [Remove](#)
 Ijzerman, Klein & Neyroud
 This template is intended to guide researchers in the CO-RE lab to run exploratory studies. Please use this template alongside the Research Milestone ...

[Research Template to Start New Project \(Confirmatory\)](#) [Edit](#) [Remove](#)
 Ijzerman, Klein, Neyroud & 3 more
 This template is intended to guide researchers in the CO-RE lab to run confirmatory studies. Please use this template alongside the Research Miles she...

Files

Click on a storage provider or drag and drop to upload

Name	Modified
CO-RE Lab Workspace	
- OSF Storage (United States)	
- Research Template to Start New Project (Exploratory)	
- OSF Storage (United States)	
+ Theoretical Background (Before data collection)	
+ Methods, Procedures, Scales (Before data collection)	
+ Data (After data collection)	
+ Analytic Code (After data collection)	
- Research Template to Start New Project (Confirmatory)	
- OSF Storage (United States)	
+ Study Rationale + Hypotheses (Before registration)	
+ Methods, Procedures, Scales (Before registration)	
+ Power Calculation (Before registration)	
+ Data Analysis Plan (Before registration)	

Tags

corelabdat x workflow x Add a tag

Recent Activity

- Richard A. Klein added tag corelabdat to CO-RE Lab Workspace 2018-10-02 01:53 PM
- Richard A. Klein removed tag corelab from CO-RE Lab Workspace 2018-10-02 01:53 PM
- Richard A. Klein added tag corelab to CO-RE Lab Workspace 2018-10-17 02:21 PM

Research Template to Start New Project (Confirmatory)

Contributors: Hans IJzerman, Richard A. Klein, Lison Neyroud, Subatli Tiffany, Zoé Lackner, Barbosa Vivian

Date created: 2014-07-28 04:33 PM | Last Updated: 2018-10-09 02:41 PM

Category: Project

Description: This template is intended to guide researchers in the CO-RE lab to run confirmatory studies. Please use this template alongside the Research Miles sheet.

Please DON'T change this page, but copy the page into a new project.

Wiki

This is the workflow for running a **confirmatory study**. Be sure to follow the extra steps in the [Research Milestones Sheet](#) to pre-register your study prior to data collection. Follow these steps, using the existing components for organization:

- Fork the research template into a new project.
- Name your project.
- Add your co-authors on this page (in the order that they will likely appear on the paper)
- ...

[Read More](#)

Files

Name	Modified
Research Template to Start New Project (Confirmatory)	
- OSF Storage (United States)	
- Study Rationale + Hypotheses (Before registration)	
- OSF Storage (United States)	
- Methods, Procedures, Scales (Before registration)	
- OSF Storage (United States)	
- Power Calculation (Before registration)	
- OSF Storage (United States)	
- Data Analytic Plan (Before registration)	

Citation

Components

- Study Rationale + Hypotheses (Before registration)
IJzerman, Klein, Neyroud & 3 more
- Methods, Procedures, Scales (Before registration)
IJzerman, Klein, Neyroud & 3 more
- Power Calculation (Before registration)
IJzerman, Klein, Neyroud & 3 more
- Data Analytic Plan (Before registration)
IJzerman, Klein, Neyroud & 3 more
- Data (After data collection)
IJzerman, Klein, Neyroud & 3 more
- Analytic Code (After data collection)
IJzerman, Klein, Neyroud & 3 more
- Explanation of Auxiliary/Exploratory Analyses (After data collection)
IJzerman, Klein, Neyroud & 3 more

Recent Activity

Research Template to Start New Project (Confirmatory)

Public

Contributors: Hans IJzerman, Richard A. Klein, Lison Neyroud, Subatli Tiffany, Zoé Lackner, Barbosa Vivian

Date created: 2014-07-28 04:33 PM | Last Updated: 2018-10-09 02:41 PM

Category: Project

Description: This template is intended to guide researchers in the CO-RE lab to run confirmatory studies. Please use this template alongside the Research Miles sheet.

Please DON'T change this page, but copy the page into a new project.

Wiki

This is the workflow for running a **confirmatory study**. Be sure to follow the extra steps in the [Research Milestones Sheet](#) to pre-register your study prior to data collection. Follow these steps, using the existing components for organization:

- Fork the research template into a new project.
- Name your project.
- Add your co-authors on this page (in the order that they will likely appear on the paper)
- ...

