# Learning in the Household[*]

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March 9, 2026

**Abstract**

How well do spouses pool information and learn from each other? In an experiment with married couples in India, we vary whether individuals discover information themselves or must instead learn it from their spouse. Women's individual decisions respond equally to their own and their husband's information. In contrast, men's decisions respond only half as much to their wife's information, even when it is perfectly communicated. Joint decision-making instead leads to equal weights on husbands' and wives' information. Our findings suggest that decisions made by men are likely to insufficiently incorporate useful information held by their wives.

**Keywords:** household, gender, communication, gender norms, experiment

# 1  Introduction

Household members often have access to independent information through their personal experiences and networks. For example, two spouses might each encounter separate information about the efficacy of vaccines, the returns to an investment, or the schools they might send their child to. How efficiently do spouses learn from each other and incorporate each other's information into their decisions? How does this depend on whether the decision is made privately by one spouse or jointly by the couple?

A recent literature has shown that when spouses have different preferences—e.g., different desired fertility—they may hide or distort information, and communication may break down, contrary to the assumptions of standard household decision-making models. But how efficient is learning within the household in the *absence of strategic motives*? Should we think of strategic issues as causing occasional deviations from a default case of efficient learning and information pooling within the household?

It is difficult to rigorously answer these questions using observational data or natural field experiments for two reasons. First, it is hard to observe each person's information set, which may itself be endogenous to whether their spouse 'listens'. Second, different preferences over outcomes may be hard to rule out in any given domain. We therefore design a lab experiment that carefully varies information while aligning incentives for participants to learn from each other and pool information. 400 married couples play a simple learning game, guessing the share of red balls in an urn. Before guessing, they receive two noisy signals—sets of draws with replacement—from the same urn. In a control condition, where individuals play on their own and privately draw both signals themselves, men and women have similar performance and self-confidence.

In the treatment conditions, the two signals are split up across the two spouses: each spouse privately draws only one signal and then gets the chance to learn their spouse's signal through a face-to-face discussion before the couple makes a joint guess (akin to a household decision). Each spouse then makes a private guess (akin to an individual decision). Couples play multiple rounds of the experiment, facing different treatments in randomized order. Some treatments ensure that relevant information is shared, reducing communication frictions.

Incentives in the experiment are fully aligned across spouses. One of the guesses made by the two spouses in the experiment is randomly chosen to be paid off based

on its accuracy. This payoff is split equally between the spouses—even if the guess was privately made by one spouse—creating incentives to pool information. Guesses made after discussion are kept private, even if selected for payment. This design provides a simple test for information pooling: are guesses—joint household guesses or private guesses made by each spouse—equally sensitive to information discovered by the husband and the wife?

**Private decisions.** In their private guesses, husbands put substantially less weight on information collected by their wives, while wives place equal weight on information collected by themselves and by their husbands. Pooling across treatment rounds, men are 46% less sensitive to signals drawn by their wives ($p < 0.01$). In contrast, women are only 10% less sensitive to signals drawn by their husbands, and we cannot reject that women treat their own and their spouses' information the same ($p = 0.38$). This difference in weights placed on their spouse's information between husbands and wives is statistically significant ($p = 0.04$).

Ex ante, one plausible mechanism for this finding is asymmetric communication: perhaps men speak up in the discussion while women are hesitant to voice their opinion, or perhaps men are less likely to elicit their partner's information. We find that such differences in communication do *not* drive the results. In a treatment in which the experimenter directly informs each participant of their spouse's signals, men discount those signals by a striking 83% ($p < 0.01$). Men thus largely neglect their wives' information even when it is perfectly communicated by a third party (and then potentially confirmed by their wife in a face-to-face discussion). As a result, wives' draws increase men's expected earnings by 85% less than their own draws ($p = 0.04$). In contrast, we cannot reject that women place equal weight on their own and their husbands' signals in this (and every) treatment. By design, lack of communication, differences in ability, and/or mistrust between spouses cannot explain husbands' behavior.

**Joint decisions.** In contrast to husbands' private guesses, we do *not* find evidence of joint household guesses putting differential weights on wives' compared to husbands' information. Instead, when husbands and wives must enter a joint household decision, the decision is equally sensitive to the information men and women uncover. In this way, household decisions are closer to wives' private decisions than to husbands'. We do still find evidence, however, of information-sharing failures: the joint guess is more sensitive to both husbands' and wives' signals in the treatment where the experimenter ensures information is shared ($p = 0.01$). While joint guesses weight information from

both spouses equally on average, information is not perfectly shared.

Does this asymmetric learning reflect a general gender difference in learning from others? Re-analyzing Experiment 1 from Conlon et al. (2026)—where 500 adults at the same lab played the same experiment in pairs of mixed- and same-gender strangers— we cannot reject equal under-weighting by men and women ($p = 0.61$). *Both* men and women put substantially less weight on information discovered by their randomly-assigned partner, implying that husbands treat their wife's information as they treat a stranger's.[1] Wives instead put more weight on their husband's information than on strangers' (even male strangers') information ($p < 0.01$). Controlling for observable characteristics such as the players' relative age, marital status, relative ability, or confidence does not explain away the differences between husbands and wives, or between spouses and pairs of strangers.

Since men and women treat strangers' information similarly, the asymmetry in learning between wives and husbands is not due to gender differences *per se* (e.g., in self-confidence, assertiveness, or competitiveness; Niederle and Vesterlund, 2011; Exley and Kessler, 2022; Exley et al., 2020). Instead, the marital context itself appears to generate gender differences in behavior, perhaps due to norms of wives deferring to their husbands. We provide suggestive evidence that spouses with greater decision-making power at home place higher weights on their own signal relative to their spouse's. Having more power at home might therefore lead individuals to ignore valuable information held by their spouse, which can make both spouses worse off.

**Implications.** Our findings suggest that household decisions might be particularly inefficient in cases where husbands largely decide on their own but wives hold decision-relevant information. In contrast, we expect joint decisions and those made by wives only to incorporate information from both spouses equally, even if information is not perfectly pooled in joint decisions.

What types of decisions are likely to fall into these different categories? Commonly-used datasets such as the DHS, the HRS, and the EU-SILC ask questions about household decision-making at too broad a level (e.g. "major household decisions") to form

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[1]As argued in Conlon et al. (2026), this underweighting of others' information cannot be explained by factors such as confusion, social signaling, reputational concerns, competitive behavior, differences in ability or confidence, mistrust of the experimenter, propensity to contribute information (Coffman, 2014), or reluctance to ask for or provide information (Chandrasekhar et al., 2019). Instead, it suggests a form of ownership effects over information, related to Hartzmark et al. (2021).

a detailed picture (Jayachandran et al., 2023). Still, existing literature provides some hints. Men tend to have greater say in major financial investments (Mader and Schneebaum, 2013) and in agricultural production (Alwang et al., 2017; Anderson et al., 2017). Women are thought to have equal or greater decision rights over daily household consumption, while education expenditures are more likely to be jointly decided (Mader and Schneebaum, 2013; Peterman et al., 2021; Anderson et al., 2017).

Our study contributes to the literature on household decision-making. We provide a new way to study women's power in the household—measuring how their knowledge and information influences decisions—even when the decision is made by their spouse (Jayachandran and Voena, 2025). Standard models of household decision-making assume that spouses have identical beliefs but may have differing preferences (Chiappori and Mazzocco, 2017). Several recent papers have relaxed the assumption of perfect information pooling, exploring situations where one spouse may have strategic reasons to hide information from the other (e.g., Ashraf, 2009; Ashraf et al., 2014; Ambler, 2015; Lowe and McKelway, 2022). Others have measured information asymmetries (Afzal et al., 2022) and tested whether information is transmitted within the household (e.g., Fehr et al., 2024; Ashraf et al., 2021, 2022; Apedo-Amah et al., 2020; Cassidy et al., 2023; Anderberg et al., 2024; Delavande et al., 2025). To our knowledge, our paper is the first to study how couples pool information when their incentives are fully aligned. Building on our work, Mustafi (2024) replicates our finding of imperfect information pooling in the same lab task but finds better information pooling in gendered domains.

Our study also adds to the literature on the role of gender in group judgments and decision-making. Existing evidence shows that women are less likely to contribute their ideas, particularly in stereotypically-male tasks (Coffman, 2014; Cooper and Kagel, 2016) and in mixed-gender groups (Bordalo et al., 2019; Chen and Houser, 2019). When women do contribute information, they are often perceived as less competent or worse communicators, even conditional on ability (Beaman and Dillon, 2018; Coffman et al., 2021; Mengel et al., 2019). In a task with no gender differences in performance or confidence, we find that gender differences in learning can emerge in the household context, even without gender differences outside it. This echoes Abbink et al. (2020), who show that women in Bangladesh are more likely than men to delegate risky lab decisions to their spouse, despite no gender differences when playing with strangers.

# 2   Setting, Recruitment, and Study Sample

The experiments were conducted between June and December 2019 at the Behavioral Development Lab in Chennai, a relatively progressive city in India. We recruited participants on a rolling basis, with about 2 to 5 pairs of people completing the experiment on a given day. Recruitment stopped when we reached our pre-specified target of 400 couples and 500 unrelated individuals (250 men and 250 women) who completed the experiment.

**Recruitment of couples.** We recruited couples from low- to middle-income communities within a reasonable travel time of the lab. Surveyors went door-to-door to advertise an academic study on 'how decisions are made in the household'. Potential participants were informed that they would spend 2 to 3 hours at the study office and could expect to earn Rs. 300-560 ($4-7.75) per couple, plus a payment of Rs. 100 ($1.40) to cover travel expenses. Participants were required to be 'married couples' who could come to the lab together.[2] No more specific information was provided at this point.

**Recruitment of strangers.** Our 'strangers' sample—also described in Conlon et al. 2026 as 'Experiment 1'—participated in a separate set of experimental sessions, where they played in both mixed- and same-gender pairs. We recruited individuals unknown to each other before our study from the same neighborhoods as the couples sample. Recruiters followed the same procedure as for the couples sample, with the exception that participants were recruited individually.

**Descriptive statistics.** Table A.I shows characteristics for the two samples. The average couple has been married for about 12 years, and husbands are about 5 years older than wives (columns 1 and 2). Average education is similar across spouses at about 8 years, though husbands are somewhat more numerate than wives. They are also much more likely to work outside the household (100% vs. 42%) and thus earn about 5 times more than wives on average. Our secondary sample of strangers (columns 3 and 4) is similar to the couples on demographics, except that they also include single adults of both genders (although a majority are married). They have similar education levels, ages, literacy, numeracy, and labor-market participation relative to the couples.

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[2]In practice, by 'married couples' we mean cohabiting couples who identify as married. Given the cultural context, it was inappropriate to ask people to reveal other forms of romantic relationships. It is also uncommon in our study context for same-sex couples to publicly identify as such, and thus our sample consists entirely of couples consisting of one man and one woman.

# 3 Experimental Design

The main goal of this paper is to study how well spouses learn from each other in a simple setting where both spouses would benefit from pooling information. The experimental design allows for a simple test of whether a participant is equally sensitive to their own and their partner's signals. This section describes the experimental design for the Spouses Experiment; the Strangers Experiment is nearly identical as briefly described at the end of Section 3.1.

Studying learning in the lab allows us to align the incentives of the spouses. With payoffs split equally between spouses, there are no strategic reasons to withhold information and clear incentives to pool it. In addition, we can tightly control each spouse's private information set and calculate the "right" answer.[3] This allows us to ask whether underweighting of spouses' information is a mistake: Does it lead to guesses farther from the Bayesian benchmark?

Figure 1 illustrates the experimental design.[4] Participants play five rounds of a balls-and-urns task (Benjamin, 2019). The goal in each round is to guess the number of red balls in an urn containing 20 balls. Participants are informed, with the help of Figure A.I(a), that the number of red balls is drawn uniformly from 4 to 16 in each round. In each round, participants can learn two signals about the composition of the urn. Each signal is a set of independent draws (with replacement) of balls from the urn, either drawn privately by the participant themselves or by their partner. The number of draws in each signal is randomized—either 1, 5, or 9 draws—creating variation in how informed each participant is. After receiving each set of draws—or potentially learning them through a discussion with their partner—participants privately guess the number of red balls in the urn.

We incentivize participants to pool information and make accurate guesses by rewarding one randomly-chosen guess from each pair for its accuracy. We use easy-to-understand incentives: the closer their guess is to the truth, the more participants are paid. More precisely, as illustrated in Figure A.I(b), participants earn Rs. 210 if the guess is exactly correct, and lose Rs. 30 for each ball that their guess is away from the truth (though the guess cannot earn less than Rs. 0). The maximal pay of Rs. 210

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[3]More precisely, we can calculate what the expected-earnings maximizing guess made by a rational Bayesian would be when presented with the same signals.

[4]Full scripts for the experiment are in Appendix B.

per pair is about \$3 and Rs. 30 is about \$0.40. These incentives are substantial when compared to average daily earnings of Rs. 357 (\$4.21).

To ensure that incentives to pool information are aligned within the pair, we divide the payoff equally between the two participants irrespective of who made the guess that is chosen for scoring. Each participant receives their half in a separate envelope at the end of the experiment.[5] Each person thus has an incentive to make every guess from their team as accurate as possible. Neglecting to ask your partner for information, withholding information from your partner, or failing to incorporate information your partner tells you reduces your own expected payoff.

Any private guesses made after discussion were not revealed, even if selected for payment. This ensures that participants have incentives to guess what they truly think, without worrying about revealing potential disagreements to their spouse.

Comprehension of the experimental instructions was excellent, as measured by the comprehension checks reported in Table A.II. Husbands and wives each answered about 87% of questions correctly on the first attempt.

## 3.1 Experimental Treatments

Figure 1(b) shows the structure of the *Individual* (control) condition and each treatment condition. Participants first play, in randomized order, one round of the *Individual* condition and one round of the *Discussion* treatment.

*Individual* **condition.** The participant first draws a set of balls from the urn, then guesses how many red balls are in the urn. Then, they draw a second set of balls from the urn and make a second (and final) guess. All drawing and guessing is done privately, with no opportunity to share information. This serves as a control condition—a benchmark against which we compare the other treatments.

*Discussion* **treatment.** Each person first privately draws a set of balls from the same urn. Exactly as in the *Individual* condition, each participant then makes a private guess. Next, the pair is asked to hold a face-to-face discussion, for as long as they like, and decide on a joint guess. After this joint guess, each person makes one final, private guess. Participants are aware that they will enter a joint guess after the discussion and

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[5]Of course, married couples—but not strangers—might redistribute the earnings after leaving the experiment. Even so, each partner should be at least weakly better off by pooling information.

will then each make a private guess. Thus, they have an incentive to pool information with their partner.

Comparing each participant's final guesses in the *Individual* condition to their final guesses in the *Discussion* treatment reveals how much they react to information that they uncovered themselves relative to information that is discovered by their partner and potentially learned from them via discussion. By design, participants have access to the exact same number of draws to inform their final private guess in these two conditions, provided they share information.

To test whether any potential underweighting of others' information is caused by communication frictions (i.e., information is never communicated between partners) or by inefficient use of communicated information, we implement two additional treatments to mitigate communication frictions. Participants play these along with a second round of the *Discussion* treatment in randomized order.

***Informed of Partner's Draws* treatment.** This treatment is identical to the *Discussion* treatment except that after each participant receives their first set of draws and enters their first guess, they are told their partner's draws (both number and composition) directly by the experimenter, e.g., "Your spouse had five draws, of which three were red and two were white." They then make an additional private guess, which can incorporate both sets of draws, before moving on to the discussion, joint guess, and final private guess. A greater relative weight placed on one's partner's signal in this treatment compared to the *Discussion* treatment would reveal a lack of communication or mistrust between spouses in the face-to-face discussion.[6]

***Informed of Partner's Guess* treatment.** This treatment is identical to the *Informed of Partner's Draws* treatment except that the experimenter tells each person their partner's private guess (based on their own draws only) rather than their partner's draws. The experimenter also shares the number of draws on which this guess was based, e.g., "Your spouse had 5 draws and, after seeing these draws, they guessed that the urn contains 12 red balls." Thus, while in the *Informed of Partner's Draws* treatment we directly transmit the signal received by one's partner, in the *Informed of Partner's*

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[6]Comparing the guess made after informing each participant of their partner's draws (but before discussion) with the final guess in the *Individual* condition cleanly tests whether information is used identically regardless of the source. Comparing the post-discussion guesses in the *Informed of Partner's Draws* and *Discussion* treatments holds fixed joint deliberation while testing whether communication frictions in discussion inhibit information pooling.

*Guess* treatment we transmit the action (guess) taken based on that signal. When observing actions, beliefs about others' competence might affect how these actions are interpreted and how much is learned about the signals.

**Strangers experiment.** To learn whether spouses pool information differently than comparable strangers and whether any gender differences between spouses are specific to the marital context, we repeat the experiment with pairs of strangers—who are quasi-randomly assigned to each other—with similar demographics. The pairs of strangers play the same five rounds of the task as above, the order of which was similarly randomized. However, participants play one of the two *Discussion* treatment rounds—picked at random—in same-gender pairs and the other four rounds in (the same) mixed-gender pairs. This allows us to also test whether mixed-gender environments themselves create gender differences in behavior, as in Babcock et al. (2017).

## 3.2 Individual Performance and Confidence

In both samples, men and women perform equally well in the *Individual* condition. Figure A.II Panel A plots spouses' average performance—the expected earnings from their guesses—in the *Individual* condition against the number of draws they received. Reassuringly, expected earnings increase with the number of draws, implying that participants learn from more signals. The difference between husbands' and wives' expected earnings is insignificant at each number of draws.[7] In 48% of couples, the wife outperforms the husband. Average guesses for both husbands and wives are quite close to those a risk-neutral Bayesian would make following the same draws (Panel B). Figure A.V shows very similar patterns in the strangers experiment.

Men and women are both—equally—overconfident about their own ability, as reported in Figure A.II and Table A.I. After completing the experimental rounds, we asked participants to privately predict their own and their partner's average expected earnings excluding any joint guesses.[8] Men correctly believe that their wives are as good as they are, but intriguingly, women *incorrectly* predict that their husbands are

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[7]Consistent with this, husbands and wives also have nearly identical expected overall earnings (Rs. 122 vs. Rs. 120, $p = 0.33$), as shown in Table A.I.

[8]These predictions were incentivized. Each participant's prediction of either their own or their partner's earnings was randomly picked to be paid off. Participants earned Rs. 50 for a prediction within Rs. 30 of the truth, and nothing otherwise. It was not revealed to participants which guess was paid off. A participant's guesses were not revealed to their partner.

better than them. Women's inflated views of their husband's ability relative to their own do not extend to other men; when asked about their male partners in the strangers experiment, or about men versus women 'in general,' women do not think that men outperform women.

Altogether, we interpret these facts as suggesting that our experimental task is not particularly gendered. Men and women are equally good and, except for wives' beliefs about their husbands, largely believe that they are equally good. This is worth noting since recent literature has shown that the gender stereotype of particular tasks affects beliefs (Bordalo et al., 2019), belief updating (Coffman et al., 2024), and contributions to problem solving (Coffman, 2014; Coffman et al., 2021).

# 4 Results

## 4.1 Empirical Framework

We test whether participants respond differently to information gathered themselves and by their partner, and whether this varies with gender. Following Conlon et al. (2026), let $First\ Signal_{irt}$ and $Second\ Signal_{irt}$ be the net number of red draws (i.e., red minus white draws) in the first and second signal, respectively, for individual $i$ in round number $r \in \{1, 2, 3, 4, 5\}$ and treatment/control condition $t$. We estimate the following equation by OLS:

$$Guess_{irt} = \alpha + \beta_1 \cdot First\ Signal_{irt} + \beta_2 \cdot Second\ Signal_{irt} \qquad (1)$$
$$+ \boldsymbol{\beta_3} \cdot \mathbf{T}_{irt} \cdot Second\ Signal_{irt} + \epsilon_{irt}$$

where $Guess_{irt}$ is $i$'s private guess of the number of red balls in treatment condition $t$ when it occurred as the $r^{\text{th}}$ round a participant played (to account for any order effects). $\beta_1$ captures the "weight" that participants put on their first set of draws, averaging across all treatments.[9] $\beta_2$ is the weight they put on their second signal in the *Individual* condition when they gather the signal themselves. $\mathbf{T}_{irt}$ is a vector of indica-

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[9]We average across all rounds and conditions for *First Signal* since the treatment only applies to the second set of signals. In a robustness check (Table A.III), we allow $\beta_1$ to vary by treatment. This does not change our conclusions. Throughout the analysis, we do not include participants' first private guess within each round, since this occurred before they had a chance to learn about their partner's signal.

tors for whether a particular guess corresponds to the *Discussion*, *Informed of Draws*, or *Informed of Guess* treatments or, in a pooled analysis, any of these treatment conditions. When breaking down effects by treatment condition, we allow for arbitrary order effects by including round-number dummies interacted with *Second Signal$_{irt}$*. Standard errors are clustered at the pair level.

Our key parameter of interest is $\boldsymbol{\beta}_3$, which captures the *differential* weight placed on the second set of signals when they are drawn by one's partner. With perfect information-pooling, it should not matter whether the signals were drawn oneself (as in the *Individual* condition) or by one's partner (as in the *Discussion* or *Informed* treatments), i.e., $\boldsymbol{\beta}_3 = 0$.[10] If instead $\boldsymbol{\beta}_3 < 0$, then participants in the corresponding treatment do not fully learn their partner's information or under-weight it relative to had it been their own.

Our analysis does not assume that participants are Bayesian. Even if participants deviate from Bayesian updating in the many ways documented in the literature, they should still respond similarly to their own signals and their partner's signals, since the order of receiving the signals, the average number of draws, and the prior are held equal across treatments by the experiment. This test is robust to arbitrary differences across husbands and wives in their risk preferences as well as their ability to update their beliefs accurately—following Bayes' Rule—when playing alone.

Conlon et al. (2026) lays out non-parametric and structural alternatives to the reduced form approach described above. The structural model has some strengths, such as fully accounting for the signal structure, the incentive scheme, and providing interpretable weights on signals relative to a Bayesian benchmark. Yet all the qualitative and substantive conclusions remain unchanged, and we therefore omit those analyses here for concision.

## 4.2   Couples Experiment: Individual Decisions

Figure 2 plots the average weights participants place on men's vs. women's information. For example, the first two bars show the average weights husbands place on

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[10]A partial exception to this benchmark is for participants' pre-discussion guess in the *Informed of Guess* treatment. Here, participants do not have direct information about their partner's signal and must instead (try to) back it out from their guess. However, in practice, weights on partners' signals in the pre- and post-discussion guesses in the *Informed of Guess* treatment look very similar.

their own (blue bars) and their wives' signals (grey bars) pooled across rounds in the Couples Experiment. Similarly, the second two bars show the weights wives place on their husbands' (blue bars) and their own signals (grey bars).

Husbands' guesses are much less sensitive to signals collected by their wives compared to their own signals. When collected by their wives, husbands put 46 percent less weight (0.29 vs. 0.54) on the second signal than on the corresponding signal in the *Individual* condition ($p < 0.01$, Table 1 column 1). This implies husbands do not learn efficiently from their wives: they either fail to learn their wife's signal in the first place (communication frictions) or discount it upon learning it (information-processing frictions).[11]

Column 2 of Table 1 shows that husbands heavily discount their wives' information in all treatment conditions. In the *Discussion* treatment, husbands discount their wives' signals by over 60 percent (0.32/0.53).[12] Strikingly, when the experimenter directly informs husbands about their wives' signals, husbands discount their wives' signals even more (83 percent vs. 60 percent, $p = 0.09$).[13] By design, this cannot be explained by a failure to communicate or by husbands mistrusting their wives. Instead, it appears that husbands process information discovered by their wives differently from their own information. Similarly, husbands put very little weight on their wives' signal in the *Informed of Partner's Guess* treatment.

