

**Behavior explanation - Explanations based on beliefs - October 2016 (#1692)**

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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?**

When judging explanations of someone's choice that differ in what the person believed when making the choice, subjects will favor explanations (by rating them more satisfying) that are simpler and that provide more rational support for the behavior.

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

For each candidate explanation (13 in total), subjects will rate how satisfying the explanation is on a scale from 1 (very bad explanation) to 7 (very good explanation).

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

Two conditions. In one condition, subjects will be told that the decision maker `_likes_` a specific performer at a show. In the second condition, subjects will be told that the decision maker `_dislikes_` a specific performer at a show.

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

We will compare subjects' average ratings to the predictions of a decision net model that assigns probabilities to all of the candidate explanations. We will fit one free parameter in the decision net model (part of its assumed utility function) to the data. After fitting this parameter, we will compute the correlation coefficient between the model predictions and mean subject average ratings.

**6) Any secondary analyses?**

We will conduct a 2x2 ANOVA with one factor being condition (2) and one factor being explanation (13). We predict an interaction between these variables such that people will provide different judgments depending on whether the decision maker liked or disliked a performer.

**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 will collect data until we have 50 subjects in each condition (100 total), after excluding subjects for failing the attention check. Because we won't know in advance how many subjects will fail the attention check, the final number of subjects might be slightly higher or lower than 50 per condition. For example, we will first collect data from 50 subjects per condition, then exclude subjects who failed the attention check. We will then collect a second batch of data to get the total number of non-excluded subjects up to about 50. Data collection will not be conditioned on the outcome of the results.

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

We will exclude all subjects that fail an attention check.