[Read More](#)

Files

Name	Modified
Research Template to Start New Project (Confirmatory)	
- OSF Storage (United States)	
- Study Rationale + Hypotheses (Before registration)	
- OSF Storage (United States)	
- Methods, Procedures, Scales (Before registration)	
- OSF Storage (United States)	
- Power Calculation (Before registration)	
- OSF Storage (United States)	
- Data Analytic Plan (Before registration)	

Citation

Components

- Study Rationale + Hypotheses (Before registration)
IJzerman, Klein, Neyroud & 3 more
- Methods, Procedures, Scales (Before registration)
IJzerman, Klein, Neyroud & 3 more
- Power Calculation (Before registration)
IJzerman, Klein, Neyroud & 3 more
- Data Analytic Plan (Before registration)
IJzerman, Klein, Neyroud & 3 more
- Data (After data collection)
IJzerman, Klein, Neyroud & 3 more
- Analytic Code (After data collection)
IJzerman, Klein, Neyroud & 3 more
- Explanation of Auxiliary/Exploratory Analyses (After data collection)
IJzerman, Klein, Neyroud & 3 more

Recent Activity

This is the workflow for running a **confirmatory study**. Be sure to follow the extra steps in the [Research Milestones Sheet](#) to pre-register your study prior to data collection. Follow these steps, using the existing components for organization:

- Fork the research template into a new project.
- Name your project.
- Add your co-authors on this page (in the order that they will likely appear on the paper)
 - We want all our data to be stored in the EU. In order to do so, go to the arrow next to your profile name in the upper right corner. Then go to "Settings" there. When you are in "Settings" go to "Account Settings". Put your "Default Storage Location" to "Frankfurt, Germany".
- Fill in the name of the project, the order of authors, and the link to your new OSF project page in the Research Milestones Sheet (RMS).
- Decide whether you will make the OSF page public at this time (the default initially is no, but in certain cases, it can be yes).
- Review the literature and write the review. Develop your hypothesis and post them on the OSF (link to page in RMS).
- Do your power calculation (NB: given the existing publication bias in the field, we recommend doing a conservative power calculation. The wisest approach is likely to take the smallest effect size of interest). (Link to completed power analysis in RMS).
- Complete your proposed methods and include all materials needed to run your study. Post them. Share the page in RMS.
- Write your syntax (SPSS, R, or other software program) and post on OSF (link to page in RMS). Preferably use simulated data to see if the code works.
- Complete your ethics application if needed (in consultation with the lab's PI).
- **Pre-register your study. By default, keep private unless otherwise decided (link to page in RMS).**
- Before running study, double-check pre-registration. If you made a mistake before data collection, fork project and explain mistake (if so, link to fork in RMS. Pre-register project again).
- After data collection, de-identify data so that participants cannot be recognized. If page/data will be made public, verify deidentification with PI. (link to page in RMS)
- Post analytic code written after data collection (link to page in RMS).
- Describe verbally on OSF which analyses were done separate from pre-registration (auxiliary/exploratory analyses; link to page in RMS).
- Let data, code, and OSF page be checked by an independent researcher. Researcher should be able to use script to go from raw data to final results, and verify numbers in manuscript. Researcher should also verify deidentification. The independent researcher should be added to the OSF page and as second to last co-author on paper. Indicate completion on the RMS.
 - Run your manuscript through a Plagiarism Checker (e.g., <https://plagiarismcheckerx.com/>).
- Post your completed RMS to the OSF page.
- Post paper to a pre-print server after submitting paper to a journal (preferably PsyArxiv, so you can directly link to this project page).

Workflow

This is the workflow for running a **confirmatory study**. Be sure to follow the extra steps in the [Research Milestones Sheet](#) to pre-register your study prior to data collection. Follow these steps, using the existing components for organization:

- Fork the research template into a new project.
- Name your project.
- Add your co-authors on this page (in the order that they will likely appear on the paper)
 - We want all our data to be stored in the EU. In order to do so, go to the arrow next to your profile name in the upper right corner. Then go to "Settings" there. When you are in "Settings" go to "Account Settings". Put your "Default Storage Location" to "Frankfurt, Germany".
- Fill in the name of the project, the order of authors, and the link to your new OSF project page in the Research Milestones Sheet (RMS).
- Decide whether you will make the OSF page public at this time (the default initially is no, but in certain cases, it can be yes).
- Review the literature and write the review. Develop your hypothesis and post them on the OSF. ([Link to page in RMS](#)).
- Do your power calculation (NB: given the existing publication bias in the literature, we can likely not do a very reliable power calculation. The wisest approach is likely to take the smallest effect size of interest). ([Link to completed power calculation in RMS](#)).
- Complete your proposed methods and include all materials needed to run your study. Post on OSF ([link to page in RMS](#)).
- Write your syntax (SPSS, R, or other software program) and post on OSF ([link to page in RMS](#)). Preferably use simulated data to see if the code works.
- Complete your ethics application if needed (in consultation with the lab's PI).
- **Pre-register your study. By default, keep private unless otherwise decided ([link to page in RMS](#)).**
- Before running study, double-check pre-registration. If you made a mistake before data collection, fork project and explain mistake (if so, [link to fork in RMS](#). Pre-register project again).
- After data collection, de-identify data so that participants cannot be recognized. If page/data will be made public, verify deidentification with PI. ([link to page in RMS](#))
- Post analytic code written after data collection ([link to page in RMS](#)).
- Describe verbally on OSF which analyses were done separate from pre-registration (auxiliary/exploratory analyses; [link to page in RMS](#)).
- Let data, code, and OSF page be checked by an independent researcher. Researcher should be able to use script to go from raw data to final results, and verify numbers in manuscript. Researcher should also verify deidentification. The independent researcher should be added to the OSF page and as second to last co-author on paper. Indicate completion on the RMS.
 - Run your manuscript through a Plagiarism Checker (e.g., <https://plagiarismcheckerx.com/>).
- Post your completed RMS to the OSF page.
- Post paper to a pre-print server after submitting paper to a journal (preferably PsyArxiv, so you can directly link to this project page).

Teaching open practices

Research Tools in Social Cognition

Instructor: Dr. Hans IJzerman

E-mail: hans.ijzerman@univ-grenoble-alpes.fr

Office: D202 (BSHM)

Objectives

This course is designed to provide you with the tools to conduct more precise, accurate, and solid studies in social cognition that matter. You may be well aware that psychology has faced a reproducibility crisis. This course will offer you tools to better cope with this crisis.

Because I strongly feel that the tools needed for modern research theory, the research approaches discussed in this class will be good because they are well-suited for the methods we discuss. The main purpose of this course is for you to get a better sense of research approaches in social cognition. By nature of the design of this course (and due to time constraints), we will only be able to sample a limited amount of methods, so I will try to give you what I feel are some of the most important tools for you to utilize during your research career.

M2 Teaching

Contents

We will start discussing the reproducibility crisis. Following this, will focus on how to increase the level of precision for your research, while at the same time supporting you in drawing better inferences from your data. In so doing, we will discuss why it is important to distinguish exploratory and confirmatory psychological science, discuss how to engage in these different approaches to your data, learn how to pre-register a study, and set up a plan for you to share your materials (including the assessment of different methods to share research data and materials). Finally, we will also take a brief dive into methods that can help you explore your data in systematic ways.

Home

Menu

- Project Wiki Pages
- Home**
- + Component Wiki Pages

View

Wiki Version: (Current) Hans IJzerman: 2018-09-24 09:11:22+00:00 UTC

Workshop Goal

To provide hands-on training in open science. Topics discussed during the workshop include exploratory social psychological science (e.g., deep learning), confirmatory social psychological science (i.e., pre-registration), and other aspects of establishing a reproducible workflow. The workshop is primarily aimed at providing training to researchers with fewer financial resources.

Conference Hashtag: #SolidBordeaux2018

Conference Videos: http://www.teletoile.u-bordeaux2.fr/2018_2019/EASP/index.html

Content Specifics

The last few years have seen social psychology in a crisis, ranging from outright fraud (e.g., Stapel) to considerable concerns about reproducibility (e.g., Open Science Collaboration, 2015). Yet, the workshops have also set off the way in the past two to move towards "it". Sharing research materials and data, pre-registration, and separating exploratory from confirmatory analyses are steps towards more transparent science. However, moving to more solid science is not easy. This workshop therefore deals with the challenges that a researcher will face in the actual implementation of these steps to a workflow (Frederik Aust), conduct proper power analyses for both simple and complex analyses (Marco Perugini), learn to use cross-validation (Michèle Nijholt), how to integrate these new habits into undergraduate teaching (Fieke Wagemans), how to analyze large datasets (Kai Jonas), and initiating or participating in crowd-sourced research (Ben Jones). We will also discuss the changes to the new EU data security laws and how psychologists can prepare for these changes. The workshop will also have a special focus on how to reduce the costs of open science for the researchers, while at the same time gather resources to be able to meet the challenges of the Revolution 2.0 (Spellman, 2015). The workshop is co-organized by the Université de Bordeaux and Université Grenoble Alpes and is supported by EASP.