Wives, in stark contrast to husbands, do *not* significantly under-weight their spouse's information relative to their own (Table 1 columns 3 and 4). They place about 10 percent lower weight on their husband's information in the pooled treatment conditions compared to their own information in the *Individual* condition, but this difference is not statistically significant ($p = 0.38$). Unlike husbands, wives thus learn and process their spouse's signal (nearly) as effectively as their own. Husbands and wives significantly differ in the 'discount' they place on each other's information overall ($p = 0.04$) and in

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[11]Participants are slightly less sensitive to signals than a risk-neutral Bayesian would be in the *Individual* round (Figure A.II Panel B). By being even less sensitive to their wives' signals, men move even further away from a Bayesian benchmark.

[12]For ease of presentation, we pool the pre- and post-discussion guesses for the two *Informed* treatments in the main analysis. Disaggregated estimates for all guesses are shown in Table A.IV and Figure A.III. These reveal that husbands' discounting of their wives' information in the *Informed* treatments is large and significant both before and after discussion with their wives.

[13]These effects are even larger than the pooled estimate. This discrepancy is explained by the controls for order effects, which cannot be included in the pooled specification because the order of treatments was not fully randomized (see Figure 1). In either case, husbands' discounting of their wives' information is substantial and statistically significant.

each treatment condition ($p \leq 0.02$).

Husbands' discounting of their wives' signals is costly for couples. Table A.V regresses expected earnings on the (randomized) number of draws in each signal. Husbands (column 1) earn 85% less (1.73/2.03) per additional draw when this draw comes from their wife rather than themselves ($p = 0.04$). In contrast, the difference in expected earnings for additional own vs. their husband's draws is small in magnitude and insignificant for wives (column 3).

## 4.3   Couples Experiment: Joint Decisions

Perhaps surprisingly given the above results, joint guesses put similar weights on husbands' and wives' information and are thus closer to wives' guesses than to husbands' guesses (Figure 2). Joint decisions by couples put slightly more weight on wives' information compared to husbands' information in the *Discussion* treatment but do the opposite in the *Informed* treatments, though none of these differences is statistically significant (Figure A.IVa).

Expected earnings from joint guesses are also closer to wives' than to husbands' guesses (Table A.VI cols. 1 to 3). A woman's additional draw increases expected earnings from husbands' guesses by 64 percent less (($2.27-0.81$)/2.27) than for joint guesses ($p < 0.01$). In contrast, while we can still reject that additional men's draws equally increase expected earnings from wives' and joint guesses, the discrepancy is only 24 percent ($p = 0.04$).

We do still find some evidence, however, of information-sharing failures: the joint guess is more sensitive to both husbands' and wives' signals in the *Informed of Draws* round, where the experimenter ensures information is shared, than in the *Discussion* round (Figure A.IV). We can reject the hypothesis that the joint guess places equal weight on both sets of signals in both rounds ($p = 0.01$, see Table A.VII). While joint guesses weight information from both spouses equally on average, information is not perfectly shared.

Our interpretation of these patterns is that group decisions mitigate biases in individual decision-making in our setting. While spouses may disagree on the best decision—as evidenced by the fact that only half of the participants make the same private final guess as the joint guess—a process of bargaining and compromise delivers

equal weights in the joint guess. Thus, for decisions that are truly made jointly in the household, the standard assumption of information pooling may not be a bad one—at least as long as both spouses have aligned preferences. However, when household decisions are made by an individual—particularly by husbands in culturally similar contexts to India—information pooling may fail even when this makes both spouses worse off.

## 4.4  Strangers Experiment

Both men and women significantly discount their partner's information when their partner is a stranger (right panel of Figure 2). In contrast to wives, who put equal weight on their own and their husbands' signals, both men and women paired with a stranger heavily discount their partner's signals by about 50 percent ($p < 0.01$, Table 1 columns 5 and 7). We cannot reject that men and women discount strangers' information by equal amounts ($p = 0.61$), and in none of the treatments can we reject equal discounting by men and women when paired with strangers (Table 1 columns 6 and 8). Both men and women place somewhat higher weight on their partner's signals when their partner shares their gender, but these differences are not statistically significant.

Are men and women behaving differently in the two samples? To formally test for gender differences between married couples and pairs of strangers, we pool the *Discussion* and both *Informed* treatments of both samples and estimate how the weights placed on one's partner's info vary by sample (couples vs. strangers) and by gender (Table A.VIII, column 1). Men treat others' information quite similarly when partnered with their wives versus with strangers (8% difference, $p = 0.408$). In contrast, while women place no more weight on their partner's information than men do when playing with strangers (4% difference, $p = 0.737$), they place significantly more weight on their partner's information when that partner is their husband (33% difference, $p < 0.001$).

Could sample selection explain the differences in women's guessing patterns across experiments? One might worry that participants differ across the two experiments, given the difference in recruiting (individuals vs. couples). First, it is worth noting that married and unmarried individuals discount strangers' information similarly, both pooling across participants (Table A.IX, columns 7 and 10) and within gender (columns 11 and 12). Still, one might be concerned, for instance, that women in the Strangers Sample are more 'independent' than wives in the couples sample (which in turn might be associated with more discounting of others' information). We cannot fully rule

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out such differences, but controlling for participants' observable characteristics (such as their marital status, labor-force participation, daily earnings, self-confidence in the task, etc.) does not explain away the gender differences in guessing patterns across couples and strangers (Table A.IX).

## 4.5   Variation across Households

What explains the asymmetry in learning across genders (only) in couples? More generally, what determines the weight each spouse's signal receives? We report an exploratory analysis of heterogeneity across households, as well as a randomized sub-experiment testing for the importance of social signaling.

First, we study the role of the relative power to make decisions in the household. Does husbands' information receive greater weight in shaping both spouses' beliefs in couples where husbands tend to make most of the important household decisions? Second, a spouse perceived to be more competent might be more likely to dominate discussions or be viewed as having more relevant information, leading to more weight put on their signals. To test these hypotheses, we estimate:

$$Guess_{ij} = \alpha + \beta_1 \, Husband's \; Signal_{ij} + \beta_2 \, Wife's \; Signal_{ij} \tag{2}$$
$$+ \, \gamma_1 Husband's \; Signal_{ij} \times \mathbf{X}_j + \gamma_2 \, Wife's \; Signal_{ij} \times \mathbf{X}_j, + \epsilon_{ij}$$

where $Guess_{ij}$ is the guess by decision-maker $i$ (husband, wife, or joint couple decision) in couple $j$ of the number of red balls in the urn (Table A.XIII shows nearly identical results if we exclude joint guesses). $Husband's \; Signal_{ij}$ and $Wife's \; Signal_{ij}$ are defined similarly to Equation (1) as the net number of red draws in the husband's and wife's signals, respectively. $\mathbf{X}_j$ is a vector of household characteristics that includes normalized indices of (i) the relative household decision-making power of the husband,[14] and (ii) the relative ability of the husband at the experimental task.[15]

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[14]The household decision-making power variable is constructed by taking the average answer couples gave to questions asking whether the husband primarily made decisions for the household regarding finances, education, health, shopping, travel, savings, and loans, whether he managed the money in the household, whether he was the primarily household decision-maker, and whether he earned more outside the household than the wife, and whether he is older. See Table A.X for summary statistics on each of these components.

[15]The relative ability measure averages indicator variables for whether each spouse thinks the husband is better at the experimental task, whether he answered more comprehension questions correctly, more numeracy questions correctly, more memory questions correctly, and performed better (in first

Table 2 shows the results, pooling the guesses made by husbands, those made by wives, and joint guesses. In column 1, the interaction of the husband's decision-making power with the husband's signal is positive and significant for the *Discussion* treatments, while the interaction with the wife's signal is negative (though not significant). The key test is for the difference between these two interaction coefficients, which is sizable and statistically significant ($+0.11$, $p = 0.03$). Thus, in households with higher husband's decision-making power, relatively higher weight is placed in the *Discussion* treatment on his signal relative to his wife's. This difference is driven equally by the guesses of husbands, of wives, and of joint decisions (Table A.XI). That is, the higher the decision-making power of a spouse, the higher the weight *both* spouses place on that spouse's information set, even in their own private beliefs. Although only a correlation, this result hints at how underlying power relations within a couple affect not just (say) bargaining weights over actions, but also how knowledge within the household is weighted, along the lines of Hoff et al. (2017). We do not see the same patterns in the *Informed of Draws* and *Informed of Guess* treatments, which might suggest that household decision-making power distorts the weight placed on information less once information is externally verified.

We find a similar pattern of results for relative ability. In the *Discussion* treatments, the higher the relative ability of a spouse at the experimental task, the more their information is weighted (Table 2 column 2). The difference in the interactions between husband's relative ability and husband's and wife's signals is again large and statistically significant ($+0.17$, $p < 0.01$) and the effect is again driven by both spouses and joint decisions (Table A.XI). Note that ability at the task should not, in theory, affect weight placed on the signals themselves — the more competent spouse can always 'do the math' themselves after extracting relevant information from their partner. Instead, they simply down-weight the information from their partner. We observe directionally similar but smaller and insignificant patterns for the *Informed of Draws* and *Informed of Guess* treatments.

Finally, we also investigate whether the physical presence of an experimenter during the discussion affected learning between husbands and wives. If so, this would suggest some role for social signaling to the experimenter in the weights placed on one's spouse's information. We randomized within-couple whether the experimenter was present in the booth during the discussion in each round. We find no evidence that the experimenter's

private guesses) at the task. See Table A.X for summary statistics on each of these components.

presence affects husbands' or wives' weighting of their spouses' signals (Table A.XII).

# 5    Conclusion

Our findings imply that—even absent strategic motives—households may not pool information. Spouses may fail to learn from each other, even when this makes them both worse off. Moreover, this occurs asymmetrically by gender, despite considering a gender-neutral domain. Wives correctly place equal weight on their own and their husband's information, while husbands are much less sensitive to their wife's information. If these findings prove to be true more generally, then policy-makers who want to ensure that both spouses in a household acquire some knowledge should not assume that informing or training one spouse will suffice. Information provided to women may be particularly discounted, as in BenYishay et al. (2020).

Our study has numerous limitations that point to useful avenues for future research. First, it would be valuable to collect more data on differences in economically important beliefs within the household, as in, e.g., D'Acunto et al. (2021), Fehr et al. (2024), and Delavande et al. (2025). Second, it will be important to study information pooling within the household using more natural field experiments and with higher stakes, as in Ashraf et al. (2021). Third, we studied a relatively gender-neutral domain in which men and women had similar ability and similar beliefs about own ability. Given the well-documented importance of gender stereotypes in beliefs and learning (e.g., Coffman et al., 2021, 2024), it would be interesting to study if individuals weight their spouse's information more highly when it is in a domain congruent with the spouse's gender (see Mustafi 2024 for a recent experiment along these lines). Finally, it will be important to better understand the kinds of decisions in which the psychology we document matters most. In culturally similar settings, decisions that are made largely by husbands but to which wives have some relevant information are likely to see the least efficient use of information in decisions. Conversely, women might make better decisions when information aggregation within the household is helpful.

# References

**Abbink, Klaus, Asad Islam, and Chau Nguyen**, "Whose voice matters? An experimental examination of gender bias in intra-household decision-making," *Journal of Economic Behavior & Organization*, 2020, *176*, 337–352.

**Afzal, Uzma, Giovanna d'Adda, Marcel Fafchamps, and Farah Said**, "Intrahousehold Consumption Allocation and Demand for Agency: A Triple Experimental Investigation," *American Economic Journal: Applied Economics*, 2022, *14* (3), 400–444.

**Alwang, Jeffrey, Catherine Larochelle, and Victor Barrera**, "Farm decision making and gender: results from a randomized experiment in Ecuador," *World Development*, 2017, *92*, 117–129.

**Ambler, Kate**, "Don't tell on me: Experimental evidence of asymmetric information in transnational households," *Journal of Development Economics*, 2015, *113*, 52–69.

**Anderberg, Dan, Rachel Cassidy, Anaya Dam, Wendy Janssens, Karlijn Morsink, and Anouk van Veldhoven**, "Keeping the Peace while Getting Your Way: Information, Persuasion and Intimate Partner Violence," 2024.

**Anderson, C Leigh, Travis W Reynolds, and Mary Kay Gugerty**, "Husband and wife perspectives on farm household decision-making authority and evidence on intra-household accord in rural Tanzania," *World development*, 2017, *90*, 169–183.

**Apedo-Amah, Marie, Habiba Djebbari, and Roberta Ziparo**, "Gender, Information and the Efficiency of Household Production Decisions: An Experiment in Rural Togo," *IZA Discussion Paper No. 12948*, 2020.

**Ashraf, Nava**, "Spousal Control and Intra–Household Decision Making: An Experimental Study in the Philippines," *American Economic Review*, 2009, *99* (4), 1245–77.

**_ , Erica Field, Alessandra Voena, and Roberta Ziparo**, "Gendered spheres of learning and household decision making over fertility," *Working Paper*, 2022.

**_ , _ , and Jean Lee**, "Household Bargaining and Excess Fertility: An Experimental Study in Zambia," *American Economic Review*, 2014, *104* (7), 2210–37.

**_ , Erica M. Field, Alessandra Voena, and Roberta Ziparo**, "Maternal Mortality Risk and Spousal Differences in the Demand for Children," *NBER Working Paper 28220*, 2021.

**Babcock, Linda, Maria P. Recalde, Lise Vesterlund, and Laurie Weingart**, "Gender Differences in Accepting and Receiving Requests for Tasks with Low Promotability," *American Economic Review*, 2017, *107* (3), 714–47.

**Beaman, Lori and Andrew Dillon**, "Diffusion of agricultural information within social networks: Evidence on gender inequalities from Mali," *Journal of Development*

*Economics*, 2018, *133*, 147–161.

**Benjamin, Daniel J.**, "Chapter 2 - Errors in Probabilistic Reasoning and Judgment Biases," *Handbook of Behavioral Economics: Applications and Foundations 1*, 2019, *2*, 69–186.

**BenYishay, Ariel, Maria Jones, Florence Kondylis, and Ahmed Mushfiq Mobarak**, "Gender gaps in technology diffusion," *Journal of Development Economics*, 2020, *143*.

**Bordalo, Pedro, Katherine Coffman, Nicola Gennaioli, and Andrei Shleifer**, "Beliefs about Gender," *American Economic Review*, 2019, *109* (3), 739–773.

**Cassidy, Rachel, Anaya Dam, Wendy Janssens, Umair Kiani, and Karlijn Morsink**, "Targeting men, women or both to reduce child marriage," *Working paper*, 2023.

**Chandrasekhar, Arun G, Benjamin Golub, and He Yang**, "Signaling, Shame, and Silence in Social Learning," *Working Paper*, 2019.

**Chen, Jingnan and Daniel Houser**, "When are women willing to lead? The effect of team gender composition and gendered tasks," *Leadership Quarterly*, 2019, *30*.

**Chiappori, Pierre-Andre and Maurizio Mazzocco**, "Static and Intertemporal Household Decisions," *Journal of Economic Literature*, 2017, *55* (3), 985–1045.

**Coffman, Katherine Baldiga**, "Evidence on Self-Stereotyping and the Contribution of Ideas," *The Quarterly Journal of Economics*, 2014, *129* (4), 1625–1660.

**Coffman, Katherine, Clio Bryant Flikkema, and Olga Shurchkov**, "Gender stereotypes in deliberation and team decisions," *Games and Economic Behavior*, 2021, *129*, 329–349.

**_ , Manuela R Collis, and Leena Kulkarni**, "Stereotypes and belief updating," *Journal of the European Economic Association*, 2024, *22* (3), 1011–1054.

**Conlon, John J., Malavika Mani, Gautam Rao, Matthew Ridley, and Frank Schilbach**, "Not Learning from Others," *Working Paper*, 2026.

**Cooper, David J. and John H. Kagel**, "A failure to communicate: an experimental investigation of the effects of advice on strategic play," *European Economic Review*, 2016, *82*, 24–45.

**D'Acunto, Francesco, Ulrike Malmendier, Juan Ospina, and Michael Weber**, "Exposure to Grocery Prices and Inflation Expectations," *Journal of Political Economy*, 2021, *129* (5), 1615–1639.

**Delavande, Adeline L, Gizem Koşar, and Basit Zafar**, "Information Spillovers Within Couples: Evidence from a Sequential Survey of Spouses," Technical Report, National Bureau of Economic Research 2025.

**Exley, Christine L. and Judd B. Kessler**, "The Gender Gap in Self-Promotion," *The Quarterly Journal of Economics*, 2022, *137* (3), 1345–1381.

_ , **Muriel Niederle, and Lise Vesterlund**, "Knowing When to Ask: The Cost of Leaning In," *Journal of Political Economy*, 2020, *128* (3), 816–854.

**Fehr, Dietmar, Johanna Mollerstrom, and Ricardo Perez-Truglia**, "Listen to her: Gender differences in information diffusion within the household," *Journal of Public Economics*, 2024, *239*, 105213.

**Hartzmark, Samuel M, Samuel Hirshman, and Alex Imas**, "Ownership, Learning, and Beliefs," *The Quarterly Journal of Economics*, 2021, *136* (3), 1665–1717.

**Hoff, Karla, Tauhidur Rahman, and Vijayendra Rao**, "Epistemic Discrimination against Women: Experimental Evidence from India," *Working Paper*, 2017.

**Jayachandran, Seema and Alessandra Voena**, "Women's Power in the Household," Technical Report, National Bureau of Economic Research 2025.

_ , **Monica Biradavolu, and Jan Cooper**, "Using machine learning and qualitative interviews to design a five-question survey module for women's agency," *World Development*, 2023, *161*, 106076.

**Lowe, Matt and Madeline McKelway**, "Coupling Labor Supply Decisions: An Experiment in India," *Working Paper*, 2022.

**Mader, Katharina and Alyssa Schneebaum**, "The gendered nature of intra-household decision making in and across Europe," *Vienna University of Business and Economics Department of Economics Working Paper*, 2013, *157*, 1–34.

**Mengel, Friederike, Jan Sauermann, and Ulf Zölitz**, "Gender Bias in Teaching Evaluations," *Journal of the European Economic Association*, 2019, *17* (2), 535–566.

**Mustafi, Priyoma**, "Information Pooling in the Household: The Role of Expertise," *Working paper*, 2024.

**Niederle, Muriel and Lise Vesterlund**, "Gender and Competition," *Annual Review of Economics*, 2011, *3*, 601–630.

**Peterman, Amber, Benjamin Schwab, Shalini Roy, Melissa Hidrobo, and Daniel O Gilligan**, "Measuring women's decisionmaking: Indicator choice and survey design experiments from cash and food transfer evaluations in Ecuador, Uganda and Yemen," *World Development*, 2021, *141*, 105387.

## Figure 1: Experimental Design

### Panel A: Overall Design
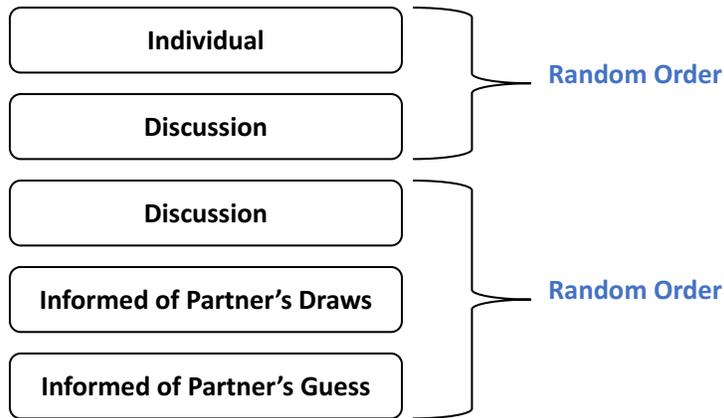


### Panel B: Structure of *Individual*, *Discussion*, and *Informed* conditions
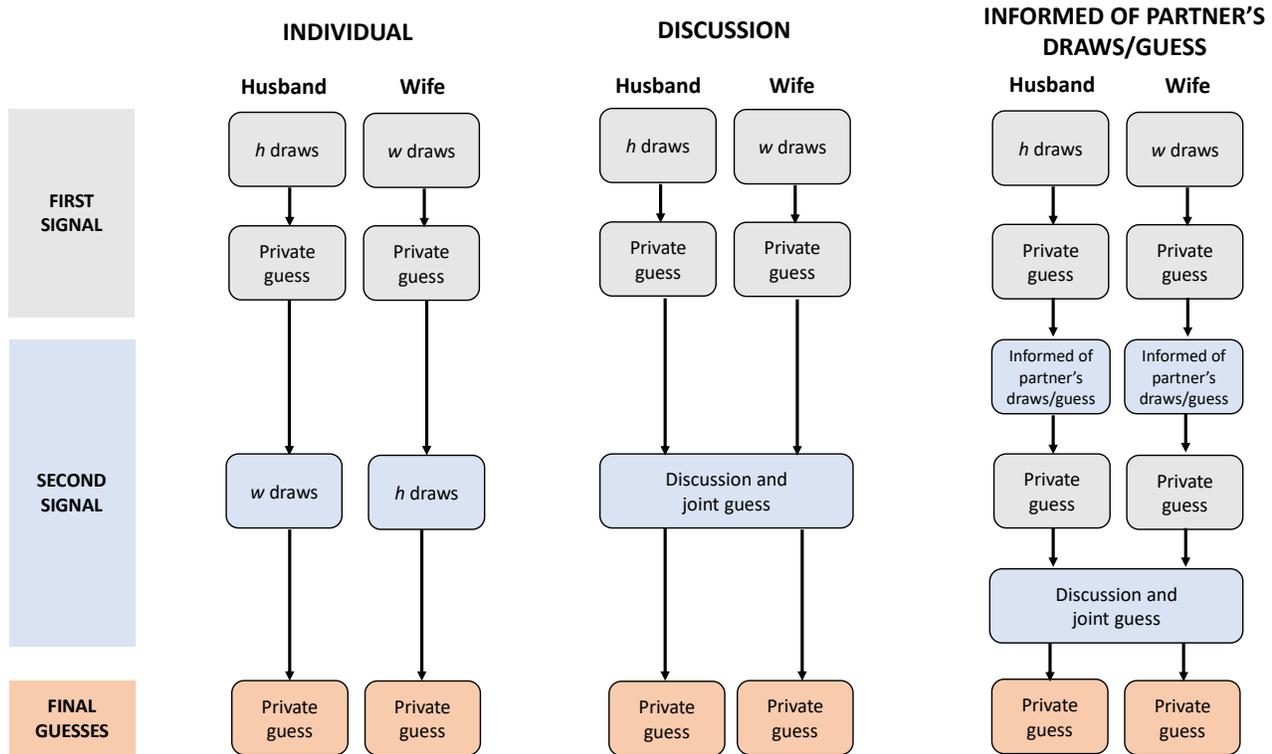


**Panel A** shows the five rounds of the Couples and Strangers Experiment. All couples and pairs of strangers complete all five rounds. The first two rounds consist of an *Individual* condition and *Discussion* treatment in randomized order. The final three rounds consist of a *Discussion*, *Informed of Partner's Guess*, and *Informed of Partner's Draws* treatment in randomized order.

**Panel B** describes the structure of the different conditions. In the *Individual* condition, each spouse gets two sets of private draws from the urn and makes a private guess after each set of draws. In the *Discussion* treatment, each spouse makes one set of draws followed by a private guess. The two spouses are then asked to discuss and make a joint guess. Next, each spouse makes a final private guess. The *Informed of Partner's Draws/Guess* treatments are identical to the *Discussion* treatment, except that they include additional information-sharing before the discussion and joint guess. In the *Informed of Partner's Draws* round, each spouse is informed about their partner's draws earlier in the round, and then asked to make a private guess. In the *Informed of Partner's Guess* round, each spouse is informed about their partner's guess earlier in the round, and then asked to make a private guess.

