

Learning in the Household – Follow-up experiment

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1 Motivation

Our initial run of the experiment with 400 married couples and 250 pairs of strangers found that even after we directly and credibly told them their partner’s information, husbands, and strangers of both genders, made guesses that substantially overweighted their own information (the balls they drew themselves) relative to their partner’s.

We are now pre-registering a follow-up experiment to explore this finding further. Our follow-up experiment is designed to answer four research questions.

Firstly, is the overweighting effect due to the specific way information was shared? In particular, three features of the design could conceivably have caused overweighting:

- Participants drew their own balls one at a time, but were told their partner’s information in a clump (i.e. were told just the number of red and white balls). Learning about balls one at a time could make draws more salient in participants’ minds, or lead them to update after each ball and thereby perhaps update more overall.
- Participants received their own information before learning their partner’s information and therefore may have anchored on it.
- Participants were asked to guess in between making their own draws and learning their partner’s information. They may have anchored on this guess, which would also generate overweighting.

Secondly, if people do treat their ‘own’ information as fundamentally more significant in some way, what determines when information is one’s ‘own’? Is it the act of *obtaining* information oneself, by drawing balls, or would it be enough to observe the balls being drawn?

Thirdly, and relatedly, are participants more likely to remember information they obtained themselves? This is unlikely to explain our original overweighting result, as we ensured that both their own and their partner’s information were fresh in their mind when guessing. But understanding the effects of information

‘ownership’ on memory is, we believe, of independent interest and relevant to many real-world situations.

Finally, does overweighting persist even when the incentives for accurate guessing are substantially increased?

2 Design

This follow-up design will consist of several rounds played with pairs of strangers. As baseline comparisons, two rounds will copy, respectively, the core ‘basic’ round from our original experiment and the round from our original experiment in which we tell people their partner’s information. Other rounds will change one aspect of the information-sharing round at a time in order to control for each of the mechanisms described above. In particular, there will be rounds where, in contrast to the original design:

- A surveyor tells each participant their partner’s information ball-by-ball
- One participant learns their partner’s information before making their own draws
- Participants do not guess in between making their own draws and learning their partner’s information
- Participants observe their partners making their draws. In this round, we will also measure participants’ memory of the draws they made themselves and of the draws they saw their partner make.

There are thus six rounds in total. In three of these rounds we will multiply the payoff function by 50%. We will randomize in a balanced fashion the order of the rounds (excepting that the ‘basic’ design always comes first) and which spouse draws first.

The main outcome measure will be the relative weights (estimated by regression) that participants’ guesses place on a summary statistic of each person’s information.

3 Sample Size

We will recruit 400 pairs of individuals: 200 mixed-gender pairs, 100 male pairs, and 100 female pairs.