Participant Specifics

The workshop is primarily aimed at researchers with fewer financial resources. First preference will be given in access to the workshop to researchers from the European Union whose residence country spends less on research and development per capita. Second preference will be given to EU researchers without any active research grants. At least 50 % (and likely more) of the workshop participants will be EASP members.

Presenters

- **Frederik Aust** (University of Cologne): *A practical primer on transparent research workflows*
- **Marco Perugini** (Università degli Studi di Milano-Bicocca): *A practical primer to power analysis*
- **Michèle Nijholt** (Tilburg University): *Open source & open science software*
- **Fieke Wagemans** (Universität Duisburg-Essen): *Teaching open science: The CREP*
- **Rick Klein** (Université Grenoble Alpes): *Exploratory social science: Getting the most out of your data, and an introduction to concepts in Deep Learning and cross-validation*
- **Kai Jonas** (Maastricht University): *Pre-registration in psychological science (and how to fund it)*
- **Ben Jones** (University of Glasgow): *Crowdsourcing psychological science: The Psychological Science Accelerator*

Workshops

Home

Toggle view: [View](#) [Compare](#)

Menu

- Project Wiki Pages
 - Home
- + Component Wiki Pages

View

Wiki Version: (Current) Hans IJzerman: 2018-09-24 09:11:22+00:00 UTC

Workshop Goal

To provide hands-on training in open science. Topics discussed during the workshop include exploratory social psychological science (e.g., deep learning), confirmatory social psychological science (i.e., pre-registration), and other aspects of establishing a reproducible workflow. The workshop is primarily aimed at providing training to researchers with fewer financial resources.

Conference Hashtag: #SolidBordeaux2018

Conference Videos: http://www.teletoile.u-bordeaux2.fr/2018_2019/EASP/index.html

Content Specifics

The last few years have seen social psychology in a crisis, ranging from outright fraud (e.g., Stapel) to considerable concerns about reproducibility (e.g., Open Science Lab, 2015). Yet, psychologists have also led the way in the quest to improve reproducibility. Shifting research culture, data sharing, pre-registration, and reporting guidelines are now firmly data analysis best practices to become the norm. However, the situation is more complex, and this workshop will review the costs and the challenges to lie ahead. It will introduce, hands-on, how to help set up a lab workflow (Frederik Aust) and power analyses (Marco Perugini) to study designs (Marco Perugini). It will focus on access to new (Méthode) infrastructure and new tools in undergraduate (Michèle Nuijten) and conducting exploratory analyses (Fieke Wagemans) all according to new analyses of nonnormal data. It will introduce crowd-sourced research (Ben Jones). We will also discuss the changes to the new EU data security laws and how psychologists can prepare for these changes. The workshop will also have a special focus on how to reduce the costs of open science for the researchers, while at the same time gather resources to be able to meet the challenges of the Revolution 2.0 (Spellman, 2015). The workshop is co-organized by the Université de Bordeaux and Université Grenoble Alpes and is supported by EASP.

Participant Specifics

The workshop is primarily aimed at researchers with fewer financial resources. First preference will be given to access to the workshop to researchers from the European Union whose residence country spends less on research and development per capita. Second preference will be given to EU researchers without any active research grants. At least 50 % (and likely more) of the workshop participants will be EASP members.

Presenters

- **Frederik Aust** (University of Cologne): *A practical primer on transparent research workflows*
- **Marco Perugini** (Università degli Studi di Milano-Bicocca): *A practical primer to power analysis*
- **Michèle Nuijten** (Tilburg University): *Open source & open science software*
- **Fieke Wagemans** (Universität Duisburg-Essen): *Teaching open science: The CREP*
- **Rick Klein** (Université Grenoble Alpes): *Exploratory social science: Getting the most out of your data, and an introduction to concepts in Deep Learning and cross-validation*
- **Kai Jonas** (Maastricht University): *Pre-registration in psychological science (and how to fund it)*
- **Ben Jones** (University of Glasgow): *Crowdsourcing psychological science: The Psychological Science Accelerator*