Figure 2: Weights on Men's vs. Women's Information
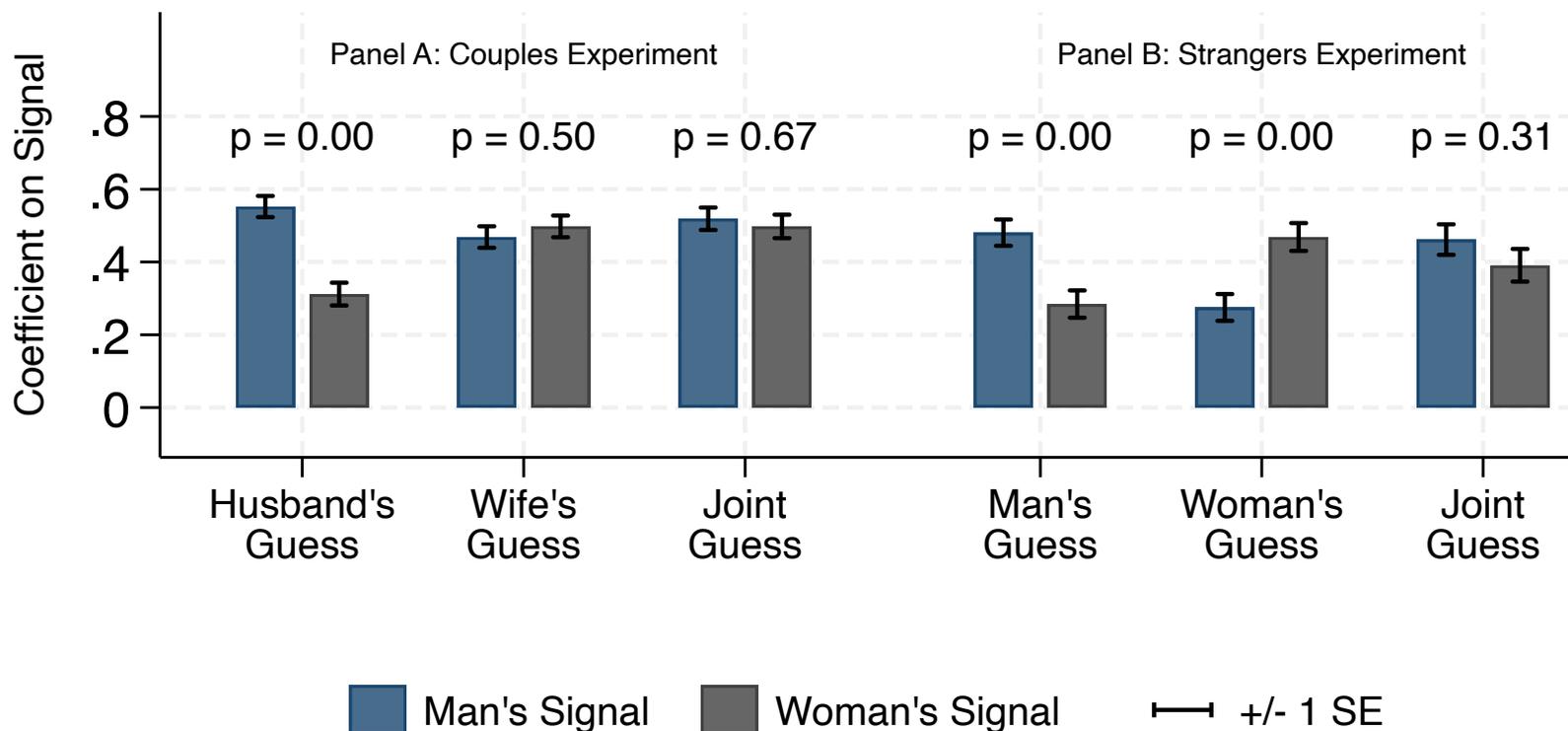
*Notes:* Each pair of bars figure shows the weights that different individuals (husbands/men, wives/women, or joint guesses between partners) put on men vs women's signals. The left panel shows results from the couples experiment, while the right panel shows results from the Stangers Experiment. Blue bars indicate weight on men's signals, while gray bars indicate weight on women's signals. For individual guessers, these incorporate the *Individual* round to control for order effects: for individual's own signal, they show $\beta_2$, the weight participants put on their second signal in the *Individual* round. For individuals' partner's signal, they show $\beta_2 + \beta_3$, the weight participants' put on their second signal in the *Discussion* and *Informed* treatments, in which their partner gathered this signal. For joint guesses, they show the coefficient on men's and women's signals without needing to control for order effects.

Table 1: Couples' and Strangers' Weight on Own vs. Others' Information

| | Couples | | | | Strangers | | | |
|---|---|---|---|---|---|---|---|---|
| | Husbands | | Wives | | Men | | Women | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| $\beta_1$: First Signal | 0.55*** | 0.55*** | 0.48*** | 0.48*** | 0.46*** | 0.46*** | 0.47*** | 0.47*** |
| | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) |
| $\beta_2$: Second Signal | 0.54*** | 0.53*** | 0.49*** | 0.51*** | 0.57*** | 0.52*** | 0.52*** | 0.50*** |
| | (0.06) | (0.08) | (0.06) | (0.07) | (0.09) | (0.11) | (0.07) | (0.10) |
| $\beta_{3,0}$: Second Signal X From Partner | -0.25*** | | -0.05 | | -0.32*** | | -0.25*** | |
| | (0.07) | | (0.06) | | (0.10) | | (0.08) | |
| $\beta_{3,1}$: Second Signal X Discussion | | -0.32*** | | -0.04 | | -0.33*** | | -0.18 |
| | | (0.08) | | (0.08) | | (0.12) | | (0.11) |
| $\beta_{3,2}$: Second Signal X Informed of Draws | | -0.44*** | | 0.06 | | -0.35** | | -0.34** |
| | | (0.12) | | (0.11) | | (0.15) | | (0.14) |
| $\beta_{3,3}$: Second Signal X Informed of Guess | | -0.51*** | | -0.11 | | -0.38** | | -0.42*** |
| | | (0.11) | | (0.12) | | (0.16) | | (0.14) |
| $\beta^{pf}$: Second Signal X Discussion X Partner Female | | | | | | -0.06 | | 0.05 |
| | | | | | | (0.11) | | (0.11) |
| $N$ | 2,800 | 2,800 | 2,800 | 2,800 | 1,750 | 1,750 | 1,750 | 1,750 |
| $p$-value: $\beta_{3,0}$ equal across genders | | 0.04 | | | | 0.61 | | |
| $p$-value: $\beta_{3,1}$ equal across genders | | | | 0.02 | | | | 0.38 |
| $p$-value: $\beta_{3,2}$ equal across genders | | | | 0.00 | | | | 0.98 |
| $p$-value: $\beta_{3,3}$ equal across genders | | | | 0.02 | | | | 0.81 |
| $p$-value: $\beta_{3,1}$ to $\beta_{3,3}$ equal across genders | | | | 0.02 | | | | 0.52 |

*Notes:* This table shows OLS estimates of Equation (1) for the Couples Experiment (Columns 1-4) and the Strangers Experiment (Columns 5-8), broken up by gender (Columns 1-2 and 5-6 for men, 3-4 and 7-8 for women). The dependent variable is participants' private guess (excluding first private guesses before any information about partners' signals was available). "First Signal" indicates the net number of red draws (i.e., red draws minus white draws) in the first signal. Similarly, "Second Signal" indicates the net number of red draws in the second signal. "Discussion" is an indicator that equals one for the final private guess in the *Discussion* treatment, when the second signal was drawn by the participant's partner and then (potentially) communicated to the participant through discussion. "Informed of Draws" indicates the second and third private guess in the *Informed of Partner's Draws* treatment, after the participant was directly told their partner's information (pooling the guesses the participant made before and after the discussion). "Informed of Guess" indicates the second and third private guess in the *Informed of Partner's Guess* treatment, after the participant was told their partner's first private guess (pooling the guesses the participant made before and after the discussion). Columns 2, 4, 6, and 8 include order fixed effects interacted with "Second Signal." Standard errors are clustered at the couple level. *, **, and *** indicate significance at the $p<0.10$, 0.05, and 0.01 levels.

Table 2: Heterogeneity across Couples: Decision-Making Power and Relative Ability

| | Discussion | | | Informed of Draws | | | Informed of Guess | | |
|---|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Husband's Signal | 0.54*** | 0.55*** | 0.55*** | 0.56*** | 0.55*** | 0.56*** | 0.41*** | 0.41*** | 0.41*** |
| | (0.08) | (0.07) | (0.07) | (0.06) | (0.06) | (0.06) | (0.06) | (0.06) | (0.06) |
| Wife's Signal | 0.36*** | 0.33*** | 0.34*** | 0.36*** | 0.35*** | 0.35*** | 0.39*** | 0.39*** | 0.38*** |
| | (0.07) | (0.07) | (0.07) | (0.07) | (0.07) | (0.07) | (0.09) | (0.09) | (0.09) |
| Husband's Signal X Husband's Decision-Making Power | 0.06* | | 0.06 | 0.02 | | 0.02 | 0.04 | | 0.04 |
| | (0.03) | | (0.04) | (0.05) | | (0.05) | (0.04) | | (0.04) |
| Wife's Signal X Husband's Decision-Making Power | -0.05 | | -0.04 | 0.04 | | 0.05 | -0.03 | | -0.03 |
| | (0.03) | | (0.03) | (0.05) | | (0.05) | (0.05) | | (0.05) |
| Husband's Signal X Husband's Relative Ability | | 0.05 | 0.04 | | 0.02 | 0.01 | | 0.00 | -0.01 |
| | | (0.04) | (0.04) | | (0.05) | (0.05) | | (0.05) | (0.05) |
| Wife's Signal X Husband's Relative Ability | | -0.12*** | -0.11*** | | -0.07 | -0.07 | | -0.01 | -0.01 |
| | | (0.03) | (0.03) | | (0.05) | (0.05) | | (0.05) | (0.05) |
| Constant | 10.22*** | 10.22*** | 10.22*** | 10.62*** | 10.61*** | 10.63*** | 10.42*** | 10.41*** | 10.42*** |
| | (0.18) | (0.17) | (0.17) | (0.17) | (0.17) | (0.17) | (0.18) | (0.19) | (0.19) |
| $N$ | 2,400 | 2,400 | 2,400 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 |
| $p$-value: HHDM Interactions Equal | 0.03 | | 0.06 | 0.82 | | 0.79 | 0.34 | | 0.36 |
| $p$-value: Ability Interactions Equal | | 0.00 | 0.01 | | 0.30 | 0.34 | | 0.87 | 1.00 |

*Notes:* This table shows OLS estimates of Equation (2) for the Couples Experiment. The dependent variable is participants' guess (excluding first private guesses before any information about partners' signals was available) in the *Discussion* treatment (columns 1-3), *Informed of Draws* treatment (columns 4-6), and *Informed of Guess* treatment (columns 7-9). "Husband's Signal" indicates the net number of red draws (i.e., red draws minus white draws) in the husband's signal. Similarly, "Wife's Signal" indicates the net number of red draws in the wife's signal.

The Household Decision-Making Index is constructed as follows: first, we take the average answer couples gave to questions asking whether the husband primarily made decisions for the household regarding finances, education, health, shopping, travel, savings, and loans, whether he managed the money in the household, whether he was the primarily household decision-maker, whether he earned more outside the household than the wife, and whether he was older than the wife. We then normalize this variable such that it has a mean of zero and standard deviation of one.

"Relative Ability" is constructed as follows: we take the average of indicators for whether the husband answered more comprehension questions correctly, whether each spouse thinks he is better at the experimental task, whether he actually performed better (in first private guesses) at the task, whether he correctly answered more numeracy questions, and whether he correctly answered more of the memory questions (about the number and color composition of his draws in the *Informed of Draws* treatment and about his previous guess in the *Informed of Guess* treatment) than his wife did. We then normalize this variable such that it has a mean of zero and standard deviation of one. All regressions include order fixed effects interacted with "Husband's Signal" and "Wife's Signal." Standard errors are clustered at the couple level. *, **, and *** indicate significance at the $p<0.10$, 0.05, and 0.01 levels.

# A  Learning in the Household: Online Appendix

Figure A.I: Visual Aids

## (a) **Guess Scale**

COMPOSITION OF RED AND WHITE BALLS IN THE URN



## (b) **Payment Scale**
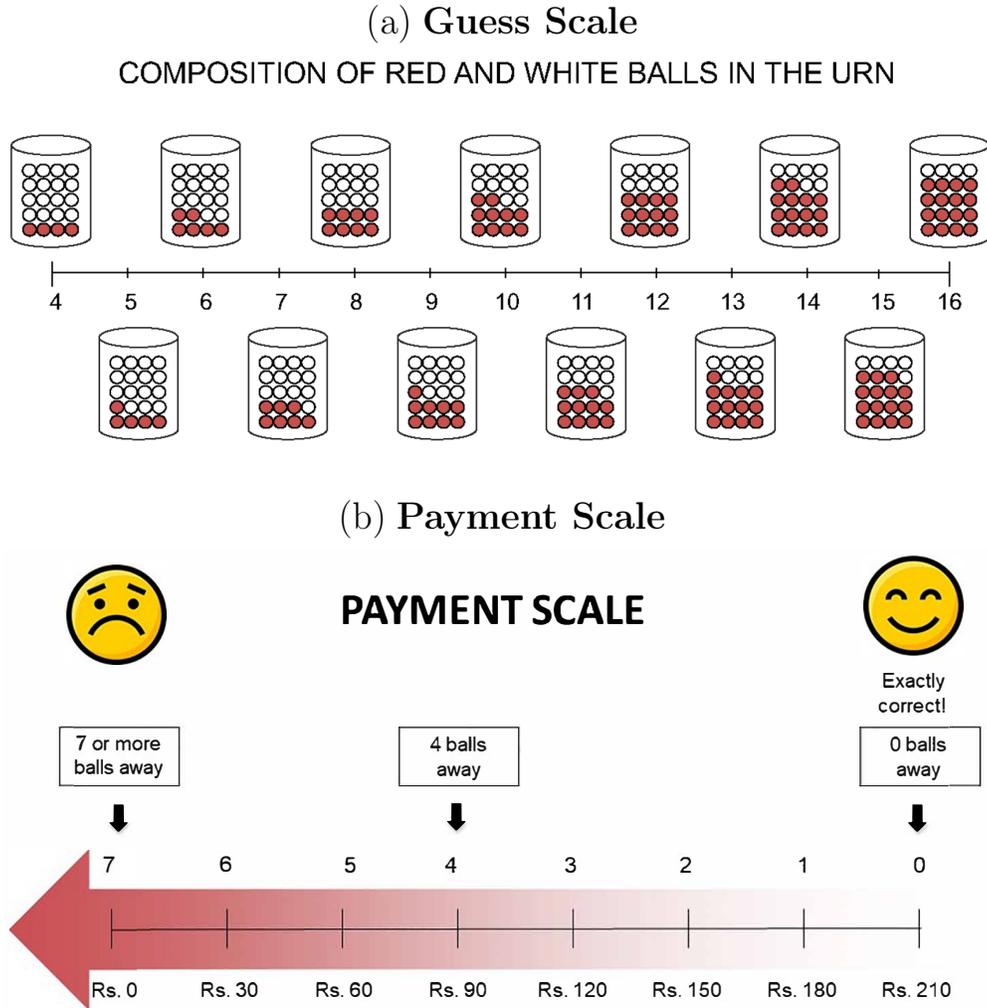


*Notes:* This figure shows the visual aids used to explain the experiment to study participants.

**Panel A:** The figure shows the scale which participants used to make their guesses. It shows the 13 possible urn compositions ranging from 4 to 16 red balls (among 20 balls in total). We induced common priors: participants were informed that in each round, each of these compositions was equally likely (probability 1/13 each). Participants guessed by placing a small token on top of the corresponding number.

**Panel B:** The figure shows the scale used to explain the incentives for accurate guessing to participants. For each pair of participants, one of their guesses was randomly selected to determine the pair's payment. On top of their participation fee, each couple receives an amount in Rupees (Rs.) equal to $\max\{(210 - 30 \times |g - r|), 0\}$, where $g$ is the guess and $r$ the true number of red balls for the randomly-selected guess.

## Figure A.II: Actual and Perceived Performance

### Panel A: Average Expected Earnings Compared to Beliefs
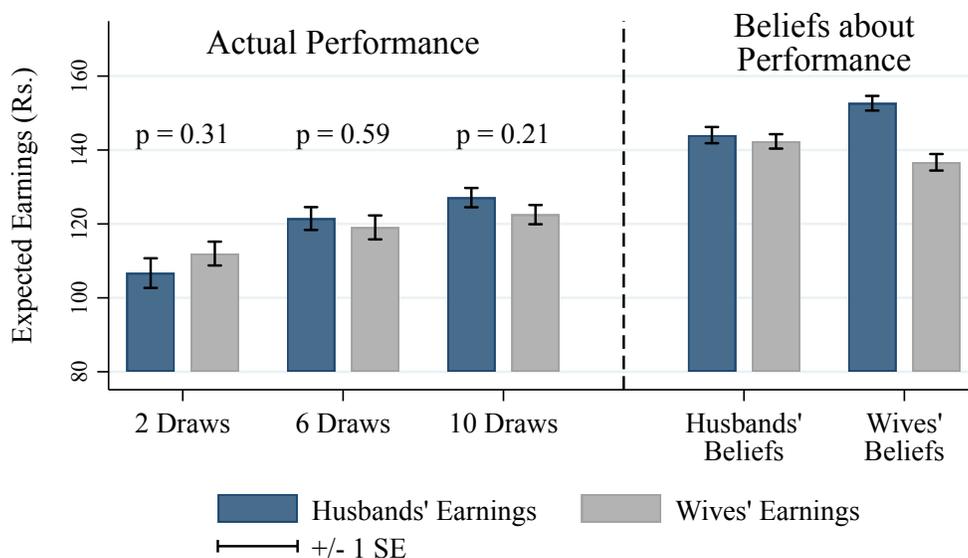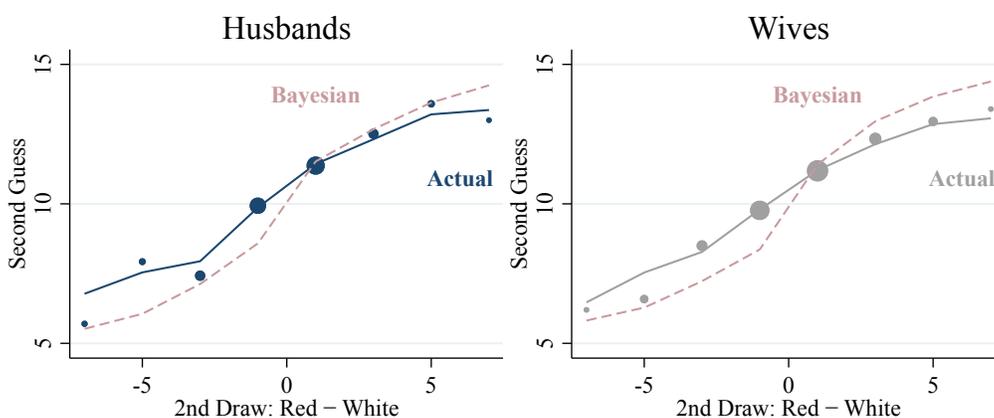


**Panel A** shows spouses' actual and perceived performance in the game. The left panel shows the average expected earnings of the final guesses in the *Individual* condition by the total number of draws in the round. Blue and gray bars indicate the mean expected earnings for husbands and wives, respectively. Bands show ± one standard error. The right panel shows spouses' predictions of how much their own and their spouse's guesses would earn on average. These predictions were incentivized by a Rs. 50 reward for being within Rs. 30 of the actual average. Blue and grey bars show spouses' predictions of husbands' and wives' average expected earnings, respectively.

**Panel B** shows the average second private guess in the *Individual* condition depending on the net number of red draws (i.e., red draws minus white draws) in participants' second signal. The blue and grey curves show locally-weighted means (lowess) for husbands and wives, respectively. The dotted lines show the average of what a risk-neutral Bayesian would have guessed given the same signals.

Figure A.III: Weights on Own vs. Partner's Information
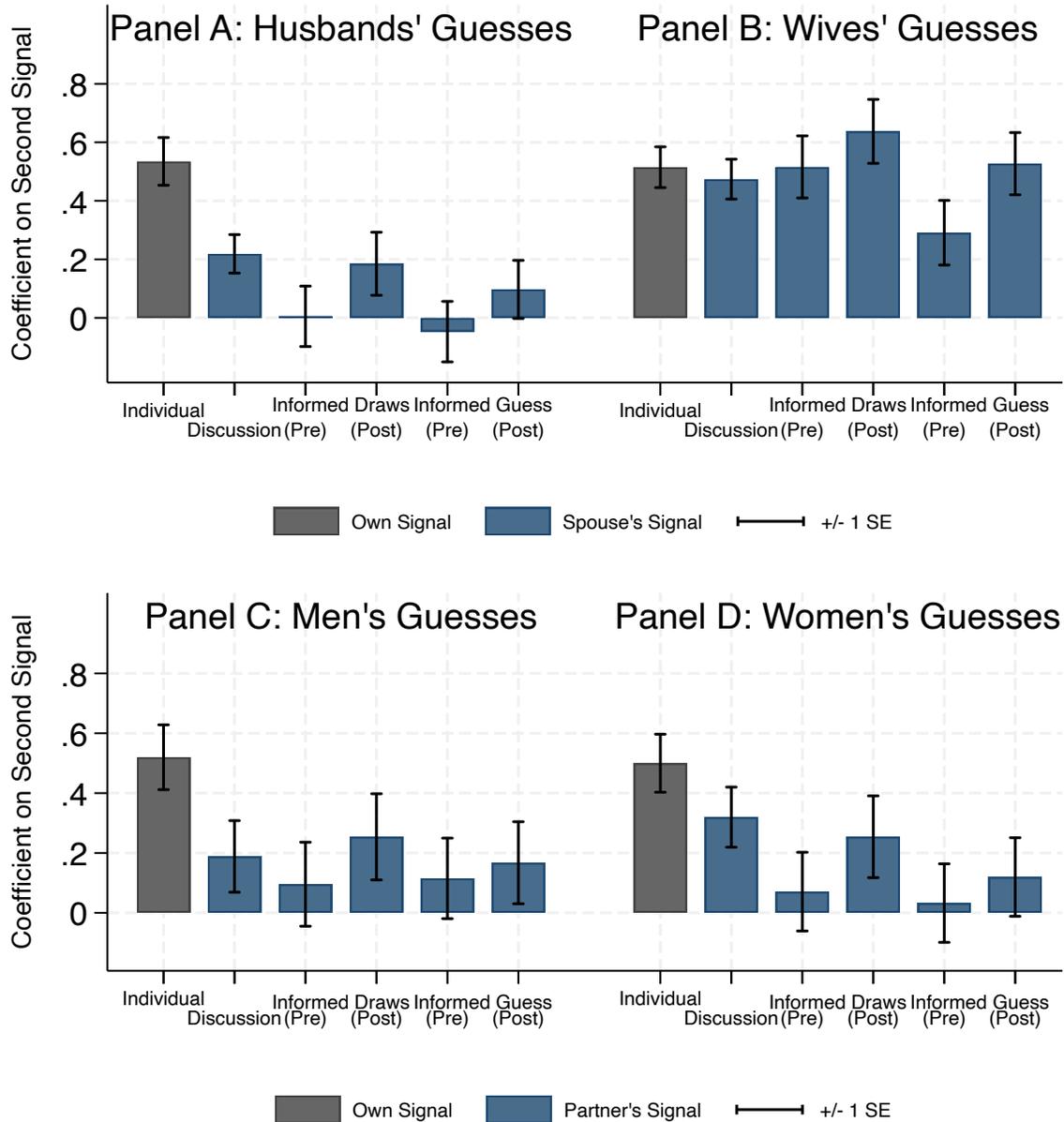
*Notes:* This figure shows the weights participants in the strangers experiment put on their first and second signals across treatments. Separately for men and women, we estimate Equation (1) and then display the sum of $\beta_2 + \beta_{3t}$ for each of the following four types of private guesses: (a) *Individual*, where participants collect all information on their own; (b) *Discussion*, in which participants collect the first set of information on their own and the second set is only accessible via discussion; (c) *Informed of Partner's Draws*, where participants receive the second set of information directly from the experimenter but before any discussion with their partner (separately for the pre-discussion and post-discussion guesses in this treatment); (d) *Informed of Partner's Guess*, where participants are told the guess their partner made about the contents of the urn (as well as the number of draws that guess was based on) from the experimenter (separately for the pre-discussion and post-discussion guesses in this treatment). Both regressions include order fixed effects interacted with "First Signal" and "Second Signal."

