SSM CUE SIMILARITY STUDY 3 (#106553)

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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?
We examine the evolution of beliefs over time in response to (i) statistical information and (ii) stories. In this study, we examine the hypothesis that the evolution of beliefs in response to a given piece of information is affected by the similarity of a target scenario to other scenarios presented in the study. Specifically, we hypothesize that higher similarity between a target cue and decoy cues creates memory interference in the recall of target information and hence reduces belief movement after some delay.

3) Describe the key dependent variable(s) specifying how they will be measured.
The key dependent variables are incentivized beliefs about the likelihood that a randomly selected review of a given product is positive, both in the immediate and in the delay condition. Our main object of interest is belief movement which is defined as the signed distance between a stated belief and the prior (50%). We reverse the coding of "belief movement" whenever the additional information was negative for consistency.

A secondary outcome is people's recall of the type and valence of information they received in the baseline survey. We collect this using a set of structured, incentivized recall questions. First, for each scenario, we ask participants to indicate whether they received a story, a statistic or no additional information. Second, we ask participants to indicate whether the additional information had positive or negative valence. In both questions, subjects can indicate that they don't remember, which we explain is equivalent to randomizing between the remaining options. We code this data as follows: Our main outcome variables of interest are dummy variables taking value 1 if respondents correctly recall both the type or the valence of the information, and 0 otherwise.

4) How many and which conditions will participants be assigned to?
We employ a design with both within-subject and between-subject variation. The repeated elicitation relies on within variation. In Immediate, beliefs are elicited directly on the screen on which subjects receive additional information, in Delay, beliefs are elicited one day later.

Within-subject and across 3 product scenarios, we vary the type of additional information subjects are exposed to. For each product, participants receive either statistical information, or information in the form of a story, or no further information. Randomization is blocked such that each subject (a) receives exactly one story and one statistic, and (b) sees exactly one positive signal and one negative piece of additional information. (a) and (b) are randomized independently.

We randomly assign participants into three between-subject treatment conditions.

Baseline treatment:
The three scenarios refer to reviews about a restaurant, a video game, and a bicycle, respectively. Subjects receive a statistic in one scenario, a story in a different scenario, and no information in the remaining scenario. We randomize whether subjects receive the statistic or the story in the restaurant scenario.

Statistic with similar decoy cues:
Like the baseline condition in which subjects receive the statistic in the restaurant scenario, but the two other scenarios are now labeled "Restaurant B" and "Restaurant C".

Story with similar decoy cues:
Like the baseline condition in which subjects receive the story in the restaurant scenario, but the two other scenarios are now labeled "Restaurant B" and "Restaurant C".

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.
We will focus on the target restaurant scenario and compare (a) average belief movement in immediate and delay as well as (b) recall performance across the statistics and story treatment arms. Specifically, we will compare baseline statistic to statistic with similar decoy cues and baseline story to story with similar decoy cues. We will also look at the distribution of beliefs in "immediate" and "delay" as a supplementary analysis.

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

Since all outcome data is either bounded between 0 and 100 or binary in nature, we will not have to deal with outliers.
We include an attention check and a set of comprehension questions on the study instructions. Subjects that fail the attention check are excluded from the study. If a subject fails to answer all comprehension questions correctly within the first two trials, we exclude that subject from the data collection.
As a further measure to ensure a high quality of responses, we will also exclude participants from the study that move their beliefs in the opposite direction of what is implied by the signal in the statistics treatment. Furthermore, we will exclude participants who later indicate that they stored information provided on day 1 explicitly.

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.
We plan to collect a total of 1,125 completes across the three treatment conditions in wave 1. In light of an expected attrition rate of around one third, we expect 750 respondents who participate in both parts of the experiment and are not excluded based on the criteria described above.

8) Anything else you would like to pre-register? (e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)
Nothing else to pre-register.