Experimental Overview and Analysis Plan

1. Design Overview (repeated from registry entry)

We seek to determine whether individuals take good advice. We provide subjects with advice that carries a clear signal of its worth then ask them to accept or ignore the advice.

Subjects complete a task (either luck or effort) for which they are told they can receive a bonus payment of up to \$2.50 depending on the quality of their answers. After the task, we tell them their score (out of five) and then introduce "the Adviser", another subject who completed the same task some time ago and scored 4/5. We explain the Adviser agreed to offer their choices as advice to others and ask the current subject if they would like to accept or ignore the advice. If they accept, the Adviser's score of 4/5 determines their payoff. If they ignore, their own score determines it. In all treatments, unless the subject also scores 4/5 (which makes the options payoff equivalent), either "accept" or "ignore" is strictly dominant in terms of the pecuniary payoff.

2. Treatments

The study consists of four treatments spread over two batches of data collection. Below we provide an overview of the treatments, before explaining the setup in more detail.

Treatments 1-3 each differ from the C	Control in one important way.
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	Task	Payoff	Payoff-relevant event
Control	Luck	Deterministic	The task completed
Treatment 1	Effort	Deterministic	The task completed
Treatment 2	Luck	Stochastic	The task completed
Treatment 3	Luck	Deterministic	Another event with the same outcome as the task completed.

Our first batch of data collection will provide the data for our key result and includes the Control and Treatment 1. Subjects are randomly allocated to either a luck task (Control) or effort task (Treatment 1). Payoffs are deterministic and based on performance in the task faced: \$0.50 multiplied by score, e.g., 4/5 gets 4*\$0.50 = \$2.00. After the questions generating our primary outcome measure (the decision to accept or ignore good advice), subjects face various secondary (survey and demographic) measures, detailed below.

Our second batch of data collection presents subjects with some supplementary treatments. Subjects are randomly allocated into Treatment 2 or 3. In Treatment 2, subjects' payoffs are stochastic rather than deterministic, e.g., 4/5 gives a 4-in-5 chance of \$2.50. In Treatment 3, subjects' payoffs are determined by applying their guesses in the task to a fresh set of coin tosses that happened to give the exact same sequence of heads and tails (this means the subject's and Adviser's scores are unchanged, but the payoff is associated with a different set of tosses). No secondary measures are recorded for subjects in Treatments 2 and 3.

3. Subjects

Subjects will be recruited from the Prolific platform. The restrictions on participation are:

- 1. Subjects located in USA
- 2. Subjects with minimum 95% approval rate
- 3. Subjects with minimum 100 previous submissions
- 4. Only desktop users
- 5. Gender-balanced sample
- 6. Maximum completion time for the experiment 56 minutes (This restriction is put by Prolific. Our predicted completion time for the experiment is 15 minutes. Prolific calculates the maximum allowed time as 56 minutes.)
- 7. No prior participation in our study

4. Inattention-Based Exclusion Criteria

We will apply three exclusion criteria ex-post:

- 1. Failing an attention check question of which there are two in the longer treatments (Control and Treatment 1), and one in Treatments 2 and 3.
- 2. Answering the crucial page regarding whether to accept or ignore advice so fast that it is clear they could not have read and processed the text presented, which we believe to be anything within 5 seconds.
- 3. Failing the comprehension question after the advice page, on their first attempt.

5. Hypotheses

Primary hypotheses:

A standard rational benchmark predicts no subject ignores good advice. We expect that to fail, but it is unclear by how much. We will provide an estimate of that. The remaining hypotheses are only applicable if some subjects ignore good advice.

The propensity to ignore good advice falls with the value of advice.

The propensity to ignore good advice depends on the nature of the task (luck vs effort).

Secondary hypotheses:

The decision to ignore good advice is associated with a subject's susceptibility to the sunk cost effect; dispositional envy; stubbornness; IQ; and gender.

The decision to ignore good advice depends on whether the payoff (i) is stochastic or deterministic, (ii) relates to an event the subject has engaged with themselves.

6. Analyses

Data will be summarized where possible by simple histograms. We will also conduct statistical analyses, including those listed below.

To test for treatment effects, difference-in-proportion tests will assess whether there were differences in the propensity to ignore good advice in each treatment versus the Control.

To test whether people trade-off a tendency to ignore good advice with the value of advice, we will report correlations of those two variables.

We will run probit regressions to investigate the determinants of ignoring good advice, with the binary variable (whether good advice was ignored) on the left-hand side and our secondary measures on the right-hand side.

We will provide summaries of demographics and our other secondary outcome measures.

7. Relation to our prior work

This study is part of an ongoing project that seeks to understand when and why individuals fail to change their behavior in the light of new information, especially when framed as advice, including work by some of the co-authors of this project (Ronayne and Sgroi, 2019; Ronayne, Sgroi & Tuckwell, 2021). The "Adviser" was selected from those confirming their willingness to serve that role in an earlier batch of data collection.

8. References

Ronayne and Sgroi (2019), "Ignoring good advice." CAGE WP 359.

Ronayne, Sgroi & Tuckwell (2021), "Evaluating the sunk cost effect." Journal of Economic Behavior & Organization 186, 318-327.