Figure A.IV: Weights in Joint Decisions
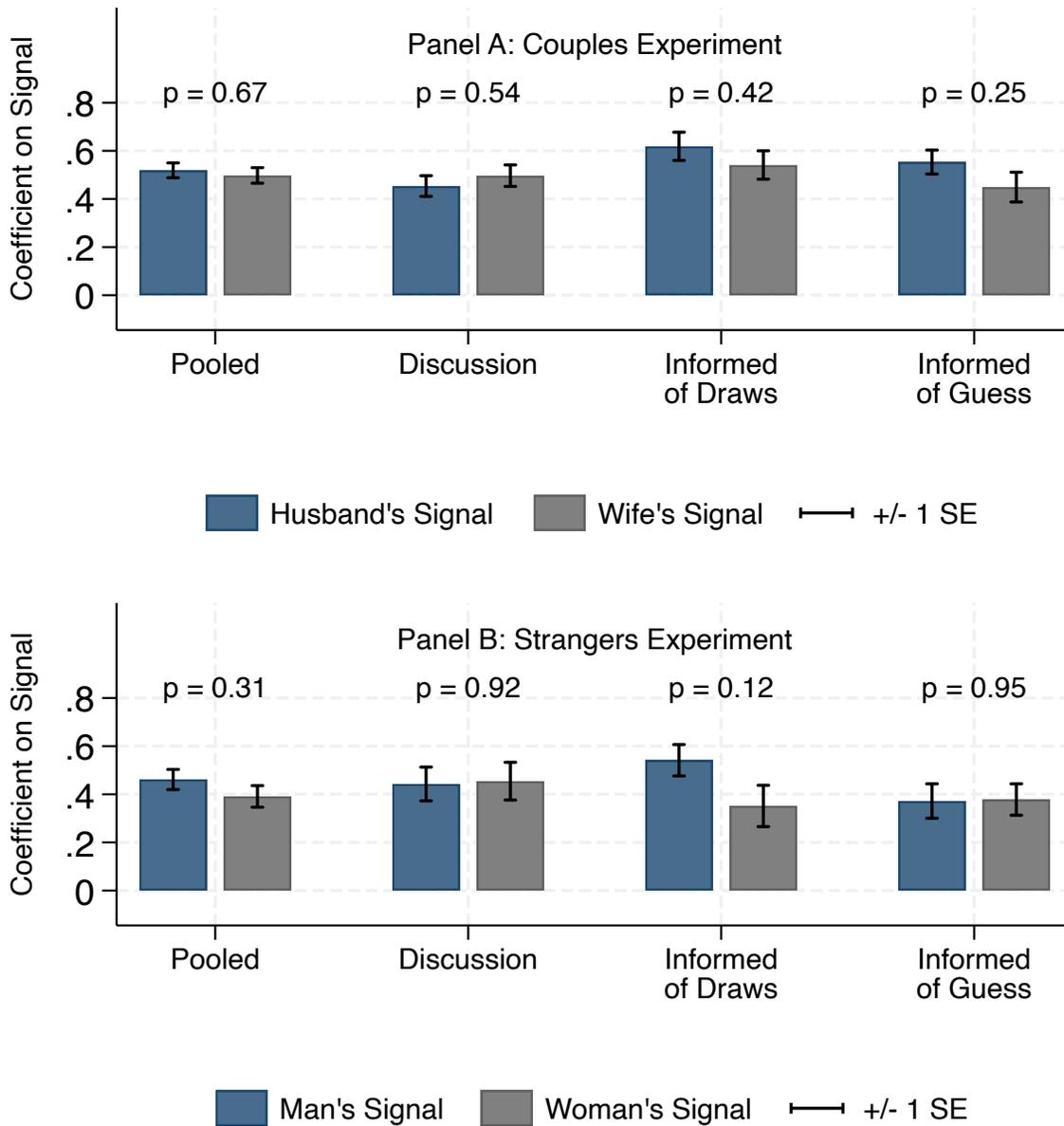


*Notes:* Each pair of bars above shows OLS estimates of $\beta_1$ and $\beta_2$ in the following equation:

$$Joint\ Guess_{irt} = \alpha + \beta_1 \cdot Husband's\ Signal_{irt} + \beta_2 \cdot Wife's\ Signal_{irt} + \epsilon_{irt}$$

*Husband's Signal*$_{irt}$ is defined as the number of "net red draws" (i.e., red draws minus white draws) in the husband's set of signals. *Wife's Signal*$_{irt}$ is number of net red draws in the wife's set of signals. The left pairs of bars show, in order, estimates for joint guesses pooled across all treatments, in the two *Discussion* treatment rounds, in the *Informed of Partner's Draws* treatment and in the *Informed of Partner's Guess* treatment. Panel A shows estimates for the sample of married couples, and Panel B shows analogous estimates for the sample of mixed-gender pairs of strangers. Whiskers denote standard errors clustered at the couple/group level.

Figure A.V: Actual and Perceived Performance: Strangers Experiment

Panel A: Average Expected Earnings Compared to Beliefs



Panel B: Belief Updating Compared to Bayesian
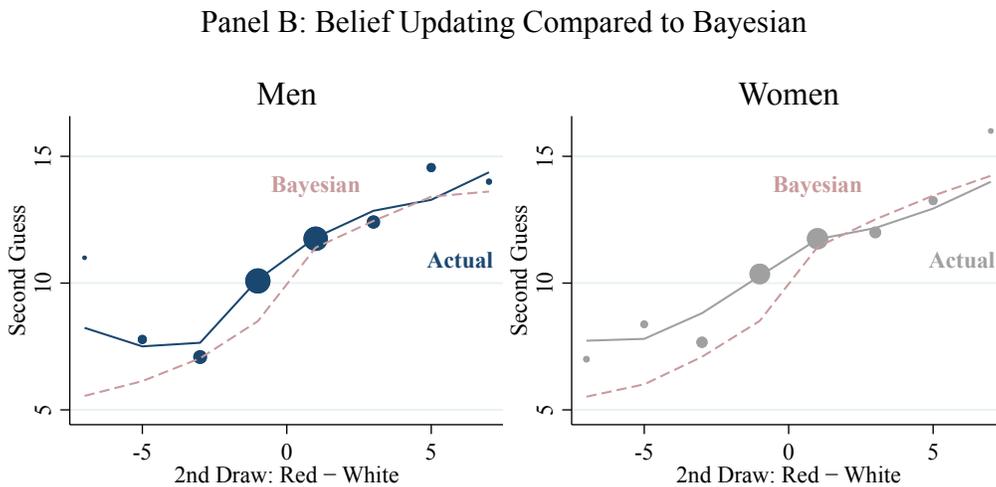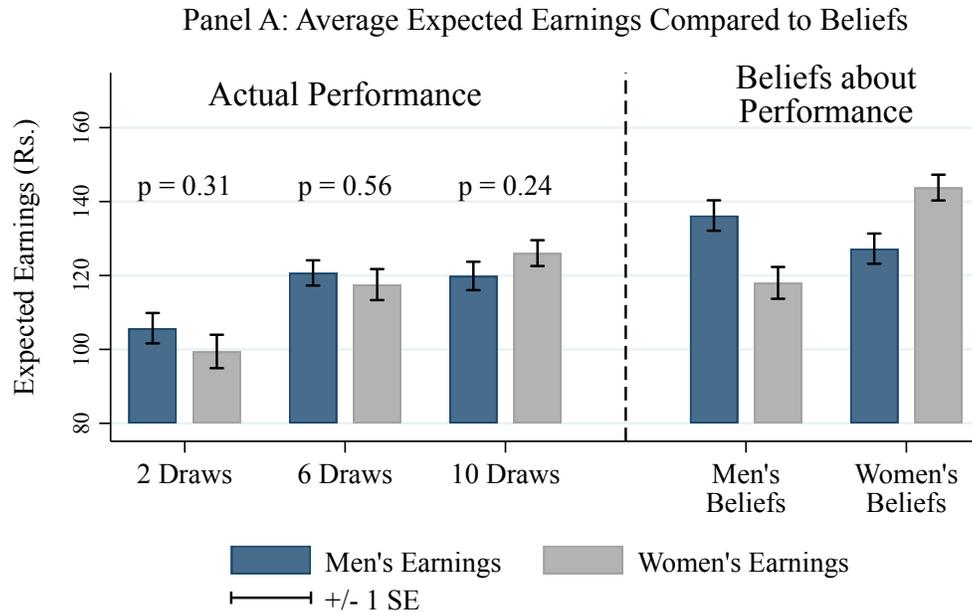


**Panel A** shows the performance of participants in our strangers experiment. The left panel shows the average expected earnings of the final guesses in the *Individual* condition by the total number of draws in the round. Blue and gray bars indicate the mean expected earnings for men and women, respectively. Bands show ± one standard error.

**Panel B** shows the average second private guess in the *Individual* condition depending on the net number of red draws (i.e., red draws minus white draws) in participants' second signal. The blue and grey curves show locally-weighted means (lowess) for men and women, respectively. The dotted lines show the average of what a risk-neutral Bayesian would have guessed given the same signals.

Figure A.VI: Weights on Men's vs. Women's Information
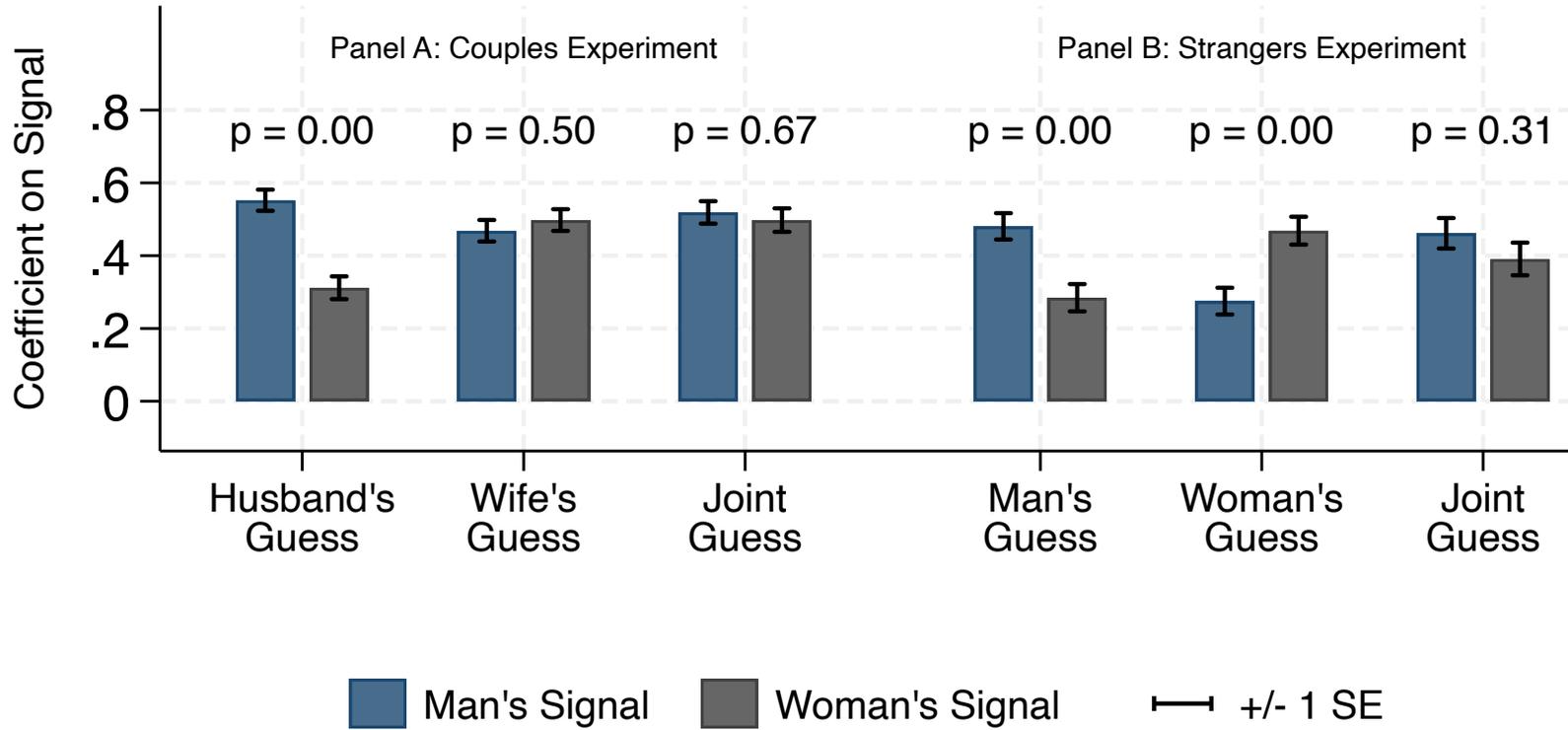
*Notes:* Each pair of bars figure shows the weights that different individuals (husbands/men, wives/women, or joint guesses between partners) put on men vs women's signals. The left panel shows results from the couples experiment, while the right panel shows results from the Stangers Experiment. Blue bars indicate weight on men's signals, while gray bars indicate weight on women's signals. See

## Table A.I: Sample Characteristics

| | Couples | | Strangers | |
|---|---|---|---|---|
| | Husbands | Wives | Men | Women |
| **Marriage & Age** | | | | |
| Married | 1.00 | 1.00 | 0.56 | 0.85 |
| Years married \| Married | 12.33 | 12.23 | 13.00 | 15.09 |
| | (8.47) | (8.45) | (7.65) | (8.66) |
| Reports being Main Household Decision Maker | 0.57 | 0.69 | — | — |
| Age | 36.46 | 31.86 | 34.92 | 34.39 |
| | (9.10) | (8.34) | (8.69) | (8.48) |
| **Education** | | | | |
| Highest grade attended | 7.86 | 8.11 | 7.77 | 7.26 |
| | (3.31) | (3.29) | (3.54) | (3.44) |
| Read Tamil | 0.86 | 0.83 | 0.77 | 0.75 |
| Multiplied correctly | 0.48 | 0.33 | 0.52 | 0.36 |
| **Work** | | | | |
| Works (at least 1 day/week) | 1.00 | 0.42 | 1.00 | 0.54 |
| Daily work hours \| Works | 8.23 | 5.56 | 7.93 | 4.40 |
| | (2.74) | (3.61) | (3.18) | (3.65) |
| Days working per week \| Works | 5.73 | 5.90 | 5.27 | 5.75 |
| | (1.05) | (1.15) | (1.26) | (1.31) |
| Daily earnings (in Rs.) \| Works | 571 | 280 | 577 | 282 |
| | (269) | (196) | (300) | (210) |
| **Ability at task** | | | | |
| Actual ability (exp. earnings in Rs.) | 122 | 120 | 117 | 119 |
| | (37) | (36) | (37) | (38) |
| Belief of own ability (in Rs.) | 144 | 137 | 139 | 144 |
| | (44) | (45) | (45) | (46) |
| Belief of partner's ability (in Rs.) | 142 | 153 | 123 | 123 |
| | (39) | (40) | (47) | (53) |
| **Who in general is better at the task?** | | | | |
| Men | 0.21 | 0.22 | 0.13 | 0.14 |
| Women | 0.40 | 0.39 | 0.27 | 0.26 |
| About the same | 0.39 | 0.39 | 0.60 | 0.59 |
| Number of participants | 397 | 399 | 250 | 250 |

*Notes:* This table shows averages of key background characteristics for the couples and strangers samples. Standard deviations for non-binary variables are in parentheses. Columns 1 and 2 describe our main experimental sample of 400 married couples; Columns 3 and 4 describe our secondary sample of 500 individuals. "Highest grade attended" refers to the highest school grade attended out of 12. Tamil is the local language. "Multiplied correctly" equals 1 if the participant knew the answer to "What is $3 \times 9$?" " | " means "conditional on." Earnings are in Indian Rupees (US\$1 $\approx$ 70 Rupees). Actual ability refers to the expected earnings of participants' final guesses in the *Individual* round. Four people in the couples sample did not complete the demographic survey at the end of the experiment, so they are excluded from this table.

Table A.II: Comprehension and Memory

| Question | Couples | | Strangers | |
|---|---|---|---|---|
| | Husbands | Wives | Men | Women |
| *A. Basic Design* | | | | |
| Number of balls | 0.95 | 0.97 | 0.98 | 0.96 |
| Colors of balls | 1.00 | 0.99 | 1.00 | 1.00 |
| *B. Common Prior* | | | | |
| Possible < 4 red | 0.92 | 0.93 | 0.92 | 0.94 |
| Possible > 16 red | 0.95 | 0.94 | 0.94 | 0.93 |
| Who chooses number of red balls | 0.84 | 0.87 | 0.79 | 0.83 |
| Likelihood of each number | 0.85 | 0.87 | 0.78 | 0.79 |
| *C. Signals* | | | | |
| More draws better | 0.90 | 0.93 | 0.85 | 0.92 |
| 4 draws possible | 0.76 | 0.80 | 0.73 | 0.80 |
| How number draws differs | 0.55 | 0.58 | 0.46 | 0.49 |
| How spouse's draws differ | 0.63 | 0.65 | 0.57 | 0.66 |
| *D. Incentives* | | | | |
| Payment if 1 off | 0.92 | 0.89 | 0.90 | 0.91 |
| Payment if way off | 0.89 | 0.85 | 0.85 | 0.86 |
| Payment if 4 off | 0.92 | 0.89 | 0.91 | 0.92 |
| *E. Memory* | | | | |
| Correctly remembered own guess | 0.94 | 0.95 | 0.92 | 0.92 |
| Correctly remembered # of own draws | 0.99 | 0.97 | 0.96 | 0.97 |
| Correctly remembered # of own red draws | 0.84 | 0.86 | 0.85 | 0.86 |

*Notes:* This table shows summary statistics of participants comprehension of the task and their memory of previous draws and guesses. Columns 1 and 2 show our main experimental sample of 400 married couples. Columns 3 and 4 show our secondary sample of 500 individuals. The questions asked were as follows:

- **Panel A:** shows answers to questions "How many balls are in the urn?" (correct answer: 20) and "What colors are the balls?" (red and white).

- **Panel B:** "Is it possible to have less than 4 /more than 16 red balls?" (no); "Who chooses how many balls are red?" (the computer); and "Are some numbers more likely than others?" (no).

- **Panel C:** "Do you learn more from one draw or five draws?" (five); "Can you get exactly 4 draws in any round?" (no); "Will you have the same or different numbers of draws across rounds?" (could be same or different); and "Will your partner have the same or different number to you?" (could be same or different).

- **Panel D:** shows the fraction of people who could correctly indicate their payment on the scale if their guess was 1, 11, or 4 balls off.

- **Panel E:** shows the proportion of participants who correctly remember their own guess and draws in the *Informed of Partner's Guess* and *Informed of Partner's Draws* rounds when these questions were asked.

Table A.III: Couples' and Strangers' Weight on Own vs. Others' Information - First Signal Also Interacted With Treatment

| | Couples | | | | Strangers | | | |
|---|---|---|---|---|---|---|---|---|
| | Husbands | | Wives | | Men | | Women | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| $\beta_1$: First Signal | 0.45*** | 0.47*** | 0.41*** | 0.37*** | 0.35*** | 0.46*** | 0.42*** | 0.38*** |
| | (0.05) | (0.06) | (0.06) | (0.07) | (0.08) | (0.08) | (0.07) | (0.10) |
| $\beta_{3,0}$: First Signal X Not Individual Round | 0.11** | | 0.09 | | 0.14 | | 0.05 | |
| | (0.06) | | (0.06) | | (0.09) | | (0.08) | |
| $\beta_{3,1}$: First Signal X Discussion | | 0.07 | | -0.00 | | 0.22* | | 0.01 |
| | | (0.08) | | (0.08) | | (0.12) | | (0.12) |
| $\beta_{3,2}$: First Signal X Informed of Draws | | 0.13 | | -0.02 | | 0.03 | | 0.05 |
| | | (0.11) | | (0.11) | | (0.14) | | (0.14) |
| $\beta_{3,3}$: First Signal X Informed of Guess | | 0.11 | | -0.12 | | 0.04 | | 0.05 |
| | | (0.11) | | (0.11) | | (0.13) | | (0.13) |
| $\beta^{pf}$: First Signal X Discussion X Partner Female | | | | | | -0.10 | | 0.22** |
| | | | | | | (0.10) | | (0.10) |
| $\beta_2$: Second Signal | 0.56*** | 0.55*** | 0.50*** | 0.54*** | 0.60*** | 0.53*** | 0.53*** | 0.51*** |
| | (0.06) | (0.08) | (0.06) | (0.07) | (0.09) | (0.11) | (0.07) | (0.10) |
| $\beta_{3,0}$: Second Signal X From Partner | -0.27*** | | -0.08 | | -0.35*** | | -0.26*** | |
| | (0.07) | | (0.06) | | (0.10) | | (0.08) | |
| $\beta_{3,1}$: Second Signal X Discussion | | -0.33*** | | -0.04 | | -0.36*** | | -0.18 |
| | | (0.08) | | (0.09) | | (0.13) | | (0.12) |
| $\beta_{3,2}$: Second Signal X Informed of Draws | | -0.47*** | | 0.06 | | -0.33** | | -0.35** |
| | | (0.12) | | (0.12) | | (0.16) | | (0.15) |
| $\beta_{3,3}$: Second Signal X Informed of Guess | | -0.53*** | | -0.08 | | -0.37** | | -0.44*** |
| | | (0.11) | | (0.12) | | (0.16) | | (0.14) |
| $\beta^{pf}$: Second Signal X Discussion X Partner Female | | | | | | -0.04 | | 0.02 |
| | | | | | | (0.11) | | (0.11) |
| $N$ | 2,800 | 2,800 | 2,800 | 2,800 | 1,750 | 1,750 | 1,750 | 1,750 |
| $p$-value: $\beta_{3,0}$ equal across genders | | | 0.06 | | | | 0.49 | |
| $p$-value: $\beta_{3,1}$ equal across genders | | | | 0.02 | | | | 0.30 |
| $p$-value: $\beta_{3,2}$ equal across genders | | | | 0.00 | | | | 0.94 |
| $p$-value: $\beta_{3,3}$ equal across genders | | | | 0.01 | | | | 0.73 |
| $p$-value: $\beta_{3,1}$ to $\beta_{3,3}$ equal across genders | | | | 0.03 | | | | 0.33 |

*Notes:* This table shows OLS estimates of an extension of Equation (1) for the couples experiment (Columns 1-2) and the strangers experiment (Columns 3-4), broken up by gender (Columns 1 and 3 for men, 2 and 4 for women). The dependent variable is participants' private guess (excluding first private guesses before any information about partners' signals was available). "First Signal" indicates the net number of red draws (i.e., red draws minus white draws) in the first signal. Similarly, "Second Signal" indicates the net number of red draws in the second signal. "Discussion" is an indicator that equals one for the final private guess in the *Discussion* round, when the second signal was drawn by the participant's partner and then (potentially) communicated to the participant through discussion. "Informed of Draws" indicates the second and third private guess in the *Informed of Partner's Draws* round, after the participant was directly told their partner's information (pooling the guesses the participant makes before and after the discussion). "Informed of Guess" indicates the second and third private guess in the *Informed of Partner's Guess* round, after the participant was told their partner's first private guess (pooling the guesses the participant makes before and after the discussion). All regressions include order fixed effects interacted with "First Signal" and "Second Signal." Standard errors are clustered at the couple level. *, **, and *** indicate significance at the $p<0.10$, 0.05, and 0.01 levels.

