Preregistration

How to sway voters? Part 5

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Study Information

Research question	**RQ1:** Can a dishonest advisor succesfully draw the attention of an interacting dyad?
Hypothesis	**H1 (RQ1):** We expect that the dishonest advisor is better able to draw the attention of an interacting dyad as compared to single individuals.

Design Plan

Existing data	**Registration prior to creation of data**. As of the date of submission of this research plan for preregistration, the data have not yet been collected, created or realized.

Study design

This preregistration is part 3 of the project "How to sway voters". Part 1 of this project can be found here and for full experimental details we will refer to this document. Part 2 of this project can be found here, part 3 here, and part 4 here. In this fifth part, we plan to investigate whether our main result (i.e., a dishonest advisor can draw the attention of a client better than an honest advisor) can also be extended to interacting dyads.

Compared to part 1, we will only use the environment with the highest level of uncertainty (i.e., treatment 1: 25% of trials with 90 balls of one colour, and 75% of trials with 50 balls of each colour). We will run two treatments: i) single individuals, ii) interacting dyads. In both treatments, the human participants will be confronted with an honest advisor (HA) and a dishonest advisor (DA) and have to decide which advisor to follow for a total of 20 rounds. i) The single treatment will be the same as in part 1, with a single individual making decisions by itself. ii) In the dyad treatment, two participants will perform the experiment together sitting next to each other and making consensus decisions. That is, they are encouraged to discuss their opinion with each other and reach an agreement on which advisor to follow.

If participants complete the experiment, they receive a 5 euro flat fee for participation, plus a bonus payment of 10 cents for each correct outcome.

Randomization

In our planned study, the **HA** and **DA** will appear either on the left or right side of the screen and this will be counterbalanced between participants/groups. That is, approximately half of the singletons/dyads will experience the HA on the left side, and the other half will experience the HA on the right side of the screen.

Data collection procedures

The data will be collected via a browswer-based study implemented in the Lioness platform. Participants will be invited to the lab of the Max Planck Institute for Human Development. Participants are recruited from the participant pool of the Center for Adaptive Rationality. The study will take approximately 15 minutes for the single treatment and 20 minutes for the dyads. Participants who complete the study receive 5 euro compensation plus a bonus payment (range: 0 - 2 euro) depending on the number of correct outcomes.

To ensure that participants have understood the instructions before starting the

experiment, a series of comprehension questions is asked after the instructions. Only participants who correctly answer all comprehension questions can start the experiment. Participants can go back to read the instructions during the comprehension questions, but can submit their answers maximally five times (to avoid participants who try all possible combinations of answers). Comprehension questions are present in both the single and dyad treatment (albeit with partly different questions reflecting the relevant differences in experimental treatment).

Sample size and stopping rule

i) For the individual treatment, we will stop data collection as soon as 60 participants succesfully completed the experiment. A successfull completion means that a participant started and finished the experiment. Note that this single treatment is the same as the single treatment in part 4. That is, we do not plan to collect additional data for single individuals, but we plan to use the 60 single participants collected in part 4.

ii) For the dyad treatment, we will stop data collection as soon as 50 groups succesfully completed the experiment. A successfull completion means that a dyad started and finished the experiment.

Measured variables

The key variable of interest is the *choice* of the clients. Additionally, the following demographic variables will be elicited at the beginning of the study for each participant:

1. Age.
2. Gender: female, male, other, do not want to report.
3. Education: basic, high school, college, posgraduate.

Explanation hypothesis

We predict that interacting dyads decide more often for the DA than single individuals. As a potential driving mechanism, we propose that groups experience a higher level of regret as compared to individuals, and are thus more likely to switch to the DA when they selected the HA but lost. Fig. 1 shows the data of a small pilot in which we tested 10 singletons and 10 dyads. In single individuals we observed a 54% likelihood to choose the DA, and in the interacting dyads a 63% likelihood.

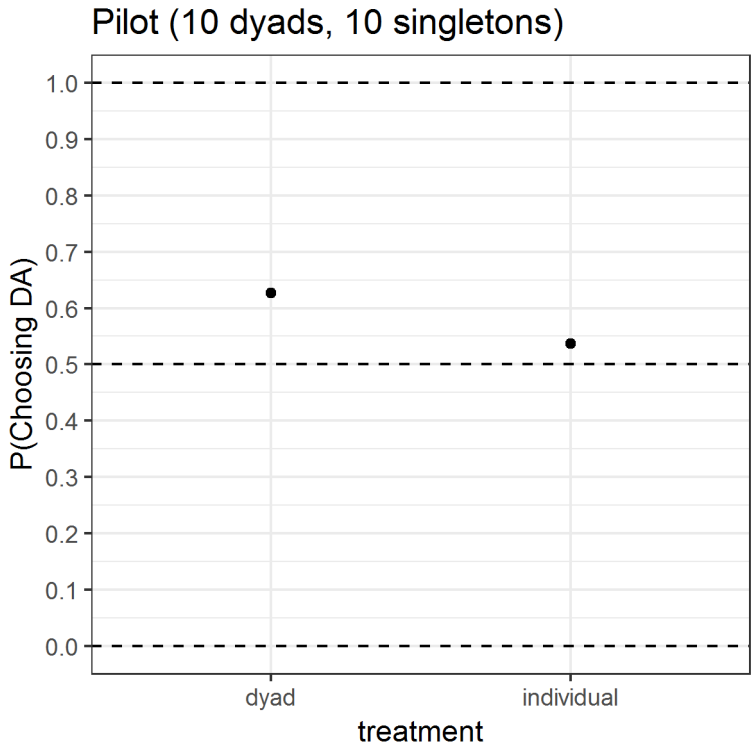

Figure 1: Pilot data on 10 singletons and 10 dyads.