# Reproducibility Project: Template for Replication Report Open Science Collaboration

Replication reports should all use this template to standardize reporting across projects. These reports will be public supplementary materials that accompany the summary report(s) of the aggregate results.

#### Other useful documents

- Research guide for conducting replication projects
- Executive summary: Detailed description of the reproducibility project
- Possible interpretations of a failure to replicate
- Spreadsheet for documenting replication projects
- Open Science Framework discussion group
- Analysis plan
- Report draft

# -- REPORT TEMPLATE --

Replication of Study X by Sample & Sample (200x, *Psychological Science*)

Replication Authors contact information

#### Introduction

[No abstract is needed.] Each replication project will have a straightforward, no frills report of the study and results. These reports will be publicly available as supplementary material for the aggregate report(s) of the project as a whole. Also, to maximize project integrity, the intro and methods will be written and critiqued in advance of data collection. Introductions can be just 1-2 paragraphs clarifying the main idea of the original study, the target finding for replication, and any other essential information. It will NOT have a literature review -- that is in the original publication.

## Methods

#### **Power Analysis**

Original effect size, power analysis for samples to achieve 80%, 90%, 95% power to detect that effect size. Considerations of feasibility for selecting planned sample size.

# **Planned Sample**

Planned sample size and/or termination rule, sampling frame, known demographics if any, preselection rules if any.

# **Materials**

All materials - can quote directly from original article - just put the text in quotations and

note that this was followed precisely. Or, quote directly and just point out exceptions to what was described in the original article.

#### **Procedure**

Can quote directly from original article - just put the text in quotations and note that this was followed precisely. Or, quote directly and just point out exceptions to what was described in the original article.

## **Analysis Plan**

Can also quote directly, though it is less often spelled out effectively for an analysis strategy section. The key is to report an analysis strategy that is as close to the original - data cleaning rules, data exclusion rules, covariates, etc. - as possible.

# **Differences from Original Study**

Explicitly describe known differences in sample, setting, procedure, and analysis plan from original study. The goal, of course, is to minimize those differences, but differences will inevitably occur. Also, note whether such differences are anticipated to make a difference based on claims in the original article or subsequent published research on the conditions for obtaining the effect.

(Post Data Collection) Methods Addendum

# **Actual Sample**

sample size, demographics, data exclusions based on rules spelled out in analysis plan

# Differences from pre-data collection methods plan

Any differences from what was described as the original plan, or "none".

Results

#### Data preparation

Data preparation following the analysis plan.

# **Confirmatory analysis**

The analyses as specified in the analysis plan

# **Exploratory analyses**

Any follow-up analyses desired (not required).

Discussion

# **Summary of Replication Attempt**

Open the discussion section with a paragraph summarizing the primary result from the confirmatory analysis and the assessment of whether it replicated, partially replicated, or failed to replicate the original result.

#### Commentary

Add open-ended commentary (if any) reflecting (a) insights from follow-up exploratory analysis, (b) assessment of the meaning of the replication (or not) - e.g., for a failure to replicate, are the differences between original and present study ones that definitely, plausibly.

or are unlikely to have been moderators of the result, and (c) discussion of any objections or challenges raised by the current and original authors about the replication attempt. None of these need to be long.