

Project on Advice Giving_Math test study'. (#153382)

Author(s)

This pre-registration is currently anonymous to enable blind peer-review.
It has 2 authors.

Pre-registered on: 11/30/2023 07:21 PM (PT)

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 predict that people want to avoid disappointing others and thus take into account their expectations when giving advice. Specifically, we hypothesize that (1) people who estimate that they scored higher on a math test are more likely to be advised to compete against a more competitive group, (2) men estimate that they performed better than do women, and (3) showing expectations leads men and women to receive different advice. We explore whether such "flattering" advice comes at a cost.

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

Participants in Stage 1 complete a math quiz consisting of 10 questions. We record how many questions they answer correctly ("Score"). We then ask participants to estimate their score ("Guess"). Participants in Stage 2 give advice to ten Stage 1 participants on whether they should compete against a group of Top Performers or a group of Low Performers. We code as "1" advice to compete against the Top Performers and "0" advice to compete against the Low Performers. Returning participants from Stage 1 then make a binary decision which of the two groups to compete against. We code as "1" if they compete against the Top Performers and "0" if they compete against the Low Performers. Finally, we measure their earnings from the task (0 cents, 30 cents, or 50 cents).

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

Participants in Stage 1 will be informed about the average score of a group of five participants who had previously completed the identical math test. They will be randomly assigned to observing an average score of either 2.6 ("Low Expectations" treatment) or 6.4 ("High Expectations"). Participants in Stage 2 will observe either only the true Score of the Stage 1 participant when giving advice ("Baseline" treatment) or they will observe the Stage 1 participant's Score along with their Guess ("Information" treatment).

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

We will conduct the following OLS regression for the subset of Stage 2 participants in the "Information" Treatment: $\text{AdviseTopPerformers} \sim b_0 + b_1 \times \text{Score} + b_2 \times \text{High_Expectations}$. We cluster standard errors at the level of the Stage 2 participant, and predict that $b_2 > 0$.

Looking only at Stage 1 participants: $\text{Guess} \sim b_0 + b_1 \times \text{Score} + b_2 \times \text{Male}$. We predict $b_2 > 0$.

Looking only at Stage 2 participants: $\text{AdviseTopPerformers} \sim b_0 + b_1 \times \text{Information} + b_2 \times \text{Stage1_Male} + b_3 \times \text{Information} \times \text{Stage1_Male}$. We cluster standard errors at the level of the Stage 2 participant and predict that $b_3 > 0$. That is, gender differences emerge as a result of showing expectations.

Looking at Stage 1 participants who have received advice from a Stage 2 participant in the Information treatment: $\text{Earnings} \sim b_0 + b_1 \times \text{Score} + b_2 \times \text{High_Expectations}$. We examine whether b_2 is negative.

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

We will include all participants who complete the survey.

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 recruit 1,000 participants for Stage 1 (Advisees) and 1,000 participants for Stage 2 (Advisers). We then re-invite all Advisees for Stage 3 and keep the survey open for 7 days following the launch of Stage 3.

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

We will create groups of ten Stage 1 participants to present to Stage 2 participants. Each group will consist of five men and five women who are matched on their performance. We create the groups such that the average Score of the groups matches the average Score of all participants. We will also conduct a t-test comparing the performance on the math test between men and women and report the results. We will conduct a manipulation check to see if the Guess of Stage 1 participants in the "High Expectations" group is higher than the Guess of those in the "Low Expectations" group using a t-test.