<https://osf.io/gvkxn>

Replication Education

Collaborative Replications and Education Project (CREP)

Contributors: Jon Grahe, Mark Brandt, Jordan Wagge, Nicole Legate, Bradford J. Wiggins, Cody D. Christopherson, Yanna Weisberg, Katherine S. Corker, Christopher R. Chartier, Marianne Fallon, Lea Hildebrandt, Michelle Hurst, Lili Lazarevic, Carmel Levitan, Joseph McFall, Heidi McLaughlin, Adam Pazda, Crystal Steltenpohl, Hans Ijzerman, Brian A. Nosek, Cong Peng, Hale Gervais, Kaylis Hase, Tayler Peck, Megan Raddatz, David Redman, Chad Schaeffer, Tiana Wamba, Cristina Baciu, Sara LePine

Date created: 2013-05-30 04:56 PM | Last Updated: 2018-10-29 04:47 PM

Identifiers: DOI 10.17605/OSF.IO/WFC6U | ARK c7605/osf.io/wfc6u

Category: Project

Description: This is a replication project where students are encouraged to conduct replications as part of their courses.

Wiki



Read More

Files

Name	Modified
Collaborative Replications and Education Project (CREP)	
OSF Storage (United States)	

Citation

Community

Collaborative Replications and Education Project (CREP)

Brandt, Grahe, Wagge & 12 more

CREP Research Certificate

Grahe, Brandt, Wagge & 10 more

Instructions to Contributors

Grahe, Brandt, Wagge & 13 more

CREP Researchers, Findings, and Data

Grahe, Brandt, Wagge & 9 more

THIS PAGE IS CURRENTLY NOT UP TO DATE!! Please contact us if you are interested in findings for a meta-analysis this page includes a list of our projects...

Instructors: What Can You Do with a Replication?

Brandt, Grahe, Wagge & 9 more

FAQs--Instructions and Workflow Procedure Guidelines here

Grahe, Brandt, Wamba & 12 more

Collaborative Replications and Education Project (CREP)

Contributors: Jon Grahe, Mark Brandt, Jordan Wagge, Nicole Legate, Bradford J. Wiggins, Cody D. Christopherson, Yanna Weisberg, Katherine S. Corker, Christopher R. Chartier, Marianne Fallon, Lea Hildebrandt, Michelle Hurst, Lili Lazarevic, Carmel Levitan, Joseph McFall, Heidi McLaughlin, Adam Pazda, Crystal Steltenpohl, Hans Ijzerman, Brian A. Nosek, Cong Peng, Hale Gervais, Kaylis Hase, Tayler Peck, Megan Raddatz, David Redman, Chad Schaeffer, Tiana Wamba, Cristina Baciu, Sara LePine

Date created: 2013-05-30 04:56 PM | Last Updated: 2018-10-29 04:47 PM

Identifiers: DOI 10.17605/OSF.IO/WFC6U | ARK c7605/osf.io/wfc6u

Category: Project

Description: This is a replication project where students are encouraged to conduct replications as part of their courses.

Wiki



Read More

Citation

Component

DOI: 10.17605/OSF.IO/WFC6U
Brandt, Grahe, Wagge & 12 more

CREP Research Certificate
Grahe, Brandt, Wagge & 10 more

Instructions to Contributors
Grahe, Brandt, Wagge & 13 more

CREP Researchers, Findings, and Data
Grahe, Brandt, Wagge & 9 more
THIS PAGE IS CURRENTLY NOT UP TO DATE!! Please contact us if you are interested in findings for a meta-analysis this page includes a list of our projects...

Instructors: What Can You Do with a Replication?
Brandt, Grahe, Wagge & 9 more

FAQs--Instructions and Workflow Procedure Guidelines here
Grahe, Brandt, Wamba & 12 more

Files

Name	Modified
Collaborative Replications and Education Project (CREP)	
OSF Storage (United States)	

Yearly workflow updates

Thanks!

Slides created via the R package [xaringan](#).

You can reach us at www.corelab.io.

E-mail: hans.ijzerman@univ-grenoble-alpes.fr -- Twitter: @hansijzerman



financé par
IDEX Université Grenoble Alpes



LABORATOIRE
PERSONNALITÉ
INTER-UNIVERSITAIRE
COGNITION
DE PSYCHOLOGIE
CHANGEMENT SOCIAL