Honesty & Observability

Noah Brown, Jack Engelhard, Javier Fernandez, Maria Fernandez, Mia Ferris, Riley Sheehan.
Research Mentor: Jose Lopez, XS/FS: Experimental Social Science Lab

Introduction & Background

- This economics study introduces an experimental design to examine how varying levels of observation affect dishonest behavior in a Fischbacher & Follmi-Heusi (2013) style lying game. Previous research compared lying when 0% or 100% of decisions were observed (Gneezy et al., 2018; Abeler et al., 2019). This project expands on that by introducing 20% and 50% observation conditions.
- These new settings create environments where participants have incentives to lie but must consider social image costs. By observing individual decisions, the study estimates behavior more precisely, especially among unobserved participants. This allows for testing new predictions of lying models that factor in social image costs.
- This work ties into classical economic theories by challenging the assumption that individuals act solely out of self-interest to maximize utility. Instead, it integrates behavioral economics concepts, demonstrating how social image and the potential for observation influence decision-making, even in situations where economic gain is possible through dishonesty.

Lying Model in this Environment – Gneezy, et al. (2018)

Let $i, j \in \{Detectable\ Messages\}$ and $k, l \in \{Deniable\ Messages\}$
Let M be the number of Detectable Messages
Let N be the number of Deniable Messages

A player with true message k faces the decision choice:

$$u_{kk} = v_k + \sum_m P_m \beta\theta_k^m + (1-\lambda)\beta\rho_k$$ Tell the truth

$$u_{ki} = v_i - c_{ki} - t + P_i\beta\theta_i^i + 0 + (1-\lambda)\beta\rho_i$$ Lie to the detectable lie that maximizes utility

$$u_{kl} = v_l - c_{kl} - t + \sum_m P_m \beta\theta_l^m + (1-\lambda)\beta\rho_l$$ Lie to the deniable lie that maximizes utility

Methods

Our team contributed to this study in two key areas: conducting experiments in the lab and expanding the subject pool. To broaden participation, we delivered curated pitches in primarily freshman business classes, emphasizing the study's relevance and the opportunity for compensation.
The experiment was conducted in the lab using an online survey on the lab's computers. Participants were first provided with detailed instructions about the procedure. Each participant was randomly assigned a folder number between 1 and 100. Out of these 100 folders:

- 50 folders contained envelopes numbered 1 through 10 (one envelope per number).
- The other 50 folders contained envelopes with identical numbers. For instance:
  - One folder contained ten envelopes, each with the number 1.
  - Another folder contained ten envelopes, each with the number 2.
  - This pattern continued up to the number 10.

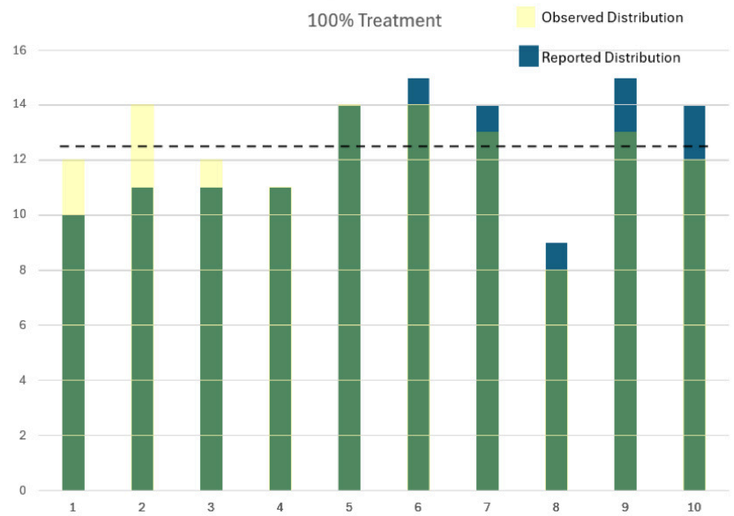
Participants were instructed to select an envelope from their assigned folder, observe the number inside, and then return the envelope to the folder. The researcher recorded the folder number assigned to each participant.
After selecting and noting the number, participants moved to a separate area to privately report the number they received. To incentivize honesty or dishonesty, participants were informed that they would receive additional monetary compensation equal to 0.5 times the reported number. The compensation was provided by a separate researcher who was unaware of the folder assignments.
This setup created a 50% chance that the researchers could detect dishonest reporting, aligning with the 50% observability condition of the study. Data from the 20% observation sessions is pending, and future sessions will complete the analysis across different observation levels.

Our team played a critical role in multiple aspects of this study beyond the lab. We were responsible for the following...

- Coding the online survey - ensuring it was intuitive, secure, and aligned with experimental protocols. At first, we realized that most participants did not understand the observability, so we worked to edit and correct that.
- In-Person Pitches – This allowed us to expand our subject pool and outreach to many students within the FSU community and its College of Business. ur efforts in recruitment were essential in securing a robust sample size and ensuring the validity and reliability of the study's findings.

Results

This is an ongoing experiment. While we are still in the process of data collection, our preliminary results can be seen in the graph below. The graph represents 124 observations collected showing that against the numbered odds, test subjects more often than not lied about the number they pulled in order to recieve higher compensation.



References & Contacts