

Pre-analysis Plan: Paying for good intentions? Effect of ex-ante bonuses

Research Questions

- 1) What is the role of monetary incentives on following through on intentions?
- 2) What is the role of the timing of monetary incentives?
- 3) What can explain the effects of the timing of bonus payments?

Study Design

Sampling: We will conduct an experiment with people in the U.S., recruited via Amazon's MTurk. Participants are informed that the study investigates ways to motivate people to follow through on their intention, in this case writing a get-out-the-vote messages. After participants agree to participate, we collect data on their gender, age, education, income, political affiliation, and whether they have previously voted or participated in political activities. We then ask them if they are interested in volunteering to write a short message to potential voters encouraging them to vote in the upcoming election. Dependent on project funding, we aim for sample size of 800 people who are interested in volunteering.

Randomization: Those who express interest are then randomized into one of four groups and learn about details of the task:

- Control: participants receive no payment
- T1 – Post Payment: receive \$1.50 bonus after completing the message
- T2 – Pre Payment: receive \$1.50 bonus today
- T3 – Choice: choose between receiving the \$1.50 bonus today or after completing the task

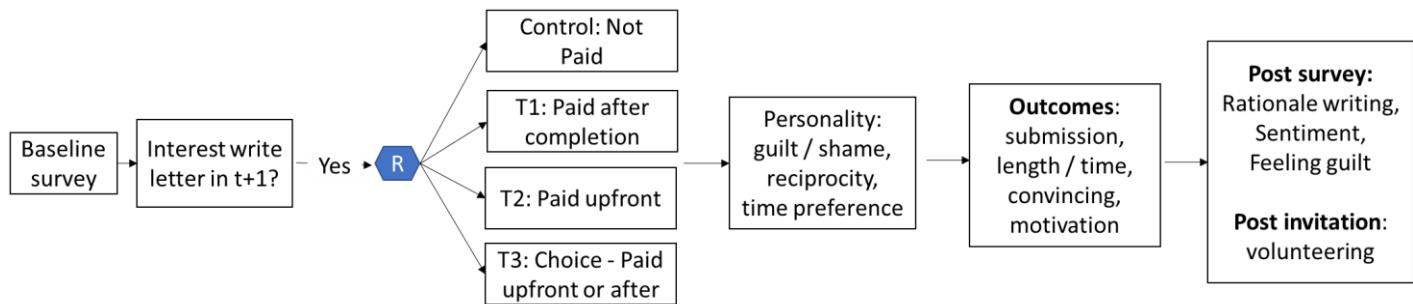


Figure 1: Design Overview

Afterwards, those that agreed to write the letter complete a survey module in which we elicit measures of time preference and their tendency to reciprocate and feel guilty / ashamed. This data is used to distinguish mechanisms, as discussed in more detail below.

Importantly, across all groups, participants can only complete the task starting one day after the initial survey (submission open for a three-day window). This mimics the fact that intentions are about future actions. The day that the submission opens, all people who agree receive a notification with the link

where they submit the letter. By that point, the initial (survey) task has been approved, and workers have been paid. Thus, there are no concerns about having their previous work rejected or reputational effects resulting from failure to follow through on intentions. In addition, the submission site (re-) emphasizes that any (potential) payment does not depend on the content or length of the letter.

After people submit the letter, they complete a short survey in which we ask them how happy writing the letter made them feel, their rationale for completing the letter, and how guilty they would have felt, had they not submitted the letter.

After the submission window has closed, a random subset of participants (not conditional on having submitted a letter) are invited for a voluntary, unpaid task. Specifically, they are asked to rate the effectiveness of four letters.

