

Study 2 - Counterfactual mindsets and motivation (#30855)

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1) Have any data been collected for this study already?

No, no data have been collected for this study yet.

2) What's the main question being asked or hypothesis being tested in this study?

Research question: Do additive and subtractive counterfactual mindsets differentially affect people's strategies in decision making?

Hypothesis: A subtractive (vs. additive) counterfactual mindset should lead to more vigilant and less eager strategies in decision making.

3) Describe the key dependent variable(s) specifying how they will be measured.

The main dependent variable is response bias in a recognition task. Participants have to indicate for a sequence of 40 non-words (20 old and 20 new each) whether they had already seen them in the previous encoding phase or not. A tendency towards saying "no" represents a "conservative" response bias (i.e., vigilant decision making), whereas saying "yes" corresponds with a "risky" response bias (i.e., eager decision making; see Crowe & Higgins, 1997).

4) How many and which conditions will participants be assigned to?

Participants will be randomly assigned to one of three conditions in a between-subjects design with three conditions (counterfactual mindset: subtractive vs. additive vs. control). To manipulate a counterfactual mindset, participants will generate thoughts on how the outcome of a personal negative event could have been improved (Roese, 1994; Roese et al., 1999). Thereby, participants are either instructed to generate subtractive (i.e., which actions should not have been performed) or additive (i.e., which actions should have been performed) thoughts. In a control condition, no counterfactual mindset is induced, but participants are asked to provide some more detailed information about the event.

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.

The main hypothesis will be tested with a one-way ANOVA and planned contrast analysis (focal contrast: 1 subtractive, -1 additive, 0 control; residual contrast: -1 subtractive, -1 additive, 2 control) with response bias as the criterion variable (for the exact calculation see Crowe & Higgins, 1997; Stanislaw & Todorov, 1999).

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.

Data will be checked for outliers using studentized deleted residuals (SDR) from a regression of the main DV on the main IV. Participants with an absolute SDR > 2.69 will be regarded as statistical outliers.

Requirements for participation: only English native speakers (because materials are language sensitive), no psychology students (because they might be suspicious about hypotheses and familiar with the used materials)

7) How many observations will be collected or what will determine sample size? No need to justify decision, but be precise about exactly how the number will be determined.

Lacking a reliable estimate for the expected effect size, we aim at testing N = 300 participants (i.e., 100 per condition). This would allow us to detect a small-to-medium sized effect ($f = 0.18$) in a one-way ANOVA with $\alpha = .05$ and a power of $(1 - \beta) = .80$.

8) Anything else you would like to pre-register? (e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)

For exploratory purposes, we will test whether participants in the two mindset conditions differ regarding the adoption of a promotion or prevention focus (2 items from Gino & Margolis, 2011), risk attitudes (5 items from Gino & Margolis, 2011) and the ease with which the thoughts were generated (2 items). Furthermore we will check whether participants in the three experimental conditions differ regarding their affect when remembering the negative event (6 items from Roese, 1994).