Table A.IV: Couples' and Strangers' Weight on Own vs. Others' Information: Disaggregating Pre- and Post-Discussion Guesses

| | Couples | | Strangers | |
|---|---|---|---|---|
| | Husbands (1) | Wives (2) | Men (3) | Women (4) |
| $\beta_1$: First Signal | 0.55*** (0.03) | 0.48*** (0.03) | 0.46*** (0.03) | 0.47*** (0.03) |
| $\beta_2$: Second Signal | 0.53*** (0.08) | 0.51*** (0.07) | 0.52*** (0.11) | 0.50*** (0.10) |
| $\beta_{3,1}$: Second Signal X Discussion | -0.32*** (0.08) | -0.04 (0.08) | -0.33*** (0.12) | -0.18 (0.11) |
| $\beta_{3,2}$: Second Signal X Informed of Draws (Pre) | -0.53*** (0.12) | 0.00 (0.12) | -0.42*** (0.16) | -0.43*** (0.15) |
| $\beta_{3,3}$: Second Signal X Informed of Draws (Post) | -0.35*** (0.12) | 0.12 (0.12) | -0.27 (0.16) | -0.25* (0.15) |
| $\beta_{3,2}$: Second Signal X Informed of Draws (Pre) | -0.58*** (0.12) | -0.22* (0.12) | -0.40** (0.16) | -0.47*** (0.15) |
| $\beta_{3,3}$: Second Signal X Informed of Guess (Post) | -0.44*** (0.12) | 0.01 (0.12) | -0.35** (0.16) | -0.38** (0.15) |
| $\beta^{pf}$: Second Signal X Discussion X Partner Female | | | -0.06 (0.11) | 0.05 (0.11) |
| $N$ | 2,800 | 2,800 | 1,750 | 1,750 |
| $p$-value: $\beta_{3,0}$ equal across genders | | 0.04 | | 0.61 |
| $p$-value: $\beta_{3,1}$ equal across genders | | 0.02 | | 0.38 |
| $p$-value: $\beta_{3,2}$ equal across genders | | 0.00 | | 1.00 |
| $p$-value: $\beta_{3,3}$ equal across genders | | 0.01 | | 0.96 |
| $p$-value: $\beta_{3,4}$ equal across genders | | 0.04 | | 0.75 |
| $p$-value: $\beta_{3,5}$ equal across genders | | 0.01 | | 0.88 |
| $p$-value: $\beta_{3,1}$ to $\beta_{3,5}$ equal across genders | | 0.06 | | 0.79 |

*Notes:* This table shows OLS estimates of Equation (1) for the couples experiment (Columns 1-2) and the strangers experiment (Columns 3-4), broken up by gender (Columns 1 and 3 for men, 2 and 4 for women). The dependent variable is participants' private guess (excluding first private guesses before any information about partners' signals was available). "First Signal" indicates the net number of red draws (i.e., red draws minus white draws) in the first signal. Similarly, "Second Signal" indicates the net number of red draws in the second signal. "Discussion" is an indicator that equals one for the final private guess in the *Discussion* round, when the second signal was drawn by the participant's partner and then (potentially) communicated to the participant through discussion. "Informed of Draws (Pre)" and "Informed of Draws (Post)" indicate the pre-discussion and post-discussion private guess, respectively, in the *Informed of Partner's Draws* round, after the participant was directly told their partner's information. "Informed of Guess (Pre)" and "Informed of Guess (Post)" indicate the pre-discussion and post-discussion private guess, respectively, in the *Informed of Partner's Guess* round, after the participant was told their partner's first private guess. All regressions include order fixed effects interacted with "Second Signal." Standard errors are clustered at the couple level. *, **, and *** indicate significance at the $p<0.10$, 0.05, and 0.01 levels.

## Table A.V: Earnings

| | Couples | | | | Strangers | | | |
|---|---|---|---|---|---|---|---|---|
| | Husbands | | Wives | | Men | | Women | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| $\beta_1$:# First Draws | 2.16*** | 2.13*** | 2.33*** | 2.33*** | 2.91*** | 2.95*** | 2.41** | 2.45*** |
| | (0.68) | (0.69) | (0.71) | (0.71) | (0.97) | (0.94) | (0.93) | (0.93) |
| $\beta_2$:# Second Draws | 2.03** | 1.83** | 2.19** | 2.15*** | 3.33*** | 2.83** | 3.03** | 2.57** |
| | (0.82) | (0.76) | (0.85) | (0.77) | (1.21) | (1.15) | (1.21) | (1.03) |
| $\beta_{3,1}$:# Second Draws X From Partner | -1.73** | | -0.22 | | -3.35*** | | -2.83** | |
| | (0.83) | | (0.89) | | (1.18) | | (1.20) | |
| $\beta_{3,1}^{pf}$:# Second Draws X From Partner X Partner Female | | | | | -0.11 | | 0.34 | |
| | | | | | (0.46) | | (0.48) | |
| $\beta_{3,1}$:# Second Draws X Discussion | | -1.38** | | -0.14 | | -2.40*** | | -1.61** |
| | | (0.54) | | (0.55) | | (0.79) | | (0.79) |
| $\beta_{3,1}^{pf}$:# Second Draws X Discussion X Partner Female | | | | | | -0.41 | | -0.28 |
| | | | | | | (0.76) | | (0.66) |
| $\beta_{3,2}$:# Second Draws X Informed of Draws | | -2.54*** | | 0.11 | | -2.27** | | -2.31** |
| | | (0.73) | | (0.77) | | (0.97) | | (0.95) |
| $\beta_{3,3}$:# Second Draws X Informed of Guess | | -2.73*** | | -0.03 | | -2.45** | | -2.86*** |
| | | (0.73) | | (0.81) | | (0.97) | | (0.99) |
| $N$ | 2,800 | 2,800 | 2,800 | 2,800 | 2,000 | 2,000 | 2,000 | 2,000 |

*Notes:* This table shows OLS estimates from regressions including data from the couples experiment (Columns 1-2) or the strangers experiment (Columns 3-4), broken up by gender (Columns 1 and 3 for men, 2 and 4 for women). The dependent variable is the expected earnings of participants' private guess (excluding first private guesses before any information about partners' signals was available). "# First Draws" indicates the number of draws the participant made from the urn for their first signal. Similarly, "# Second Draws" indicates the number of draws in the second signal. "Discussion" is an indicator that equals one for the final private guess in the *Discussion* round, when the second signal was drawn by the participant's partner and then (potentially) communicated to the participant through discussion. "Informed of Draws" indicates the second and third private guess in the *Informed of Partner's Draws* round, after the participant was directly told their partner's information (pooling the guesses the participant makes before and after the discussion). "Informed of Guess" indicates the second and third private guess in the *Informed of Partner's Guess* round, after the participant was told their partner's first private guess (pooling the guesses the participant makes before and after the discussion). All regressions include order fixed effects interacted with "# First Draws" and "# Second Draws." Standard errors are clustered at the couple level. *, **, and *** indicate significance at the $p<0.10$, 0.05, and 0.01 levels.

Table A.VI: Earnings – Individual vs Joint Guesses

| | Couples | | | Strangers | | |
|---|---|---|---|---|---|---|
| | Husbands (1) | Wives (2) | Joint (3) | Men (4) | Women (5) | Joint (6) |
| $\beta_m$: # Man's Draws | 2.53*** | 1.95*** | 2.58*** | 2.81*** | 1.38*** | 3.19*** |
| | (0.27) | (0.28) | (0.30) | (0.46) | (0.47) | (0.52) |
| $\beta_w$: # Woman's Draws | 0.81** | 2.27*** | 2.38*** | 1.42*** | 3.25*** | 2.79*** |
| | (0.34) | (0.33) | (0.33) | (0.47) | (0.49) | (0.51) |
| Constant | 106.76*** | 104.14*** | 103.45*** | 99.05*** | 96.33*** | 94.70*** |
| | (1.81) | (1.85) | (1.97) | (2.86) | (3.03) | (3.36) |
| $N$ | 2,400 | 2,400 | 1,600 | 1,250 | 1,250 | 750 |
| $p$-value: $\beta_m = \beta_w$ | 0.00 | 0.37 | 0.59 | 0.01 | 0.00 | 0.47 |
| $p$-value: $\beta_m$ equal to joint | 0.83 | 0.04 | | 0.42 | 0.00 | |
| $p$-value: $\beta_w$ equal to joint | 0.00 | 0.26 | | 0.01 | 0.72 | |
| $p$-value: $\beta_m - \beta_w$ equal to joint | 0.00 | 0.46 | | 0.04 | 0.00 | |

*Notes:* This table shows OLS estimates from regressions including data from the couples experiment (Columns 1-3) or the strangers experiment (Columns 4-6), broken up by guesser (Columns 1 and 4 for men, 2 and 5 for women, 3, and 6 for joint). The dependent variable is each the expected earnings of each guess (excluding first private guesses before any information about partners' signals was available). "# Man's[Woman's] Draws" indicates the number of draws the man [woman] made from the urn for their first signal. Data include the *Discussion, Informed of Partner's Draws*, and *Informed of Partner's Guess* rounds. The strangers data include only mixed-gender pairs. Standard errors are clustered at the couple level. *, **, and *** indicate significance at the $p<0.10$, 0.05, and 0.01 levels.

Table A.VII: Signal Weights in Joint Guesses by Round

*Panel A: Couples*

|  | All | Discussion | Signal-Sharing | Guess-Sharing |
|---|---|---|---|---|
|  | (1) | (2) | (3) | (4) |
| Man's Signal | 0.52*** | 0.45*** | 0.62*** | 0.55*** |
|  | (0.03) | (0.04) | (0.06) | (0.05) |
| Woman's Signal | 0.50*** | 0.50*** | 0.54*** | 0.45*** |
|  | (0.03) | (0.04) | (0.06) | (0.06) |
| Constant | 10.73*** | 10.64*** | 10.83*** | 10.83*** |
|  | (0.09) | (0.11) | (0.14) | (0.14) |
| $N$ | 1,600 | 800 | 400 | 400 |
| $p$-value: Man's = Woman's | 0.67 | 0.54 | 0.42 | 0.25 |
| $p$-value: Both weights equal to Disc. |  |  | 0.01 | 0.27 |

*Panel B: Strangers*

|  | All | Discussion | Signal-Sharing | Guess-Sharing |
|---|---|---|---|---|
|  | (1) | (2) | (3) | (4) |
| Man's Signal | 0.46*** | 0.44*** | 0.54*** | 0.37*** |
|  | (0.04) | (0.07) | (0.07) | (0.07) |
| Woman's Signal | 0.39*** | 0.45*** | 0.35*** | 0.38*** |
|  | (0.04) | (0.08) | (0.09) | (0.07) |
| Constant | 11.09*** | 11.20*** | 11.08*** | 11.01*** |
|  | (0.11) | (0.18) | (0.18) | (0.18) |
| $N$ | 1,500 | 500 | 500 | 500 |
| $p$-value: Man's = Woman's | 0.31 | 0.92 | 0.12 | 0.95 |
| $p$-value: Both weights equal to Disc. |  |  | 0.47 | 0.48 |

*Notes:* This table shows results from regressing joint guesses on both sets of signals, separately by round. Each column reports coefficients from a regression of the joint guess on the man's signal and the woman's signal. 'Man's = Woman's' indicates a test of the hypothesis that the weight on the man's signal equals the weight on the woman's signal. 'Both weights equal to Disc.' indicates a joint $F$-test of the hypothesis that both the man's signal weight and the woman's signal weight equal their respective values in the *Discussion* round. Standard errors are clustered at the couple/pair level. *, **, and *** indicate significance at the $p<0.10$, 0.05, and 0.01 levels.

Table A.VIII: Testing for Differences Between Couples and Strangers

| | All rounds | Informed of Partner's Draws | | Informed of Partner's Guess | | Discussion rounds |
|---|---|---|---|---|---|---|
| | (Pre- & Post-Disc.) | (Pre-Disc.) | (Post-Disc.) | (Pre-Disc.) | (Post-Disc.) | (Post-Disc.) |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Own Signal | 0.48*** | 0.46*** | 0.32*** | 0.42*** | 0.34*** | 0.57*** |
| | (0.04) | (0.09) | (0.08) | (0.08) | (0.08) | (0.05) |
| Partner's Signal | 0.25*** | 0.15 | 0.34*** | 0.18* | 0.24** | 0.21*** |
| | (0.04) | (0.09) | (0.10) | (0.08) | (0.08) | (0.06) |
| Partner's Signal X Guesser Is Husband In Couple | 0.04 | 0.02 | 0.01 | -0.06 | 0.04 | 0.12 |
| | (0.05) | (0.10) | (0.11) | (0.09) | (0.09) | (0.08) |
| Partner's Signal X Guesser Is Woman | 0.02 | -0.04 | -0.00 | -0.12 | -0.07 | 0.16* |
| | (0.05) | (0.11) | (0.11) | (0.09) | (0.10) | (0.08) |
| Partner's Signal X Guesser Is Wife In Couple | 0.16*** | 0.28** | 0.21* | 0.15 | 0.29** | 0.06 |
| | (0.05) | (0.10) | (0.09) | (0.09) | (0.09) | (0.06) |
| N | 7800 | 7800 | 7800 | 7800 | 7800 | 2600 |

*Notes:* This table shows OLS regressions in which the dependent variable is a person's individual guess. All regressions pool data from both the couples and strangers sample.

- In Columns 1 and 2, the sample includes all final guesses made by both men and women in the two *Discussion* rounds plus the pre- and post-discussion guesses from the *Informed of Partner's Draws* and *Informed of Partner's Guess* rounds.

- Columns 3 and 4 show results for the pre-discussion *Informed of Partner's Draws* round guesses alone, and Columns 5 and 6 show results from the post-discussion *Informed of Partner's Draws* round alone. Columns 7 to 10 similarly show results for pre- and then post-discussion guesses in the *Informed of Partner's Guess* round alone. Columns 11 and 12 show results from the *Discussion* round guesses (after the joint discussion) alone.

- "Own Net Red" refers to the net red minus white draws in the set the person guessing drew him or herself, and "Partner's Net Red" to the same in the set the guesser's partner drew. "Guesser Is Woman" equals one if the guesser is a woman, and "Guesser Is Wife In Couple" equals one if the person guessing is a woman *and* is in the couples sample, i.e., is playing with her husband.

- The regressions also include controls for Own Net Red interacted with "Guesser Is Woman" and "Guesser Is Wife In Couple" (coefficients not shown). Regressions for individual treatments are stacked and estimated jointly including controls for round order effects.

## Table A.IX: Explaining Differences Between Couples and Strangers

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Own Signal | 0.48*** | 0.50*** | 0.48*** | 0.54*** | 0.56*** | 0.47*** | 0.33*** | 0.43*** | 0.45*** | 0.46*** | 0.36*** | 0.55*** |
| | (0.04) | (0.04) | (0.04) | (0.04) | (0.06) | (0.05) | (0.05) | (0.05) | (0.05) | (0.09) | (0.13) | (0.13) |
| Partner's Signal | 0.25*** | 0.23*** | 0.26*** | 0.20*** | 0.10 | 0.24*** | 0.08 | 0.30*** | 0.30*** | -0.08 | 0.00 | -0.23* |
| | (0.04) | (0.04) | (0.04) | (0.04) | (0.06) | (0.04) | (0.06) | (0.05) | (0.05) | (0.09) | (0.13) | (0.12) |
| Partner's Signal X Guesser Is Husband In Couple | 0.04 | 0.02 | 0.05 | 0.04 | 0.11* | 0.04 | 0.03 | 0.04 | 0.04 | 0.07 | 0.08 | |
| | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) | (0.06) | (0.07) | |
| Partner's Signal X Guesser Is Woman | 0.02 | 0.02 | 0.03 | 0.01 | 0.02 | 0.02 | 0.01 | -0.02 | -0.02 | -0.03 | | |
| | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) | (0.06) | | |
| Partner's Signal X Guesser Is Wife In Couple | 0.16*** | 0.18*** | 0.17*** | 0.16*** | 0.20*** | 0.16*** | 0.16*** | 0.16*** | 0.16*** | 0.19*** | | 0.23*** |
| | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) | (0.04) | (0.05) | (0.05) | (0.05) | | (0.06) |
| Partner's Signal X Guesser Is Older | | 0.04 | | | | | | | | 0.05 | 0.00 | 0.10 |
| | | (0.04) | | | | | | | | (0.04) | (0.06) | (0.06) |
| Partner's Signal X Guesser Thinks Sole HHDM | | | -0.06 | | | | | | | -0.04 | -0.07 | -0.01 |
| | | | (0.04) | | | | | | | (0.04) | (0.06) | (0.05) |
| Partner's Signal X Partner Better | | | | 0.09** | | | | | | 0.09** | 0.10* | 0.07 |
| | | | | (0.03) | | | | | | (0.03) | (0.05) | (0.04) |
| Partner's Signal X Guesser Thinks Partner Better | | | | | 0.15** | | | | | 0.14** | 0.12 | 0.18** |
| | | | | | (0.05) | | | | | (0.05) | (0.06) | (0.07) |
| Partner's Signal X Guesser Is Married | | | | | | 0.00 | | | | 0.02 | 0.04 | -0.05 |
| | | | | | | (0.05) | | | | (0.05) | (0.07) | (0.07) |
| Partner's Signal X Guesser Comprehension index | | | | | | | 0.19*** | | | 0.19*** | 0.09 | 0.31*** |
| | | | | | | | (0.05) | | | (0.05) | (0.07) | (0.07) |
| Partner's Signal X Daily Earnings | | | | | | | | -0.00 | | -0.00 | -0.00 | -0.00 |
| | | | | | | | | (0.00) | | (0.00) | (0.00) | (0.00) |
| Partner's Signal X Daily Work Hours | | | | | | | | | -0.01 | -0.00 | 0.00 | -0.00 |
| | | | | | | | | | (0.00) | (0.01) | (0.01) | (0.01) |
| Constant | 10.69*** | 10.69*** | 10.69*** | 10.69*** | 10.69*** | 10.69*** | 10.68*** | 10.69*** | 10.69*** | 10.69*** | 10.67*** | 10.70*** |
| | (0.06) | (0.06) | (0.06) | (0.06) | (0.06) | (0.06) | (0.06) | (0.06) | (0.06) | (0.06) | (0.06) | (0.07) |
| N | 7800 | 7800 | 7800 | 7800 | 7800 | 7800 | 7800 | 7800 | 7800 | 7800 | 3900 | 3900 |

*Notes:* This table shows OLS regressions where the dependent variable is a person's individual guess. All regressions pool data from both the couples and strangers sample and include all final guesses made by both men and women in the two *Discussion* treatment rounds plus the pre- and post-discussion guesses from the *Informed of Partner's Draws* and *Informed of Partner's Guess* treatments.

- Column 1 repeats the specification in Column 2 from Table A.VIII. The other columns add interactions between Partner's Net Red and other variables, to test whether heterogeneity along these variables explains the difference between wives and others. Column 11 includes only men, and column 12 includes only women.

- When we add an interaction between Partner's Net Red and a variable, we control for the corresponding interaction(s) with Own Net Red (coefficients not shown).

- "Guesser Is Older" means the person guessing is older than their partner. "Guesser Thinks Sole HHDM" means the guesser considers themselves the sole decision maker in their household. "Partner Better" indicates that the guesser's partner earns more from their guesses on average; "Guesser Thinks Partner Better" indicates that the guesser thinks this is so. "Guesser Is Married" indicates that the guesser is married; this is always one in the couples sample, but not in the strangers sample. "Comprehension index" is the fraction of comprehension questions the guesser answered correctly, normalized by subtracting the mean and dividing by the standard deviation of the entire sample. "Daily Earnings" and "Daily Work Hours" measure the earnings that participants gain and hours of work per day in jobs outside the home. All these variables were measured in both the couples and strangers sample.

Table A.X: Household Decision-Making and Ability Summary Statistics

| | Husbands | Wives |
|---|---|---|
| A. HHDM: Share of participants who say they... | | |
| Have more control over finances | 0.32 | 0.46 |
| Have more control over education | 0.22 | 0.43 |
| Have more control over health | 0.23 | 0.50 |
| Have more control over shopping | 0.25 | 0.60 |
| Have more control over travel | 0.39 | 0.34 |
| Have more control over savings | 0.20 | 0.53 |
| Have more control over loans | 0.34 | 0.38 |
| Manage all the money | 0.26 | 0.61 |
| Are the main decision maker | 0.29 | 0.40 |
| Earned more money overall last year | 0.85 | 0.11 |
| Are older | 0.92 | 0.03 |
| B. Ability: | | |
| Average number comprehension questions correct (out of 16) | 13.58 | 13.70 |
| | (2.02) | (2.13) |
| Share better at task | 0.57 | 0.43 |
| Share think they are better at task | 0.45 | 0.24 |
| Average numeracy score (out of 3) | 2.02 | 1.75 |
| | (0.98) | (1.02) |
| Average number correct recall of own signals (out of 3) | 2.76 | 2.79 |
| | (0.46) | (0.49) |
| Number of participants | 400 | 400 |

*Notes:* This table shows summary statistics for each component of our index of household decision-making (Panel A) and our index of relative ability (Panel B), broken up by gender.

Table A.XI: Heterogeneity Across Couples

| | Discussion | | | Informed of Draws | | | Informed of Guess | | |
|---|---|---|---|---|---|---|---|---|---|
| | Husbands (1) | Wives (2) | Joint (3) | Husbands (4) | Wives (5) | Joint (6) | Husbands (7) | Wives (8) | Joint (9) |
| Husband's Signal | 0.64*** | 0.56*** | 0.45*** | 0.62*** | 0.46*** | 0.63*** | 0.48*** | 0.30*** | 0.51*** |
| | (0.08) | (0.08) | (0.09) | (0.08) | (0.07) | (0.10) | (0.06) | (0.07) | (0.07) |
| Wife's Signal | 0.20*** | 0.38*** | 0.42*** | 0.18** | 0.48*** | 0.46*** | 0.27** | 0.50*** | 0.39*** |
| | (0.07) | (0.08) | (0.08) | (0.09) | (0.07) | (0.09) | (0.11) | (0.08) | (0.12) |
| Husband's Signal X Husband's Decision-Making Power | 0.06 | 0.07 | 0.05 | 0.02 | 0.02 | 0.04 | 0.01 | 0.09* | 0.01 |
| | (0.04) | (0.04) | (0.04) | (0.05) | (0.05) | (0.06) | (0.05) | (0.05) | (0.04) |
| Wife's Signal X Husband's Decision-Making Power | -0.03 | -0.04 | -0.04 | 0.02 | 0.07 | 0.04 | -0.03 | -0.00 | -0.07 |
| | (0.04) | (0.04) | (0.04) | (0.06) | (0.05) | (0.07) | (0.06) | (0.06) | (0.07) |
| Husband's Signal X Husband's Relative Ability | 0.03 | 0.03 | 0.05 | 0.02 | -0.01 | 0.02 | 0.02 | -0.04 | 0.01 |
| | (0.05) | (0.04) | (0.04) | (0.06) | (0.06) | (0.07) | (0.05) | (0.06) | (0.06) |
| Wife's Signal X Husband's Relative Ability | -0.07* | -0.12*** | -0.15*** | -0.03 | -0.10** | -0.10 | -0.01 | -0.04 | 0.06 |
| | (0.04) | (0.04) | (0.04) | (0.06) | (0.05) | (0.07) | (0.06) | (0.05) | (0.06) |
| Constant | 9.94*** | 10.38*** | 10.34*** | 10.64*** | 10.47*** | 10.92*** | 10.39*** | 10.39*** | 10.54*** |
| | (0.19) | (0.20) | (0.21) | (0.20) | (0.19) | (0.24) | (0.20) | (0.21) | (0.24) |
| N | 800 | 800 | 800 | 800 | 800 | 400 | 800 | 800 | 400 |
| p-value: HHDM Interactions Equal | 0.14 | 0.08 | 0.13 | 0.98 | 0.57 | 0.94 | 0.67 | 0.28 | 0.34 |
| p-value: Ability Interactions Equal | 0.15 | 0.02 | 0.00 | 0.63 | 0.27 | 0.28 | 0.75 | 0.96 | 0.59 |

*Notes:* This table shows OLS estimates of Equation 2 for the couples experiment. The dependent variable is participants' private guess (excluding first private guesses before any information about partners' signals was available) in the *Discussion* rounds (columns 1-3), the *Informed of Draws* rounds (columns 4-6), and the *Informed of Guess* rounds (columns 7-9). The dependent variable is the husband's guesses (columns 1, 4, and 7), the wife's guesses (columns 2, 5, and 8), or the couple's joint guesses (columns 3, 6, and 9). "Husband's Signal" indicates the net number of red draws (i.e., red draws minus white draws) in the husband's signal. Similarly, "Wife's Signal" indicates the net number of red draws in the wife's signal. The Household Decision-Making Index is constructed as follows: first, we take the average answer couples gave to questions asking whether the husband primarily made decisions for the household regarding finances, education, health, shopping, travel, savings, and loans, whether he managed the money in the household, whether he was the primarily household decision-maker, whether he earned more outside the household than the wife, and whether he was older than the wife. We then normalize this variable such that it has a mean of zero and standard deviation of one. "Ability Index" is constructed as follows: we take the average of indicators for whether the husband answered more comprehension questions correctly, whether each spouse thinks he is better at the experimental task, whether he actually performed better (in first private guesses) at the task, whether he correctly answered more numeracy questions correctly, and whether he correctly answered more of the memory questions (about the number and color composition of his draws in the *Informed of Draws* round and about his previous guess in the *Informed of Guess* round) than his wife did. We then normalize this variable such that it has a mean of zero and standard deviation of one. All regressions include order fixed effects interacted with "Husband's Signal" and "Wife's Signal." Standard errors are clustered at the couple level. *, **, and *** indicate significance at the $p<0.10$, 0.05, and 0.01 levels.