Analysis Plan

$$(1) \quad y_i = \alpha_0 + \beta_1 T_{any} + \epsilon_i$$

$$(2) \quad y_i = \alpha_0 + \beta_1 T_1 + \beta_2 T_2 + \beta_3 T_3 + \epsilon_i$$

$$(3) \quad y_i = \alpha_0 + \beta_1 T_1 + \beta_2 T_2 + \beta_3 T_3 + \beta_4 P_i + \beta_5 T_1 x P_i + \beta_6 T_2 x P_i + \beta_7 T_3 x P_i + \epsilon_i$$

1. What is the effect of paying monetary incentives (regardless of timing)

- a. We will estimate equation (1) using a binary measure of whether those who commit to write the letter have submitted it within the three day window. T_{any} pools treatment groups 1, 2, and 3.

2. What is the effect of paying an ex-ante bonus and the timing on completing the letter?

Outcomes:

- a. We will estimate equation (2) using a binary measure of whether those who commit to write the letter have submitted it within the three day window.
- b. Beta 1 captures the effect of (ex post) payments
- c. Beta 2 captures the effect of (ex ante) payments
- d. Beta 2-Beta 1 captures the effect of difference in the timing of the payment
- e. Beta 3-Beta 2 captures the effect of giving people a choice over the payment timing relative to paying people before.

3. What is the effect of paying an ex-ante bonus on quality of the letter?

Outcomes:

- a. *Message length:* We will measure the number of words used in the message winsorized (at both tails) at the 20% levels to account for outliers.
- b. *Time spent:* We will record the time it takes people to write the message winsorized (at both tails) at the 20% levels to account for outliers.
- c. *Convincing:* participants (who did not write a letter themselves) are asked to review get-out-the-vote messages. Specifically, they will assess 3-4 messages with respect to how convincing they are (measured on a 1-10 scale).

- d. *Motivating*: We ask participants how each letter affects their motivation to vote and record it as: -1=less likely, 0=no change, 1=more likely

4. What are the underlying mechanisms for why the different treatment are (not) effective? We will estimate equation (3) in which we interact the treatment groups with the following personality traits (P) of participants.

- a. *Procrastinators*
 - i. Rationale: A task in which people receive the incentive upfront but incur the cost (having to complete the task) at a later point may be particularly attractive for these procrastinating hyperbolic discounters (Laibson 1997).
 - ii. Indicator: We estimate time preference parameters using the DEEP method.
- b. *Guilt aversion*
 - i. Rationale: Receive a payment upfront and then failing to follow through on the intention may trigger guilt aversion. This channel may be particularly strong for the people that choose to be paid upfront.
 - ii. Measurement: Index of *guilt aversion* – specifically, we follow Bellemare et al. (2019) and ask participants about their reactions to four hypothetical scenarios. In addition, we ask participants who submit the letter how guilty they would have felt had they not submitted the data (measured on a 1-10 scale). This question is used as secondary evidence since we only collect it for those who submit the letter.
- c. *Shame aversion*
 - i. Rationale: Given that the requestor observes whether a person submits the letter, aversion to shame may be one reason for why people submit the letter.
 - ii. Measurement: Measurement: Index of *shame aversion* – specifically, we follow Bellemare et al. (2019) and ask participants about their reactions to four hypothetical scenarios.
- d. *Positive reciprocity*
 - i. Rationale: A large literature shows that people tend to reciprocate. These include studies of gift exchange, which shows that people increase effort in return for higher wages or other gifts. In this case, people may feel entrusted with an unconditional payment and thus decide to return the trust. We will measure people's tendency to reciprocate through two established survey questions following the global preference survey (Falk et al. 2016). In addition, data on people's feeling collected after completing the letter can help to distinguish guilt aversion and positive reciprocity. The latter would suggest that people feel more positively about completing the letter than the control group.
 - ii. Measurement: Index of two questions on reciprocity. Ordinal measure of happiness after completing the task. Binary measure of whether they are interested in participating in future task.

5. Exploratory Analysis:

- a. For those who submit the letter, we administer a survey where we ask about their motivation for writing the message. Given that we collect this for a subset of
- b. Analysis of participation rates in the voluntary follow-up task of rating additional letters should also be regarded as exploratory since we do not have a clear hypothesis about differences between treatment groups.
- c. We collect data on how soon participants submit the letter. While we explore this data, we do not have a clear hypothesis about differences between treatment groups.