We require you to fabricate data for 25 participants in a Stroop task experiment.

The goal is to fabricate data that look as genuine as possible.

## Stroop task

In the Stroop task, participants are asked to determine the color a word is presented in (i.e., word colors), but the word also reads a color (i.e., color words). The presented word color (i.e., 'red', 'blue', or 'green') can be either presented in the congruent color (e.g., 'red' presented in red) or an incongruent color (i.e., 'red' presented in green). The dependent variable in the Stroop task is the response latency. It is hypothesized that latency is on average higher for incongruent than for congruent words.

## **Hypothesis**

Your task is to confirm the existence of a Stroop effect with fabricated data, while attempting to cover up the data fabrication by making them look as genuine as possible. In other words, the hypothesis is that there is an effect of congruency on the response latencies in the Stroop task, such that responses in the incongruent condition are on average slower than in the congruent condition.

## **Fabrication instructions**

We require you to fabricate both the mean and standard deviation of the response latencies of 25 (fictional) individuals, in both congruent and incongruent conditions (i.e., 25 individuals  $\times$  2 conditions  $\times$  2 statistics = 100 data points). Each participant sees 30 trials of the Stroop task in the congruent condition, and 30 trials in the incongruent condition.

At the bottom of this page, a link is provided to a spreadsheet in which you have to fill out your fabricated data.

Your task is to fabricate the mean and standard deviation of the response latencies in milliseconds (i.e., 1 second = 1,000 milliseconds) for each person for both the congruent condition and the incongruent condition. How you decide to fabricate these data is fully in your own hands.

The green columns in the spreadsheet depict where you have to fill in the means of the congruent response latencies and their standard deviations.

The yellow columns in the spreadsheet depict the corresponding statistics for incongruent response latencies.

Each row depicts the data for one participant.

The spreadsheet automatically calculates and displays the test statistic (t-value and p-value) concerning the within-person difference of the conditions (i.e., the Stroop effect). How you decide to fabricate the results that you fill out in the spreadsheet is up to you. Your task is to fabricate means and standard deviations such that the mean *congruent* response latency is lower than the mean *incongruent* response latency.

You can spend as much time as you think is needed on fabricating the data, until the face-to-face interview takes place.

## **Download files**

- Download the spreadsheet
- Download a copy of the instructions