Table A.XII: The Effect of Public vs Private Discussions on Spouse's Post-Discussion Guesses

| | All Rounds | | Discussion | | Informed of Draws | | Informed of Guess | |
|---|---|---|---|---|---|---|---|---|
| | H | W | H | W | H | W | H | W |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Own Signal | 0.67*** | 0.42*** | 0.66*** | 0.47*** | 0.77*** | 0.42*** | 0.43*** | 0.40*** |
| | (0.09) | (0.08) | (0.10) | (0.08) | (0.10) | (0.09) | (0.07) | (0.13) |
| | | | | | | | | |
| Spouse's Signal | 0.21*** | 0.58*** | 0.24*** | 0.62*** | 0.11 | 0.56*** | 0.41*** | 0.46*** |
| | (0.08) | (0.09) | (0.08) | (0.10) | (0.13) | (0.09) | (0.12) | (0.08) |
| | | | | | | | | |
| Own Signal X | -0.07 | -0.05 | -0.04 | -0.18** | -0.21* | 0.09 | 0.02 | 0.08 |
| Public Discussion | (0.06) | (0.06) | (0.08) | (0.08) | (0.12) | (0.13) | (0.10) | (0.12) |
| | | | | | | | | |
| Spouse's Signal X | 0.01 | -0.05 | -0.07 | -0.12 | 0.24* | 0.07 | -0.06 | -0.08 |
| Public Discussion | (0.06) | (0.06) | (0.08) | (0.09) | (0.13) | (0.12) | (0.13) | (0.12) |
| $N$ | 1,600 | 1,600 | 800 | 800 | 400 | 400 | 400 | 400 |
| $p$-value: Interactions Equal | 0.361 | 0.956 | 0.835 | 0.630 | 0.026 | 0.894 | 0.651 | 0.393 |

*Notes:* This table shows OLS estimates where dependent variable is participants' post-discussion private guess in the couples experiment, pooling husbands and wives. Columns 1, 3, 5, and 7 include only husbands' guesses, while the remaining columns include only wives' guesses.

- "Own Signal" indicates the net number of red draws (i.e., red draws minus white draws) in the participants's own signal. Similarly, "Spouse's Signal" indicates the net number of red draws in their spouse's signal.

- "Public Discussion" is a dummy variable indicating whether an experimenter was randomized to sit in on the discussion.

- All regressions include interactions between "Own Signal" and "Spouse's Signal" with round-order fixed effects.

- Standard errors are clustered at the couple level. *, **, and *** indicate significance at the $p<0.10$, 0.05, and 0.01 levels.

- All regressions include order fixed effects interacted with "Own Signal" and "Spouse's Signal."

Table A.XIII: Heterogeneity across Couples: Decision-Making Power and Relative Ability
Excluding Joint Guesses

| | Discussion | | | Informed of Draws | | | Informed of Guess | | |
|---|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Husband's Signal | 0.54*** | 0.55*** | 0.55*** | 0.56*** | 0.55*** | 0.56*** | 0.41*** | 0.41*** | 0.41*** |
| | (0.08) | (0.07) | (0.07) | (0.06) | (0.06) | (0.06) | (0.06) | (0.06) | (0.06) |
| Wife's Signal | 0.36*** | 0.33*** | 0.34*** | 0.36*** | 0.35*** | 0.35*** | 0.39*** | 0.39*** | 0.38*** |
| | (0.07) | (0.07) | (0.07) | (0.07) | (0.07) | (0.07) | (0.09) | (0.09) | (0.09) |
| Husband's Signal X Husband's Decision-Making Power | 0.06* | | 0.06 | 0.02 | | 0.02 | 0.04 | | 0.04 |
| | (0.03) | | (0.04) | (0.05) | | (0.05) | (0.04) | | (0.04) |
| Wife's Signal X Husband's Decision-Making Power | -0.05 | | -0.04 | 0.04 | | 0.05 | -0.03 | | -0.03 |
| | (0.03) | | (0.03) | (0.05) | | (0.05) | (0.05) | | (0.05) |
| Husband's Signal X Husband's Relative Ability | | 0.05 | 0.04 | | 0.02 | 0.01 | | 0.00 | -0.01 |
| | | (0.04) | (0.04) | | (0.05) | (0.05) | | (0.05) | (0.05) |
| Wife's Signal X Husband's Relative Ability | | -0.12*** | -0.11*** | | -0.07 | -0.07 | | -0.01 | -0.01 |
| | | (0.03) | (0.03) | | (0.05) | (0.05) | | (0.05) | (0.05) |
| Constant | 10.22*** | 10.22*** | 10.22*** | 10.62*** | 10.61*** | 10.63*** | 10.42*** | 10.41*** | 10.42*** |
| | (0.18) | (0.17) | (0.17) | (0.17) | (0.17) | (0.17) | (0.18) | (0.19) | (0.19) |
| $N$ | 2,400 | 2,400 | 2,400 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 |
| $p$-value: HHDM Interactions Equal | 0.03 | | 0.06 | 0.82 | | 0.79 | 0.34 | | 0.36 |
| $p$-value: Ability Interactions Equal | | 0.00 | 0.01 | | 0.30 | 0.34 | | 0.87 | 1.00 |

*Notes:* This table shows OLS estimates of Equation (2) for the Couples Experiment. The dependent variable is participants' private guesses (excluding first private guesses before any information about partners' signals was available) in the *Discussion* treatment (columns 1-3), *Informed of Draws* treatment (columns 4-6), and *Informed of Guess* treatment (columns 7-9). "Husband's Signal" indicates the net number of red draws (i.e., red draws minus white draws) in the husband's signal. Similarly, "Wife's Signal" indicates the net number of red draws in the wife's signal.

The Household Decision-Making Index is constructed as follows: first, we take the average answer couples gave to questions asking whether the husband primarily made decisions for the household regarding finances, education, health, shopping, travel, savings, and loans, whether he managed the money in the household, whether he was the primarily household decision-maker, whether he earned more outside the household than the wife, and whether he was older than the wife. We then normalize this variable such that it has a mean of zero and standard deviation of one.

"Relative Ability" is constructed as follows: we take the average of indicators for whether the husband answered more comprehension questions correctly, whether each spouse thinks he is better at the experimental task, whether he actually performed better (in first private guesses) at the task, whether he correctly answered more numeracy questions, and whether he correctly answered more of the memory questions (about the number and color composition of his draws in the *Informed of Draws* treatment and about his previous guess in the *Informed of Guess* treatment) than his wife did. We then normalize this variable such that it has a mean of zero and standard deviation of one. All regressions include order fixed effects interacted with "Husband's Signal" and "Wife's Signal." Standard errors are clustered at the couple level. *, **, and *** indicate significance at the $p<0.10$, 0.05, and 0.01 levels.

Table A.XIV: Signal Weights by Guesser and Round

| | Couples | | | | Strangers | | | |
|---|---|---|---|---|---|---|---|---|
| | All | Discussion | Signal-Sharing | Guess-Sharing | All | Discussion | Signal-Sharing | Guess-Sharing |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Man's Guess X Man's Signal | 0.55*** | 0.52*** | 0.60*** | 0.52*** | 0.48*** | 0.56*** | 0.45*** | 0.40*** |
| | (0.03) | (0.04) | (0.05) | (0.05) | (0.04) | (0.05) | (0.06) | (0.07) |
| Man's Guess X Woman's Signal | 0.31*** | 0.32*** | 0.30*** | 0.32*** | 0.28*** | 0.29*** | 0.28*** | 0.28*** |
| | (0.03) | (0.04) | (0.05) | (0.06) | (0.04) | (0.06) | (0.07) | (0.07) |
| Woman's Guess X Man's Signal | 0.47*** | 0.43*** | 0.50*** | 0.48*** | 0.28*** | 0.31*** | 0.28*** | 0.19*** |
| | (0.03) | (0.04) | (0.05) | (0.05) | (0.04) | (0.05) | (0.06) | (0.07) |
| Woman's Guess X Woman's Signal | 0.50*** | 0.48*** | 0.55*** | 0.43*** | 0.47*** | 0.53*** | 0.45*** | 0.39*** |
| | (0.03) | (0.04) | (0.05) | (0.06) | (0.04) | (0.05) | (0.07) | (0.07) |
| Joint Guess X Man's Signal | 0.52*** | 0.45*** | 0.62*** | 0.55*** | 0.46*** | 0.44*** | 0.54*** | 0.37*** |
| | (0.03) | (0.04) | (0.06) | (0.05) | (0.04) | (0.07) | (0.07) | (0.07) |
| Joint Guess X Woman's Signal | 0.50*** | 0.50*** | 0.54*** | 0.45*** | 0.39*** | 0.45*** | 0.35*** | 0.38*** |
| | (0.03) | (0.04) | (0.06) | (0.06) | (0.04) | (0.08) | (0.09) | (0.07) |
| Woman's Guess | 0.07 | 0.26** | -0.11 | 0.05 | 0.02 | -0.13 | 0.22 | -0.07 |
| | (0.07) | (0.10) | (0.11) | (0.13) | (0.11) | (0.15) | (0.17) | (0.19) |
| Joint Guess | 0.18*** | 0.26*** | 0.17* | 0.14 | 0.25*** | 0.28* | 0.35** | 0.15 |
| | (0.05) | (0.08) | (0.09) | (0.11) | (0.09) | (0.16) | (0.13) | (0.16) |
| Constant | 10.55*** | 10.38*** | 10.66*** | 10.69*** | 10.83*** | 10.92*** | 10.73*** | 10.86*** |
| | (0.08) | (0.11) | (0.12) | (0.14) | (0.11) | (0.13) | (0.15) | (0.18) |
| $N$ | 5,600 | 2,400 | 2,000 | 1,200 | 4,000 | 1,500 | 1,500 | 1,000 |
| $p$-value: Rel. weights equal: M vs J | 0.00 | 0.00 | 0.00 | 0.10 | 0.05 | 0.02 | 0.79 | 0.21 |
| $p$-value: Rel. weights equal: W vs J | 0.21 | 0.94 | 0.08 | 0.42 | 0.00 | 0.11 | 0.00 | 0.04 |
| $p$-value: Rel. weights equal: M vs W | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 0.01 |
| $p$-value: Rel. weights equal to Disc.: M | | | 0.36 | 0.98 | | | | 0.25 |
| $p$-value: Rel. weights equal to Disc.: W | | | 0.96 | 0.42 | | | | 0.88 |
| $p$-value: Rel. weights equal to Disc.: J | | | 0.31 | 0.19 | | | | 0.97 |
| $p$-value: Both weights equal to Disc.: J | | | 0.01 | 0.27 | | | | |

*Notes:* This table shows results from regressing all post-discussion guesses on both sets of signals, separately by round. We interact the man's and the woman's signal with indicators for whether the guess is the man's guess, the woman's guess or the joint guess. 'Rel. weights equal' indicates a test of the hypothesis that the difference in weights between the man's and the woman's signal equals zero. 'Rel. weights equal to Disc.' indicates a test of the hypothesis that the difference in weights between the man's and the woman's signal equals the difference in weights in the *Discussion* round. This is tested for men's guesses (M), women's guesses (W), and joint guesses (J). 'Both weights equal to Disc.' indicates a test of the joint hypothesis that both the man's and the woman's signal receive the same weight as they do in the *Discussion* round. This is tested only for joint guesses (J).

# B    Experimental Scripts

## Contents

## B.1   Demographic Survey

**SECTION P: PREAMBLE**

P1. PID: |__|__|__|
[.>= 2000 and .<= 2700]

P2. Interviewer
[   ] 1. Arunbalajee
[   ] 2. Balachandar
[   ] 3. Chinnaraja
[   ] 4. Chitra
[   ] 5. John
[   ] 6. Monisha
[   ] 7. Saravannan
[   ] 8. Subbulakshmi
[   ] 9. Valli
[   ] 10. Vasu
[   ] 11. Vimal
[   ] 12. Others, specify: _____

P3. Date: |__|__|__|__| YYYY/|__|__|MM/|__|__|DD

P4. Interview Start Time: |__|__|:|__|__| 24HR

P5. What design is the respondent part of?
[   ] 1. Couple design
[   ] 2. Individual design

**INTRODUCTION**

I would like to ask you some questions about your background, your family, and your work habits. This survey will take about 10 minutes. Please answer the questions as truthfully and accurately as possible.

Please remember that your answers will not be shared with other members of your family, friends or anyone else. The survey is entirely voluntary and you can skip questions if you don't feel comfortable answering them. There are no 'right' or 'wrong' answers. So, please answer as truthfully as possible.

Please keep in mind that your survey answers will not affect your compensation for completing this survey, participating in our study, or any other benefits that you may receive from us in the future in any way.

**SECTION A: DEMOGRAPHICS**

First, I would like to ask you some questions about your background such as how old you are, whether you are married, and your level of formal education.

A1. What is the respondent's gender?
    [   ] 1. Male
    [   ] 2. Female

A2. How old are you? If you do not know your exact age, please give me your best guess. ___
    **[. > 18 and . <60]**

## SECTION A1: FAMILY

A3. What is your current marital status? *[Do not read: Read out all the options. Check the appropriate one.]*
    [ ] 1. Single.
    [ ] 2. Married.
    [ ] 3. Divorced
    [ ] 4. Widowed
    [ ] 998. Other, specify: _____ .

*[if A3 != 2] [In case, this is a participant for the individual design - this relevance condition will not be present.]*
This appears to be wrong. Please go back and correct the answer or call your supervisor if necessary.

*[if A3 = 2]*
A4. How many years have you been married for? If you do not know the exact years, please give me your best guess. ___ **[. > 0 and . <47]** *[Do not read: If the participant does not respond in integers, write down the number of years with decimal values.]*

A5. How many children do you have? _____

A6. Does your spouse currently live with you?
    [ ] 0. No.
    [ ] 1. Yes.

## SECTION A2: EDUCATION

A7. What is the highest level of education you have completed?
    [ ] 0. Never attended school.
    [ ] 1. Only attended pre-school (LKG, UKG).
    [ ] 2. Attended school past pre-school and completed up to → a) _____ standard.
    [ ] 3. Attended college but did not finish.
    [ ] 4. Finished college.
    [ ] 998. Other, specify: _____ .

A8. Are you able to read a Tamil newspaper?
    [ ] 0. No.
    [ ] 1. Yes.

A9. Are you able to write letters in Tamil?
    [ ] 0. No.
    [ ] 1. Yes.

A10. Are you able to read English letters?
    [ ] 0. No.
    [ ] 1. Yes.

A11. Are you able to write letters in English?
    [ ] 0. No.
    [ ] 1. Yes.

A12. Can you tell me what $8 + 14$ is? _____ .
*[Do not read: go to the next question if the participant does not know the answer.]*

A13. Can you tell me what 12 – 7 is? _____ .
*[Do not read: go to the next question if the participant does not know the answer.]*

A14. Can you tell me what 3 x 9 is? _____ .
*[Do not read: go to the next question if the participant does not know the answer.]*

## SECTION A3: RATION CARD

A15. Does someone in your household have a ration card?
  [   ] 0. No.
  [   ] 1. Yes.

*[If A15= 1]*
  A16. What color is your ration card? *[Do not read: Do not prompt the participants. Check one as appropriate.]*
    [   ] 1. Green.
    [   ] 2. White.
    [   ] 3. Smart card.

## SECTION A4: RELIGION

  A17. Do you identify with a certain religion?
  [   ] 0. No.
  [   ] 1. Yes.

  *[If A17 = 1]*
  A18. What religion do you identify with? *[Do not read: Read all options. Check one as appropriate.]*
    [   ] 1. Hinduism.
    [   ] 2. Islam.
    [   ] 3. Christianity.
    [   ] 4. Jainism.
    [   ] 5. Buddhism.
    [   ] 6. Sikhism.
    [   ] 7. 998. Other, specify: _____

A19. Notes: _____

## SECTION B: WORK AND EARNINGS

Secondly, I would like to ask you some questions about your work, how you earn money, and how you make decisions about work habits.

  B1. What is your current employment status? *[Do not read: Read all options. Check one as appropriate.]*
  [   ] 0. Unemployed.
  [   ] 1. Work short duration/temporary jobs.
  [   ] 2. Employed part time.
  [   ] 3. Employed full time.
  [   ] 4. Housewife.
  [   ] 998. Other, specify: _____ .

*[if ${b1} != 0 or ${b1} != 4]*
  B2. What is your primary profession? *[Do not read: Read all options. Check all that apply.]*
  [   ] 0. Unemployed

[  ] 1. Rag picker.
[  ] 2. Bidi roller.
[  ] 3. Laundry /Washer man (woman).
[  ] 4. Porter.
[  ] 5. Textile workers/ Tailor.
[  ] 6. Data entry operator.
[  ] 7. Load man.
[  ] 8. Cobbler (shoe maker).
[  ] 9. Drivers (car/bus/auto).
[  ] 10. Rice bag stitcher/destitcher.
[  ] 11. Passenger rickshaw puller.
[  ] 12. Cargo rickshaw puller.
[  ] 13. Maid.
[  ] 14. Flower stringer.
[  ] 15. Salesman (woman) / vendors.
[  ] 16. Bamboo worker.
[  ] 17. Coolie worker.
[  ] 18. Electrician.
[  ] 19. Construction worker.
[  ] 20. Plumber.
[  ] 21. Painter.
[  ] 22. Technician.
\
[  ] 998. Other, specify: _____.

B3. Years Employed (present and previous occupation):_____

B4. During a typical week, how many days of the week do you work? _____ days.

B5. During a typical day of work, how much do you earn? Rs. _____.

B6. During a typical day of work, how many hours do you work? _____ hours.

B7. During the past year, who among you and your spouse earned more money overall?
[  ] 1. I earned more.
[  ] 2. My spouse earned more.
[  ] 3. We earned about the same.


B8. Notes: _____.

## SECTION C: HOUSEHOLD DECISIONS

Think about the important decisions that have to be taken in your household - finances, children's education, shopping, travel.

C1. Overall, who is the main decision-maker in your household?
[  ] 0. Husband.
[  ] 1. Wife.
[  ] 2. Other: ____
C2. In your household, what are the decisions that you mainly decide about?

C3. In your household, what are the decisions that your spouse mainly decides about?

C4. In your household, what are the decisions that you and your spouse mainly decides about?

C5. Who has more control over decisions pertinent to finances?
    [ ] 0. Husband.
    [ ] 1. Wife.

C6 Who has more control over decisions pertinent to children's education?
    [ ] 0. Husband.
    [ ] 1. Wife.

C7. Who has more control over decisions pertinent to children's and family health?
    [ ] 0. Husband.
    [ ] 1. Wife.

C8. Who has more control over decisions pertinent to shopping?
    [ ] 0. Husband.
    [ ] 1. Wife.

C9. Who has more control over decisions pertinent to travel?
    [ ] 0. Husband.
    [ ] 1. Wife.

C10. How do you and your partner/spouse organize your household income? Which of the sentences on this card fits best? *[Do not read: Read out all the options and check the appropriate one.]*
    [ ] 1. I manage all the money and give my partner/spouse his/her share
    [ ] 2. My partner/spouse manages all the money and gives me my share
    [ ] 3. We pool all the money and each takes out what we need
    [ ] 4. We pool some of the money and keep the rest separate
    [ ] 5. We each keep our own money separate
    [ ] 998. Other, specify: _____.

C11. How satisfied are you with the sharing opinion on household tasks between you and your partner/spouse?
    [ ] 0. Never.
    [ ] 1. Almost Never.
    [ ] 2. Sometimes.
    [ ] 3. Fairly Often.
    [ ] 4. Very Often.

C12. Couples deal with serious disagreements in various ways. When you have a serious disagreement with your partner/spouse, how often do you keep your opinion to yourself?
    [ ] 0. Never.
    [ ] 1. Almost Never.
    [ ] 2. Sometimes.
    [ ] 3. Fairly Often.
    [ ] 4. Very Often.

C13. Notes: _____.

## SECTION D: SAVINGS AND BORROWING

Now I would like to ask you some questions about savings and borrowing in your household.

D1. Who makes important decisions regarding savings?
    [ ] 0. Husband.
    [ ] 1. Wife.

[  ] 2. Both husband and wife

D2. Is your spouse aware of all of your savings?
    [  ] 0. No.
    [  ] 1. Yes.

D3.  Who makes important decisions regarding loans?
    [  ] 0. Husband.
    [  ] 1. Wife.
    [  ] 2. Both husband and wife

D4. Is your spouse aware of all of your outstanding loans?
    [  ] 0. No.
    [  ] 1. Yes.

D5. Notes: _____.

## SECTION Z: CONCLUSION

Thank you for your time!

Z1. Re-enter PID: _____

End Time: |__|__|:|__|__| 24HR

## B.2   Experimental Script for Wives

**SECTION P: PREAMBLE**

P1. PID: |__|__|__|__|
[. >= 2000 and . <= 2700]

P2. Interviewer

P2a. [Prefilled] Randomized interviewer for the Rounds.

P3. Do you have the following things to proceed with the experiment?
[   ] 1. Sheet with scale for guessing red balls in the urn along with a token
[   ] 2. Sheet with payment mechanism
[   ] 3. Sheet to explain randomization of final guess
[   ] 4. A sample urn with red and white balls (10 each)
[   ] 5. Tray with red and white balls (10 each)
[   ] 6. Lid to cover the urn on the table
[   ] 7. Two practice urns - (16,4) and (9,11)
[   ] 8. Arrange all five urns for the activity at the back of the booth
[   ] 9. Envelope with the guess that counts

P4. Date: |__|__|__|__|__| YYYY/|__|__|MM/|__|__|DD

P5. Interview Start Time: |__|__|:|__|__| 24HR

**General prefills:**
P6. [Prefilled] Randomized order of rounds
P7. [Prefilled] Number of red balls in the urn in Round 1.
P8. [Prefilled] Number of red balls in the urn in Round 2.
P9. [Prefilled] Number of red balls in the urn in Round 3.
P10. [Prefilled] Number of red balls in the urn in Round 4.
P11. [Prefilled] Number of red balls in the urn in Round 5

**Round 1 prefills:**
P12. [Prefilled] Spouse who goes first in Round 1.
P13. [Prefilled] Spouse who goes second in Round 1.
P14. [Prefilled] Spouse 1's number of draws from Round 1.
P15. [Prefilled] Spouse 2's number of draws from Round 1.
P36. [Prefilled] Public/private discussion.

