

# Preregistration in practice: Comparing published papers with their preregistrations

## 1. Idea

**Preregistration** = The process of defining your research questions, research design, data collection plan, and analysis plan before collecting and analyzing the data

Research questions:

- 1) To what extent do published studies match their preregistrations?
- 2) What are the most common deviations from preregistrations and how are they explained by the authors?
- 3) How is the strictness of preregistrations related to the reproducibility of published studies?

Research goals:

- 1) Gain information to improve the quality of preregistration templates
- 2) Gain information to improve researchers' preregistration skills

## 2. Sample



N = 179



N = 150

Registered Reports -



N = 158

Control:

The effects of implicit religious primes on dictator game allocations: A preregistered replication experiment.  
CM Gomes, ME McCullough - Journal of experimental psychology ... 2015 - psycnet.apa.org  
Shariff and Norenzayan (2007) discovered that people allocate more money to anonymous strangers in a dictator game following a scrambled sentence task that involved words with religious meanings. We conducted a direct replication of key elements of Shariff and Norenzayan's (2007) Experiment 2, with some additional changes. Specifically, we (a) collected data from a much larger sample of participants (N= 650) (b) added a second religious priming condition that attempted to prime thoughts of religion less ...  
☆ 99 Cited by 50 [Related articles](#) All 12 versions Web of Science 19

[In prep.]

N = 150

## 3. Materials

- 1) Preregistrations protocol:  
A protocol to check the strictness of preregistrations (adapted from Veldkamp et al., 2018)



- 2) Published papers protocol:  
A protocol to check the reproducibility of published papers



- 3) Matching protocol:  
A protocol to check the deviations of published papers from their preregistrations



## 4. Coding

Preregistration

Published paper



**A**  
1) A identifies hypotheses in preregistration

**B**  
1) B identifies hypotheses in published paper



**C**

1) C checks which of the hypotheses match  
2) C checks whether these hypotheses are feasible to code  
3) C randomly draws one of the feasible hypotheses

**D E**

1) D and E code the preregistration  
2) D and E come together and resolve any inconsistencies

**F G**

1) F and G code the published paper  
2) F and G come together and resolve any inconsistencies

**H I**

1) H and I code the matching protocol  
2) H and I come together and resolve any inconsistencies

Estimated coding time per preregistration-published paper combination:  
3\*10 minutes (A+B+C) + 4\*45 minutes (D+E+F+G) + 2\*30 minutes (H + I)  
= **360 minutes per combination**

Estimated coding time per control group paper:  
1\*10 minutes (B) + 2\*45 minutes (F+G)  
= **130 minutes per control group paper**

Total estimated coding time:  
270\*400 combinations + 100\*150 controls  
= **2.050 HOURS**

## 5. Data collection



**WE NEED**

- 1) Researchers with a master degree (or equivalent) in a relevant discipline who can help code for 40 hours

**WE OFFER**

- 1) Co-authorship on the papers resulting from this project that can change the way we do science
- 2) Experience with preregistration that can help to improve your own preregistration skills

**Our own preregistration:**

**[In preparation]**