Study 4 - Counterfactual mindsets and motivation (#38003)

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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: Does the structure (additive vs. subtractive) of counterfactual thoughts in response to the coronavirus affect people's regulatory strategies?
Hypothesis: Subtractive (vs. additive) counterfactual thoughts should lead to a preference for vigilant over eager regulatory strategies.

3) Describe the key dependent variable(s) specifying how they will be measured.
The main dependent variable is the importance of regulatory strategies assessed via 5 bipolar items on a 9-point scale with one pole speaking for eager strategies and one pole speaking for vigilant strategies (e.g., Sassenberg et al., 2007).

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 (counterfactual structure: subtractive vs. additive vs. no counterfactuals). Participants will be asked to generate 'if only' thoughts in response to their own behavior in response to the coronavirus (based on the mindset manipulation from Roese et al., 1999). To manipulate counterfactual structure, 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 no counterfactuals control condition, participants will answer some general questions about their experiences with the coronavirus.

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 regulatory strategies as the criterion variable.

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.
Requirements for participation: only English native speakers (because materials are language sensitive), no psychology students or psychologists (because they might be suspicious about hypotheses and familiar with the used materials), serious responding (1 yes/no item at the end of the study).
After excluding participants who do not fulfill theses criteria, 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.

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 of the expected effect size, we aim at testing N = 225 participants (i.e., 75 per cell). This would allow us to detect a small-to-medium sized effect (f = 0.21) 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 the participants' preference for specific regulatory strategies depends on their chronic regulatory focus (measured via 20 items from Sassenberg et al., 2012). Based on other theoretical considerations this relationship (if present in the first place) might be moderated by experimental condition in a way that generating subtractive counterfactual thoughts (but not additive or no counterfactual thoughts) would diminish it.
Furthermore, we will check whether participants in the three experimental conditions differ regarding their affect when thinking about the coronavirus (6 bipolar items from Roese, 1994).
We will also assess how difficult participants found it to generate subtractive vs. additive counterfactuals via 1 bipolar item.