**Round 2 prefills:**
P16. [Prefilled] Spouse who goes first in Round 2.
P17. [Prefilled] Spouse who goes second in Round 2.
P18. [Prefilled] Spouse 1's first number of draws from Round 2.
P19. [Prefilled] Spouse 2's first number of draws from Round 2.
P20. [Prefilled] Spouse 1's second number of draws from Round 2.
P21. [Prefilled] Spouse 2's second number of draws from Round 2.

**Round 3 prefills:**

P22. [Prefilled] Spouse who goes first in Round 3.
P23. [Prefilled] Spouse who goes second in Round 3.
P24. [Prefilled] Spouse 1's number of draws from Round 3.
P25. [Prefilled] Spouse 2's number of draws from Round 3.
P34. [Prefilled] Public/private discussion.

**Round 4 prefills:**
P26. [Prefilled] Spouse who goes first in Round 4.
P27. [Prefilled] Spouse who goes second in Round 4.
P28. [Prefilled] Spouse 1's number of draws from Round 4.
P29. [Prefilled] Spouse 2's number of draws from Round 4.
P35. [Prefilled] Public/private discussion.

**Round 5 prefills:**
P30. [Prefilled] Spouse who goes first in Round 5.
P31. [Prefilled] Spouse who goes second in Round 5.
P32. [Prefilled] Spouse 1's number of draws from Round 5.
P33. [Prefilled] Spouse 2's number of draws from Round 5.
P37. [Prefilled] Public/private discussion.

**Beliefs about competence prefills:**
P38. [Prefilled] Randomized belief chosen for Spouse 2.
P39. [Prefilled] Randomized belief chosen for Spouse 1.

**Finalized round and guess prefills:**
P40. [Prefilled] Randomized final round.
P41. [Prefilled] Randomized final guess.

**SECTION A: INTRODUCTION**

*[Do not read: Talk to the wife and ensure that the introduction for the husband starts simultaneously.]*

Thank you for coming today! My name is ${p2}. Would you like something to drink before we start the task? May we offer you some water, or tea, or coffee?

Please turn off your mobile phone till the end of this task. We want to ensure that you are attentive throughout the task.

As discussed before, you and your husband will take part in a task in which you can earn some money. Please take this task seriously. Your choices directly affect how much you earn.

This study aims to contribute to the welfare of the people. So, your participation is important to us. Before you make each choice, think well. Consider these choices to be like decisions you make in real life.

**Section A1: General Overview**

We will now explain the activity to you. **Similarly, another surveyor is explaining this activity to your husband.** You and your husband will then participate in a total of five rounds that are all similar. In each round, you will see an urn such as this one.

*[Do not read: Show the sample urn with a few red and white balls.]*

Each urn contains a total of 20 balls. Some of these balls are white and others are red.

*[Do not read: Show the participant a tray with some white balls and some red balls.]*

Now we will ask you some questions about this task.

A1. How many balls are inside each urn?
[   ] a. 20 → Yes, that is correct.
[   ] b. Any other answer → No, there are 20 balls inside each urn.

A2. What are the colors of these balls?
[   ] a. Red and white → Yes, that is correct.
[   ] b. Any other answer → No, the balls are red and white.

In each round, the number of red and white balls will be unknown to you. You will only know that in total there are 20 balls inside the urn.

Your task will be to guess how many of these balls are red. In each round, you can draw some balls from the urn to help you make this guess.

A3. Now, can you describe to me in your own words what we would like you to do in this task?

[*Do not read: Select all points mentioned correctly by the participants*.]

[   ] a. Draw a few balls from the urn.
[   ] b. Based on the draws, guess how many of the balls in the urn are red.

A3a. *[Do not read: Did the participant describe all steps of the task accurately?]*
[   ] a. Yes → Proceed with the survey.
[   ] b. No, the participant missed or described incorrectly 1 of the 2 points. → Explain that particular point to the participant.
[   ] c. No, the participant missed or described incorrectly both points. → Explain Section A1 to the participant again. Ignore comprehension questions that are part of the text.

**Section A2: Randomization of Red and White Balls**

*[Do not read: Show the scale depicting composition of balls in the urn (Figure 1) to the participant as you explain the below text to them.]*

COMPOSITION OF RED AND WHITE BALLS IN THE URN



Your goal is to guess the number of red balls in the urn, in all five rounds. The number of red balls can be any number ranging from 4 to 16, as you can see on this figure.

- The lowest possible number of red balls is 4. *[Do not read: Point to the urn in the figure containing 4 red balls.]*

  A4. Can there be less than 4 red balls in the urn, in any round?
  [  ] a. Yes → No, the lowest number of red balls is 4.
  [  ] b. No → Yes, this is correct.

- The highest possible number of red balls is 16. *[Do not read: Point to the urn in the figure containing 16 red balls.]*

  A5. Can there be more than 16 red balls in the urn, in any round?
  [  ] a. Yes → No, the highest number of red balls is 16.
  [  ] b. No → Yes, this is correct.

- Any other number between 4 and 16 is possible. For example, there could be 6, 7, 11, or 12 red balls in the urn.

We have already used our computer to decide the true number of red balls in the urn in each round. Our computer picked a random number from 4 to 16 for all five rounds. The computer was equally likely to choose any number from 4 up to 16. So, in each round, any number from 4 to 16 is equally likely to be the true number.

In each round, we will ask you to guess the number of red balls in the urn. When we do, we would like you to use this coin to point to the exact number you would like to guess, on this figure.

*[Do not read: Show the participant how to point to the exact number on Figure 1 with the coin.]*

Before we proceed, we will ask you some questions.

A6. What is the highest number of red balls that can possibly be in the urn?
[   ] a. 16 → Yes, that is correct.
[   ] b. Any other answer → No, there can be a maximum of 16 red balls in the urn.

A7. What is the lowest number of red balls that can possibly be in the urn?
[   ] a. 4 → Yes, that is correct.
[   ] b. Any other answer → No, there can be a minimum of 4 red balls in the urn.

A8. How do we decide the correct number of red balls in the urn? Is it you, me, or the computer?
[   ] a. The computer already decided. → Yes, that's correct.
[   ] b. Any other answer → No, the computer decides the correct number of red balls in the urn.

A9. Are some numbers of red balls more likely to occur than others?
[   ] a. Each number is equally likely to be chosen by the computer. → Yes, that's correct.
[   ] b. Any other answer → No, each number is equally likely to be chosen by the computer.

A10. Do you have any questions for us?
[   ] a. Yes → *[Do not read: Clarify any doubts or questions they may have.]*
[   ] b. No → *[Do not read: Proceed with the survey.]*

A10a. **[if ${a10} = 1 ]** *[Do not read]* Specify their question: _____

Let's practice the task a few times. These rounds will not matter for your payment. They are just to help you better understand the task.

Before we begin the example rounds, let me clarify. In the final task, you will have one set of draws, while your husband has another set of draws from the same urn. In the example rounds, you will have both sets of draws. Similarly, your husband in the other booth will also have both sets of draws in the example rounds.

*[Do not read: Take practice urn 1 that contains 16 red balls and 4 white balls. Use the scale.]*

This urn contains 20 balls. Your goal will be to guess how many of them are red. Please draw one ball from this urn. I will shuffle the balls in the urn before you draw from the urn.

A11. Color of the ball: _____
[SurveyCTO check: Limit string length to exactly 1 and display as field list.]

*[Do not read: Ask them to use Figure 1 and the coin.]*

A12. How many red balls do you think are in this urn? _____

Please draw an additional five balls from this urn. I will shuffle the balls in the urn before each of your draws.

A13. Order of the draws: _____
[SurveyCTO check: Limit string length to exactly 5 and display as field list.]

*[Do not read: Ask them to use Figure 1 and the coin.]*

A14. How many red balls do you think are in this urn? Note that you should use the information from all six draws for your guess. _____

Do you have any questions for us so far?

*[Do not read: Clarify any doubts or questions they may have.]*

Let's now see how many red balls there are actually in the urn.

*[Do not read: Empty the urn in front of the participant and count the number of red balls.]*

As you can see, this urn contains mostly red balls. 16 of the balls are red and 4 of them are white.

Let me try to give you a few tips based on this example:

- **Tip 1:** Your draws help you make your guesses.

    - Suppose you draw more red balls than white balls. Then it makes sense to guess that there are more red balls in the urn. For example, if you draw four red balls and one white ball, then there are probably more red than white balls in the urn overall.

    - Suppose you draw more white balls. It makes sense to guess that there are more white balls in the urn.

    - Suppose you draw the same number of red and white balls. It makes sense to guess that the number of red and white balls are the same.

- **Tip 2:** The more balls you draw, the more confident you can be in your guess.

    - For example, suppose you draw only one ball. You do not learn much. Since there are many balls in the urn and you might draw a white ball by chance even if most balls are red.

- Suppose you draw many balls and most of the balls are red. Then, you can be fairly sure that most balls in the urn are red. Suppose you draw many balls and most of the balls are white. Then, you can be fairly sure that most balls in the urn are white.

A15. Can you tell us if you can learn more about the number of red balls from 1 draw or from 5 draws?
[   ] a. I will learn more when I draw 5 balls → Yes, that's correct.
[   ] b. I will learn more when I draw 1 ball → No, that's incorrect. You can learn more when you draw 5 balls.
[   ] c. I will learn the same regardless of how many balls I draw. → No, that's incorrect. You can learn more when you draw 5 balls.

- **Tip 3**: Shuffling the balls in the urn will be helpful. You will be able to learn more about the contents of the urn.

    - In this activity, I will ask you to draw a ball from the urn. Once you have a looked at the a ball, you put it back into the urn, and then draw another ball. Then you draw the next ball without shuffling the balls properly, there is a higher chance that you will draw the same ball again. If you draw the same ball again, you are not learning anything new. Thus, it is important to shuffle the urn to learn more about the contents of the urn. In each round, I will shuffle the balls in the urn before each of your draws.

Could you please repeat each of these three tips in your own words? I want to be sure I have explained things clearly.

A16. [*Do not read: Select all points mentioned correctly by the participant*.]
[   ] a. The more red balls you draw from the urn, the higher the chance that majority of the balls are red.
[   ] b. The more balls you draw, the more confident you can be in your guess.
[   ] c. Shuffling the balls in the urn can help you learn more.

*[Do not read: Repeat the particular tips that they missed or incorrectly explained just once.]*

Let's do another example.

*[Do not read: Take practice urn 2 that contains 9 red balls and 11 white balls. Use Figure 1 and the coin.]*

Please draw nine balls from this urn.

*[Do not read: Shuffle the balls in the urn, before each draw.]*

A17. Order of the draws: _____
[SurveyCTO check: Limit string length to exactly 9 and display as field list.]

*[Do not read: Ask them to use Figure 1 and the coin.]*

A18. How many red balls do you think are in this urn? _____

Please draw an additional ball from this urn.

*[Do not read: Shuffle the balls in the urn, before each draw.]*

A19. Color of the draw: _____
[SurveyCTO check: Limit string length to exactly 1 and display as field list.]

*[Do not read: Ask them to use Figure 1 and the coin.]*

A20. How many red balls do you think are in this urn?Note that you should use the information from all ten draws for your guess.

 _____

Let's now see how many red balls there are in the urn.

*[Do not read: Empty the urn in front of the participant and count the number of red balls.]*

As you can see, the urn contains more white balls than red balls. There are 9 red balls in the urn and 11 white balls in the urn.

**Section A3: Explanation of the Number of Draws**

As we said before, you and your husband have to guess the correct number of red balls in the urn. We will pay you according to how close your guess is to the true number of red balls in the urn.

You will make many draws and guesses for five different urns. Similarly, so will your husband. Now let me tell you more about the number of draws.

The number of draws each of you get will vary between 1,5, and 9.
The number of draws you and your husband will get might be different from each other.
The number of draws you and your husband will get might also be different across sections.

A21. Is it possible that you get exactly 4 draws in any particular round?
[   ] a. Yes, I think I can get 4 draws in a round. → No, that is incorrect. You can get either 1, 5 or 9 draws in a round.
[   ] b. No, I don't think I can get 4 draws in a round. → Yes, that is correct. You can get either 1, 5 or 9 draws in a round.

A22. How do you think your number of draws will be across rounds? *[Do not read: Read all options and mark one]*
[   ] a. You will have the same number of draws across each round. → No, that is incorrect. You may have the same or different number of draws across each round.
[   ] b. You will have different number of draws across each round. → No, that is incorrect. You may have the same or different number of draws across each round.
[   ] c. You may have the same or different number of draws across each round. → Yes, that is correct.

A23. In any given round, do you think you and your husband will have the same number of draws?
[   ] a. Yes, we will both have the same number of draws. → No, that is incorrect. You might or might not have the same number of draws.
[   ] b. No, we will not have the same number of draws. → No, that is incorrect. You might or might not have the same number of draws.
[   ] c. We might or might not have the same number of draws. → Yes, that is correct.

**Section A4: Randomization of the Guess to be Implemented**

Now, let me tell you more about the guesses you and your husband will make.

Some of these guesses will be on your own. Some others you will make together with your husband. We will record all your choices on this sheet. *[Do not read: Show the participant the sheet in which you record the choices.]* The computer has chosen only one of these guesses to be the one that counts for your payment. Since you do not know which of those choices will be selected when making your choices, you should take each single choice very seriously.

| | Wife Guess 1 | Husband Guess 1 | Wife Guess 2 | Husband Guess 2 | Joint Guess |
|---|---|---|---|---|---|
| **Round 1** | | | | | |
| **Round 2** | | | | | |
| **Round 3** | | | | | |
| **Round 4** | | | | | |
| **Round 5** | | | | | |

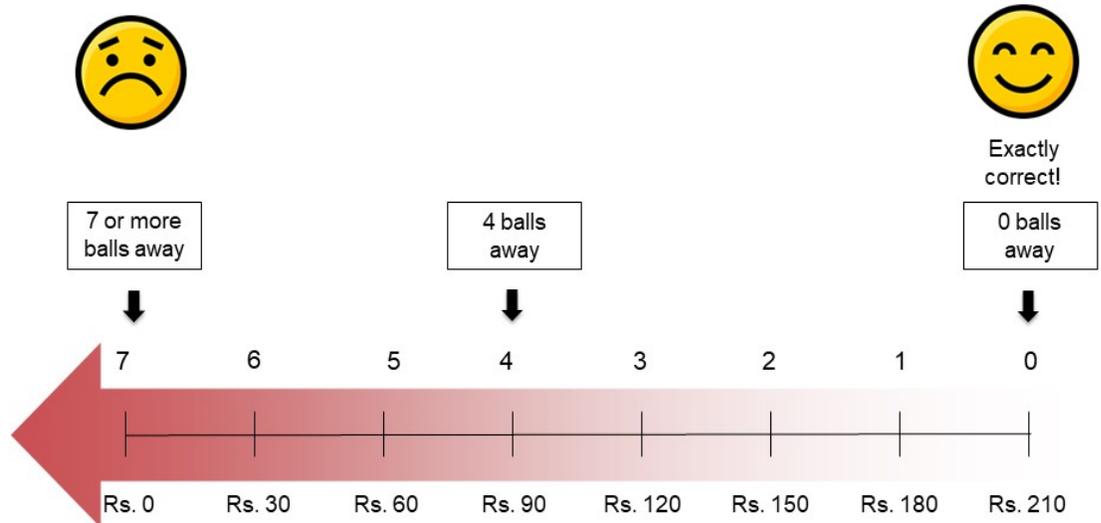## Section A5. Payment Depending on Performance

*[Do not read: Show them Figure 2 to explain the payment scheme.]*

Now, let me explain how the payment scheme works with this figure.

- Regardless of your choices, you and your husband together will receive a flat payment of Rs. 300. Besides this flat payment, both of you have a chance to make some more money. How much more money you can earn depends on how close both your guesses are to the true number of balls in the urn. Each of you will be paid half of the total amount you earn separately.

- As we mentioned above, only one of your guesses will be chosen by the computer.

- If the chosen guess is exactly correct, then you and your husband together could receive, besides the flat payment, at the most Rs. 210. So, your total payment could be at most Rs. 510. If your guess is very wrong, then you will make no extra money from the guess. You would only receive the flat payment of Rs. 300. If you are in middle of these two extremes, you get an amount that is between Rs. 0 and Rs. 210.

- Along with this, you and your husband will have an opportunity to earn an additional Rs. 50 each at the end of this activity.

- Let me give you an example. Suppose the true number of red balls is 5.

    [*Do not read: Use Figure 2 to explain this entire section*.]

# PAYMENT SCALE



-   If your guess is 5, your guess is exactly correct. So, you would receive the maximum of Rs. 210 from the guesses (and Rs. 510 in total).

-   If your guess is 9, it is 4 balls away from the truth since 9 minus 5 is 4. You will lose Rs. 30 for each of the 4 balls. Therefore, you would lose Rs. 120 and receive Rs. 90 from the guess.

-   If your guess is 12, it is 7 balls away from the truth since 12 minus 5 is 7. You will lose Rs. 30 each for the 7 balls. Therefore, you would lose Rs. 210 and receive nothing from the guesses.

-   If your guess is 16, it is 11 balls away from the truth since 16 minus 5 is 11. This guess is quite far away from the truth, so you would not receive any additional payments.

Do you have any questions about how the payment is decided?

Now, we will ask you a few questions before we proceed with the activity.

*[Do not read: Ask the participant to use Figure 2 for the following questions.]*
A24. Suppose that the true number is 6 red balls for the guess that counts. If you guess that there are 7 red balls in the urn, how many balls are you away from the true number of red balls? How much would you be paid from the guess?
[  ] a. 1 ball away from the true number. Rs. 180 → Yes, that's correct. [if ${a24} = 180]

[   ] b. Any other answer → *[Do not read: Explain the payment mechanism again with the help of Figure 2.]* No, you will be paid Rs. 180. [if ${a24} != 180]

A25. Suppose that the true number is 15 red balls for the guess that counts. If you guess that there are 4 red balls in the urn, how many balls are you away from the true number of red balls? How much would you be paid from the guess?

[   ] a. 11 balls away from the true number. Rs. 0 → Yes, that's correct. [if ${a25} = 0]
[   ] b. Any other answer → *[Do not read: Explain the payment mechanism again with the help of Figure 2.]* No, you will be paid Rs. 0. [if ${a25} != 0]

A26. Suppose that the true number is 12 red balls for the guess that counts. If you guess that there are 8 red balls in the urn, how many balls are you away from the true number of red balls? How much would you be paid from the guess?
[   ] a. 4 balls away from the true number. Rs. 90→ Yes, that's correct. [if ${a26} = 90]
[   ] b. Any other answer → *[Do not read: Explain the payment mechanism again with the help of Figure 2.]* No, you will be paid Rs. 90. [if ${a26} != 90]

## Section A6: Overview of the Activity

Before we begin the activity, let me now tell you about the structure of the activity:

- The number of draws for each of you will vary between 1, 5 and 9 over time. Each of you might get a different number of draws. We will inform you about this number in each round.
- Based on your draws, you will each make a few guesses - some on your own, some with your husband.

We are interested in learning how you decide. Thus, in some of the rounds, we will be present to observe how you make decisions. This procedure has nothing to do with what we think of the decisions you make. We follow it with all the participants.

Do you have any questions before we begin?

*[Do not read: Clarify any doubts or questions they may have.]*

**Comprehension scores:** *[In-built CTO Check to calculate their comprehension]*

${p2a} will continue with the rest of the survey.

**SECTION B: ROUNDS**

**ROUND 1: Classic**

Here is the first urn. Both of you will each make draws from the same urn. Until the completion of this round, we will be using only this urn. As you can see, this urn is green in color - for each round, we will use a different colored urn.

The computer has decided that ${p12} starts first in this round. In this round, you will draw a few balls and guess the number of red balls in the urn; then your ${p13} will draw a few balls and guess. Following this, we will ask you to make a joint guess.

*[Do not read: Ask the ${p13} to leave and talk to the ${p12}.]*

**A: Spouse 1 Individual Guess**

Before we start the activity, can you now please explain to me in your own words what we are asking you to do?

R1_a. *[Do not read: Did the participant mention the following points correctly?]*
[   ] a. Draw balls
[   ] b. Guess number of red balls

*[Do not read: Repeat and correct points that are missing or incorrect.]*

This urn contains 20 balls. You can now draw ${p14} balls from the urn to try and learn how many red balls and how many white balls are in the urn. Draw a ball from the urn, have a look at it, and put it back into the urn. Please draw ${p14} balls in total. I will shuffle the balls in the urn before each of your draws.

*[Do not read: Ensure that the participant draws ${p14} times and note down the composition.]*

Q1. Order of red/white balls drawn: ____
[SurveyCTO check: Limit string length to exactly ${p14} and display as field list.]

Q2. *[Do not read]* How many red balls did the ${p12} draw? ___

Q3. How many red balls do you think are in the urn? ___ *[Do not read: Have them move the coin to make their decision]*

Thank you for your guess. It is now your ${p13}'s turn. We will not change the contents of the urn and they will remain the same, while you are waiting.

*[Do not read: Ask the ${p12} to wait and ask the ${p13} to join. Once the ${p13} joins, ask the ${p12} to leave.]*

### B. Spouse 2 Individual Guess

Before we start the activity, can you now please explain to me in your own words what we are asking you to do?

R1_b. *[Do not read: Did the participant mention the following points correctly?]*
[   ] a. Draw balls
[   ] b. Guess number of red balls

*[Do not read: Repeat and correct points that are missing or incorrect.]*

This urn contains 20 balls and your ${p12} got a chance draw some balls from it. Now it is your turn. You can draw ${p15} balls from the urn. Draw a ball from the urn, have a look at it, and put it back into the urn. Please draw ${p15} balls in total. I will shuffle the balls in the urn before each of your draws.

*[Do not read: Ensure that the participant draws ${p15} times and note down the composition.]*

Q4. Order of red/white balls drawn: _____
[SurveyCTO check: Limit string length to ${p15} and display as field list.]

Q5. How many red balls did the ${p13} draw? ___

Q6. How many red balls do you think are in the urn? ___ *[Do not read: Have them move the coin to make their decision]*

*[Do not read: Ask the ${p13} to wait and ask the ${p12} to join.]*

### C. Joint Discussion
Now, we would like you to decide together the number of red balls in the urn.

### [if ${p36} = "public"] C1. Public Discussion

*[Do not read: Remain in the booth for the discussion.]*

We are going to remain in the booth while you make your decision together. This is only because we would like to see your decision-making process.

Our staying here has nothing to do with whether you made 'good' or 'bad' decisions in previous rounds. This task is designed to be difficult. Most couples find it hard to come up with a good answer. Don't worry about saying anything wrong in front of us. Just try to do your best.

Now both of you will make a decision together. Remember, this does not have to be the same as either of your previous guesses.

Q7a. *[Do not read: Discussion start time: |__|__|:|__|__| 24HR]*

Q7b. *[Do not read: Discussion end time: |__|__|:|__|__| 24HR]*

Q7c. *[Do not read]* Did they share information?
   [ ] 0. No
   [ ] 1. Yes

**[if ${q7c} = 1; for Q7d – Q7h]**
Q7d. *[Do not read]* Who shared information?
   [ ] a. Husband
   [ ] b. Wife
   [ ] c. Both

Q7e. *[Do not read]* What information did the wife share?
   [ ] a. Number of draws
   [ ] b. Color composition
   [ ] c. Guess

Q7f. *[Do not read]* What information did the husband share?
   [ ] a. Number of draws
   [ ] b. Color composition
   [ ] c. Guess

Q7g. *[Do not read]* Who made the decision?
   [ ] a. Husband
   [ ] b. Wife
   [ ] c. Both

Q7h. *[Do not read]* Notes on interaction: _____

**[if ${p36} = "private"] <u>C2. Private Discussion</u>**
Remember, this does not have to be the same as either of your previous guesses. We will now let you two decide. Let us know once you have made a decision together.

*[Do not read: Leave the booth and enter once they have made the decision. Keep the urn with the lid behind the table. Once you enter, place the urn on the table.]*

Q7i. *[Do not read: Discussion start time: |__|__|:|__|__| 24HR]*

Q7j. *[Do not read: Discussion end time: |__|__|:|__|__| 24HR]*
**<u>C3. Joint Guess</u>**

Q8. How many red balls do you think there are in the urn? ___ *[Do not read: Have them move the coin to make their decision]*

Q9. [*Do not read: Which spouse moved the coin last on the scale?*]
   [ ] a. Husband
   [ ] b. Wife

[  ] c. Both

We will keep aside the urn now. We will show you the number of red balls in the urn, if this urn is chosen at the end.

## C4. Post-Discussion Guesses

*[Do not read: With the other surveyor, ask the participants the following questions simultaneously in separate booths. ${p12} will remain in the same booth. Ask ${13} to go to the other booth with the other surveyor.]*

Both of you discussed and made a joint guess. You now each have a chance to make another guess based on the information you learnt. We will not share your guess with your spouse. This guess may be different from your previous guesses or it may the same. Based on all the information you learnt, how many red balls do you think are in this urn?

Q10. What is the ${p12}'s updated guess? _____ *[Do not read: Have them move the coin to make their decision]*

Q11. What is the ${p13}'s updated guess? _____ *[Do not read: Have them move the coin to make their decision]*

We will show you the number of red balls in the urn, if this urn is chosen at the end to be the one that determines your payment. Now, we will proceed to the next round.

## ROUND 2: Within-Person Updating

Here is the second urn. Both of you will each make draws from the same urn. Until the completion of this round, we will be using only this urn. As you can see, this urn is orange in color - for each round, we will use a different colored urn.

The computer has decided that ${p16} starts first in this round. In this round, you will draw a few balls and guess, then your ${p17} will draw a few balls and guess. You will not get to discuss and guess together in this round. We will also not share your guess with each other.

*[Do not read: Ask the ${p17} to leave and talk to the ${p16}.]*

## A: Spouse 1 Individual Guess

This urn contains 20 balls. We will now do something slightly different than mentioned before. You can draw ${p18} balls from the urn to try and learn how many red balls and how many white balls are in the urn. Draw each ball from the urn, have a look at it, and put it back into the urn. I will shuffle the balls in the urn before each of your draws.

R1. *[Do not read]* Order of red/white balls drawn: ____
[Constraint: Limit the number characters that can be entered to ${p18}and display as field list.]

R2.*[Do not read]* How many red balls did the ${p16} draw? ___

R3. How many red balls do you think are in the urn? ___ *[Do not read: Have them move the coin to make their decision]*

*[Do not read: Ask the participant to wait for 5 minutes before proceeding with the survey.]*

You can now draw ${p20} more balls to learn more about the contents of the urn. Please draw ${p20} balls in total.

R4. *[Do not read]* Order of red/white balls drawn: ____
[Constraint: Limit the number characters that can be entered to ${p20} and display as field list..]

R5.*[Do not read]* How many red balls did the ${p16} draw? ___

R6. Now that you have had the chance to learn more about the content of the urn, can you tell us how many red balls you think are in the urn? [Updated guess] ___ *[Do not read: Have them move the coin to make their decision]*

Thank you for your guess. It is now your ${p17}'s turn. We will not change the contents of the urn and they will remain the same, while you are waiting.

*[Do not read: Ask the ${p16} to wait and ask the ${p17} to join. Once the ${p17} joins, ask the ${p16} to leave.]*

**B. Spouse 2 Individual Guess**

This urn contains 20 balls. We will now do something slightly different than mentioned before. You can draw ${p19} balls from the urn to try and learn how many red balls and how many white balls are in the urn. Draw each ball from the urn, have a look at it, and put it back into the urn. I will shuffle the balls in the urn before each of your draws.

R7. *[Do not read]* Order of red/white balls drawn: ____
[Constraint: Limit the number characters that can be entered to ${p19}and display as field list.]

R8. *[Do not read]* How many red balls did the ${p17} draw? ___

R9. How many red balls do you think are in the urn? ___ *[Do not read: Have them move the coin to make their decision]*

*[Do not read: Ask the participant to wait for 5 minutes before proceeding with the survey.]*

You can now draw ${p21} more balls to learn more about the contents of the urn. Please draw ${p21} balls in total.

R10. *[Do not read]* Order of red/white balls drawn: ____
[Constraint: Limit the number characters that can be entered to ${p21}and display as field list.]

R11. *[Do not read]* How many red balls did the ${p17} draw? ___

R12. Now that you have had the chance to learn more about the content of the urn, can you tell us how many red balls you think are in the urn? [Updated guess] ___ *[Do not read: Have them move the coin to make their decision]*

**ROUND 3: Enforced Guess Sharing**

Here is the third urn. Both of you will each make draws from the same urn. Until the completion of this round, we will be using only this urn. As you can see, this urn is blue in color - for each round, we will use a different colored urn.

The computer has decided that ${p22} starts first in this round. In this round, you will draw a few balls and guess, then your ${p23} will draw a few balls and guess. We will share your guesses with each other. Once you learn your spouse's guess, you will make another guess. Following this, we will ask you to make a joint guess.

*[Do not read: Ask the ${p23} to leave and talk to the ${p22}.]*

**A: Spouse 1 Individual Guess**

This urn contains 20 balls. Similar to the previous round, you can draw ${p24} balls from the urn to try and learn how many red balls and how many white balls are in the urn. Draw a ball from the urn, have a look at it, and put it back into the urn. Please draw ${p24} balls in total. I will shuffle the balls in the urn before each of your draws.

*[Do not read: Ensure that the participant draws ${p24} times and note down the composition.]*

S1. *[Do not read]* Order of red/white balls drawn: _____
[Constraint: Limit the number characters that can be entered to ${p24}and display as field list.]

S2. *[Do not read]* How many red balls did the ${p22} draw? ___

S3. How many red balls do you think are in the urn? ___ *[Do not read: Have them move the coin to make their decision]*

Thank you for your guess. It is now your ${p23}'s turn. We will not change the contents of the urn and they will remain the same, while you are waiting.

*[Do not read: Ask the ${p22} to wait and ask the ${p23} to join. Once the ${p23} joins, ask the ${p22} to leave.]*

**B. Spouse 2 Individual Guess**

This urn contains 20 balls and your ${p22} got a chance draw some balls from it. Now it is your turn. Similar to the previous round, you can draw ${p25} balls from the urn. Draw a ball from the urn, have a look at it, and put it back into the urn. Please draw ${p25} balls in total. I will shuffle the balls in the urn before each of your draws.

*[Do not read: Ensure that the participant draws ${p25} times.]*

S4. *[Do not read]* Order of red/white balls drawn: _____

[Constraint: Limit the number characters that can be entered to ${p25}and display as field list.]

S5. *[Do not read]* How many red balls did the ${p23} draw? ___

S6. How many red balls do you think are in the urn? ___ *[Do not read: Have them move the coin to make their decision]*

## C. Spouse 2 Updated Individual Guess

We will now share your ${p22}'s guess with you. Using this information and your own information, we will ask you to make a new guess. This guess can be the same as your previous guess or it can be different from your previous guess. It is entirely your choice.

Your ${p22} drew ${p24} balls from this urn and guessed that there are ${s3} red balls in this urn.

S7a. Can you tell me how many balls you drew from this urn? ___

S7b. Can you tell me what you had guessed? ____

Now that you learned your spouse's guess, how many red balls do you think there are in the urn? Please take your time to think about your choice.

S7. What is the ${p23}'s updated guess? ___ *[Do not read: Have them move the coin to make their decision]*

*[Do not read: Ask the ${p23} to wait and ask the ${p22} to join. Once the ${p22} joins, ask the ${p23} to leave.]*

## D. Spouse 1 Updated Individual Guess

We will now share your ${p23}'s guess with you. Using this information and your own information, we will ask you to make a new guess. This guess can be the same as your previous guess or it can be different from your previous guess. It is entirely your choice.

Your ${p23} drew ${p25} balls from this urn and guessed that there are ${s6} red balls in this urn.

S8a. Can you tell me how many balls you drew from this urn? ___

S8b. Can you tell me what you had guessed? ____

Now that you learned your spouse's guess, how many red balls do you think there are in the urn? Please take your time to think about your choice.

S8. What is the ${p22}'s updated guess? ___ *[Do not read: Have them move the coin to make their decision]*

*[Do not read: Ask the ${p22} to wait and ask the ${p23} to join.]*

**E. Joint Discussion**

Now, we would like you to decide together the number of red balls in the urn.

**[if ${p34} = "public"] E1. Public Discussion**

*[Do not read: Remain in the booth for the discussion.]*

We are going to remain in the booth while you make your decision together. This is only because we would like to see your decision-making process.

Our staying here has nothing to do with whether you made 'good' or 'bad' decisions in previous rounds. This task is designed to be difficult. Most couples find it hard to come up with a good answer. Don't worry about saying anything wrong in front of us. Just try to do your best.

Now both of you will make a decision together. Remember, this does not have to be the same as either of your previous guesses.

S9a. *[Do not read: Discussion start time: |__|__|:|__|__| 24HR]*

S9b. *[Do not read: Discussion end time: |__|__|:|__|__| 24HR]*

S9c. *[Do not read]* Did they share information?
   [ ] 0. No
   [ ] 1. Yes

**[if ${s9c} = 1; for S9d – S9h]**
S9d. *[Do not read]* Who shared information?
   [ ] a. Husband
   [ ] b. Wife
   [ ] c. Both

S9e. *[Do not read]* What information did the wife share?
   [ ] a. Number of draws
   [ ] b. Color composition
   [ ] c. Guess

S9f. *[Do not read]* What information did the husband share?
   [ ] a. Number of draws
   [ ] b. Color composition
   [ ] c. Guess

S9g. *[Do not read]* Who made the decision?
   [ ] a. Husband

[ ] b. Wife
[ ] c. Both

S9h. *[Do not read]* Notes on interaction: _____

**[if ${p34} = "private"] <u>E2. Private Discussion</u>**

Remember, this does not have to be the same as either of your previous guesses. We will now let you two decide. Let us know once you have made a decision together.

*[Do not read: Leave the booth and enter once they have made the decision. Keep the urn with the lid behind the table. Once you enter, place the urn on the table.]*

S9i. *[Do not read: Discussion start time: |__|__|:|__|__| 24HR]*

S9j. *[Do not read: Discussion end time: |__|__|:|__|__| 24HR]*

**<u>E3. Joint Guess</u>**

S10. How many red balls do you think there are in the urn? ___ *[Do not read: Have them move the coin to make their decision]*

S11. [*Do not read: Which spouse moved the coin last on the scale?*]
    [ ] a. Husband
    [ ] b. Wife
    [ ] c. Both

We will keep aside the urn now. We will show you the number of red balls in the urn, if this urn is chosen at the end.

**<u>E4. Post-Discussion Guesses</u>**

*[Do not read: With the other surveyor, ask the participants the following questions simultaneously in separate booths. ${p22} will remain in the same booth. Ask ${23} to go to the other booth with the other surveyor.]*

Both of you discussed and made a joint guess. You now have a chance to make another guess based on the information you learnt. We will not share your guess with your spouse and will note it down. This guess may be different from your previous guesses or could be the same. So based on all the information you learnt, how many red balls do you think are in this urn?

S12. What is the ${p22}'s updated guess? _____ *[Do not read: Have them move the coin to make their decision]*

S13. What is the ${p23}'s updated guess? _____ *[Do not read: Have them move the coin to make their decision]*

We will show you the number of red balls in the urn, if this urn is chosen at the end to be the one that determines your payment. Now, we will proceed to the next round.

**ROUND 4: Enforced Information Sharing**

Here is the fourth urn. Both of you will each make draws from the same urn. Until the completion of this round, we will be using only this urn. As you can see, this urn is brown in color - for each round, we will use a different colored urn.

The computer has decided that ${p26} starts first in this round. In this round, you will draw a few balls and guess, then your ${p27} will draw a few balls and guess. After you have made your guesses, we will then share the draws you saw with your spouse. Then you will make another guess. Following this, we will ask you to make a joint guess.

*[Do not read: Ask the ${p27} to leave and talk to the ${p26}.]*

**A: Spouse 1 Individual Guess**

This urn contains 20 balls. Similar to the previous round, you can draw ${p28} balls from the urn to try and learn how many red balls and how many white balls are in the urn. Draw a ball from the urn, have a look at it, and put it back into the urn.

Please draw ${p28} balls in total. I will shuffle the balls in the urn before each of your draws. As discussed, we will share your draws with your spouse. However, we will not share your guess.

A1. Which of the following information will we be sharing with your ${p27}?
[   ] 1. Your guess
[   ] 2. Draws

*[Do not read: Ensure that the participant draws ${p28} times and note down the composition.]*

T1. *[Do not read]* Order of red/white balls drawn: _____
[Constraint: Limit the number characters that can be entered to ${p28} and display as field list.]

T2.*[Do not read]* How many red balls did the ${p26} draw? ___

T3. How many red balls do you think are in the urn? ___ *[Do not read: Have them move the coin to make their decision]*

Thank you for your guess. It is now your ${p27}'s turn. We will not change the contents of the urn and they will remain the same, while you are waiting.

*[Do not read: Ask the ${p26} to wait and ask the ${p27} to join. Once the ${p27} joins, ask the ${p26} to leave.]*

**B. Spouse 2 Individual Guess**

This urn contains 20 balls and your ${p26} got a chance draw some balls from it. Now it is your turn. Similar to the previous round, you can draw ${p29} balls from the urn. Draw a ball from the urn, have a look at it, and put it back into the urn.

Please draw ${p29} balls in total. I will shuffle the balls in the urn before each of your draws. As discussed, we will share your draws with your spouse. However, we will not share your guess.

A2. Which of the following information will we be sharing with your ${p26}?
[   ] 1. Your guess
[   ] 2. Draws

*[Do not read: Ensure that the participant draws ${p29} times and display as field list.]*

T4. *[Do not read]* Order of red/white balls drawn: _____
[Constraint: Limit the number characters that can be entered to ${p29}]

T5. *[Do not read]* How many red balls did the ${p27} draw? ___

T6. How many red balls do you think are in the urn? ___ *[Do not read: Have them move the coin to make their decision]*

**C. Spouse 2 Updated Individual Guess**

We will now share your ${p26}'s draws with you. Using this information and your own draws, we will ask you to make a new guess. This guess can be the same as your previous guess or it can be different from your previous guess. It is entirely your choice.

Your ${p26} drew a total of ${p28} balls from this urn, of which ${t2} were red balls.

T7a. Can you tell me how many balls you drew from this urn? ___

T7b. Can you tell me how many red balls you drew from this urn? ___

How many red balls do you think there are in the urn? Please take your time to think about your choice.

T7. What is the ${p27}'s updated guess? ___ *[Do not read: Have them move the coin to make their decision]*

*[Do not read: Ask the ${p27} to wait and ask the ${p26} to join. Once the ${p26} joins, ask the ${p27} to leave.]*

**D. Spouse 1 Updated Individual Guess**

We will now share your ${p27}'s information with you. Using this information and your own information, we will ask you to make a new guess. This guess can be the same as your previous guess or it can be different from your previous guess. It is entirely your choice.

Your ${p27} drew a total of ${p29} balls from this urn, of which ${t5} were red balls.

T8a. Can you tell me how many balls you drew from this urn? ___

T8b. Can you tell me how many red balls you drew from this urn? ___

How many red balls do you think there are in the urn? Please take your time to think about your choice.

T8. What is the ${p26}'s updated guess? ___ *[Do not read: Have them move the coin to make their decision]*

*[Do not read: Ask the ${p26} to wait and ask the ${p27} to join.]*

**E. Joint Discussion**

Now, we would like you to decide together the number of red balls in the urn.

**[${p35} = "public"] E1. Public Discussion**

*[Do not read: Remain in the booth for the discussion.]*

We are going to remain in the booth while you make your decision together. This is only because we would like to see your decision-making process.

Our staying here has nothing to do with whether you made 'good' or 'bad' decisions in previous rounds. This task is designed to be difficult. Most couples find it hard to come up with a good answer. Don't worry about saying anything wrong in front of us. Just try to do your best.

Now both of you will make a decision together. Remember, this does not have to be the same as either of your previous guesses.

T9a. *[Do not read: Discussion start time: |__|__|:|__|__| 24HR]*

T9b. *[Do not read: Discussion end time: |__|__|:|__|__| 24HR]*

T9c. *[Do not read]* Did they share information?
   [  ] 0. No
   [  ] 1. Yes

**[if ${t9c} = 1; for T9d – T9h]**
T9d. *[Do not read]* Who shared information?
   [  ] a. Husband
   [  ] b. Wife
   [  ] c. Both

T9e. *[Do not read]* What information did the wife share?
    [ ] a. Number of draws
    [ ] b. Color composition
    [ ] c. Guess

T9f. *[Do not read]* What information did the husband share?
    [ ] a. Number of draws
    [ ] b. Color composition
    [ ] c. Guess

T9g. *[Do not read]* Who made the decision?
    [ ] a. Husband
    [ ] b. Wife
    [ ] c. Both

T9h. *[Do not read]* Notes on interaction: _____

**[if ${p35} = "private"] E2. Private Discussion**

Remember, this does not have to be the same as either of your previous guesses. We will now let you two decide. Let us know once you have made a decision together.

*[Do not read: Leave the booth and enter once they have made the decision. Keep the urn with the lid behind the table. Once you enter, place the urn on the table.]*

T9i. *[Do not read: Discussion start time: |\_\_|\_\_|:|\_\_|\_\_| 24HR]*

T9j. *[Do not read: Discussion end time: |\_\_|\_\_|:|\_\_|\_\_| 24HR]*

**E3. Joint Guess**

T10. How many red balls do you think there are in the urn? \_\_\_ *[Do not read: Have them move the coin to make their decision]*

T11. [*Do not read: Which spouse moved the coin last on the scale?*]
    [ ] a. Husband
    [ ] b. Wife
    [ ] c. Both

We will keep aside the urn now. We will show you the number of red balls in the urn, if this urn is chosen at the end.

**E4. Post-Discussion Guesses**

*[Do not read: With the other surveyor, ask the participants the following questions simultaneously in separate booths. ${p26} will remain in the same booth. Ask ${27} to go to the other booth with the other surveyor.]*

Both of you discussed and made a joint guess. You now have a chance to make another guess based on the information you learnt. We will not share your guess with your spouse and will note it down. This guess may be different from your previous guesses or could be the same. So based on all the information you learnt, how many red balls do you think are in this urn?

T12. What is the ${p26}'s updated guess? _____ *[Do not read: Have them move the coin to make their decision]*

T14. What is the ${p27}'s updated guess? _____ *[Do not read: Have them move the coin to make their decision]*

We will show you the number of red balls in the urn, if this urn is chosen at the end to be the one that determines your payment. Now, we will proceed to the next round.

**ROUND 5: Classic**

Here is the fifth urn. Both of you will each make draws from the same urn. Until the completion of this round, we will be using only this urn. As you can see, this urn is black in color - for each round, we will use a different colored urn.

The computer has decided that ${p30} starts first in this round. In this round, you will draw a few balls and guess the number of red balls in the urn;then your ${p31} will draw a few balls and guess. Following this, we will ask you to make a joint guess.

*[Do not read: Ask the ${p31} to leave and talk to the ${p30}]*

**A: Spouse 1 Individual Guess**

This urn contains 20 balls. Similar to the previous round, you can draw ${p32} balls from the urn to try and learn how many red balls and how many white balls are in the urn. Draw a ball from the urn, have a look at it, and put it back into the urn. Please draw ${p32} balls in total. I will shuffle the balls in the urn before each of your draws.

*[Do not read: Ensure that the participant draws ${p32} times and note down the composition.]*

U1. *[Do not read]* Order of red/white balls drawn: ____
[Constraint: Limit the number characters that can be entered to ${p32} and display as field list.]

U2. *[Do not read]* How many red balls did the ${p30} draw? ___

U3. How many red balls do you think are in the urn? ___ *[Do not read: Have them move the coin to make their decision]*

Thank you for your guess. It is now your ${p31}'s turn. We will not change the contents of the urn and they will remain the same, while you are waiting.

*[Do not read: Ask the ${p30} to wait and ask the ${p31} to join. Once the ${p31} joins, ask the ${p30} to leave.]*

**B. Spouse 2 Individual Guess**

This urn contains 20 balls and your ${p30} got a chance to draw some balls from it. Now it is your turn. Similar to the previous round, you can draw ${p33} balls from the urn to try and learn how many red balls and how many white balls are in the urn. Draw a ball from the urn, have a look at it, and put it back into the urn. Please draw ${p33} balls in total. I will shuffle the balls in the urn before each of your draws.

*[Do not read: Ensure that the participant draws ${p33} times.]*

U4. *[Do not read]* Order of red/white balls drawn: ____

[Constraint: Limit the number characters that can be entered to ${p33}]

U5. *[Do not read]* How many red balls did the ${p31} draw? ___

U6. How many red balls do you think are in the urn? ___ *[Do not read: Have them move the coin to make their decision]*

*[Do not read: Ask the ${p31} to wait and ask the ${p30} to join.]*

**C. Joint Guess**

Now, we would like you to decide together the number of red balls in the urn.

**[if ${p37} = "public"] C1. Public Discussion**

We are going to remain in the booth while you make your decision together. This is only because we would like to see your decision-making process.

Our staying here has nothing to do with whether you made 'good' or 'bad' decisions in previous rounds. This task is designed to be difficult. Most couples find it hard to come up with a good answer. Don't worry about saying anything wrong in front of us. Just try to do your best.

Now both of you will make a decision together. Remember, this does not have to be the same as either of your previous guesses.

U7a. *[Do not read: Discussion start time: |__|__|:|__|__| 24HR]*

U7b. *[Do not read: Discussion end time: |__|__|:|__|__| 24HR]*

U7c. *[Do not read]* Did they share information?
   [ ] 0. No
   [ ] 1. Yes

**[if ${u7c} = 1; for U7d – U7h]**
U7d. *[Do not read]* Who shared information?
   [ ] a. Husband
   [ ] b. Wife
   [ ] c. Both

U7e. *[Do not read]* What information did the wife share?
   [ ] a. Number of draws
   [ ] b. Color composition
   [ ] c. Guess

U7f. *[Do not read]* What information did the husband share?
   [ ] a. Number of draws
   [ ] b. Color composition

[  ] c. Guess

U7g. *[Do not read]* Who made the decision?
    [  ] a. Husband
    [  ] b. Wife
    [  ] c. Both

U7h.  *[Do not read]* Notes on interaction: _____

**[if ${p37} = "private"] <u>C2. Private Discussion</u>**
Remember, this does not have to be the same as either of your previous guesses. We will now let you two decide. Let us know once you have made a decision together.

*[Do not read: Leave the booth and enter once they have made the decision. Keep the urn with the lid behind the table. Once you enter, place the urn on the table.]*

U7i. *[Do not read: Discussion start time: |__|__|:|__|__| 24HR]*

U7j. *[Do not read: Discussion end time: |__|__|:|__|__| 24HR]*

**<u>C3. Joint Guess</u>**

U8. How many red balls do you think there are in the urn? ___ *[Do not read: Have them move the coin to make their decision]*

U9. [*Do not read: Which spouse moves the coin on the scale?*]
    [  ] a. Husband
    [  ] b. Wife
    [  ] c. Both

We will keep aside the urn now. We will show you the number of red balls in the urn, if this urn is chosen at the end.

**<u>E4. Post-Discussion Guesses</u>**

*[Do not read: With the other surveyor, ask the participants the following questions simultaneously in separate booths. ${p30} will remain in the same booth. Ask ${p31} to go to the other booth with the other surveyor.]*

Both of you discussed and made a joint guess. You now each have a chance to make another guess based on the information you learnt. We will not share your guess with your spouse. This guess may be different from your previous guesses or it may the same. Based on all the information you learnt, how many red balls do you think are in this urn?

U10. What is the ${p30}'s updated guess? _____ *[Do not read: Have them move the coin to make their decision]*

U11. What is the ${p31}'s updated guess? _____ *[Do not read: Have them move the coin to make their decision]*

We will show you the number of red balls in the urn. if this urn is chosen at the end to be the one that determines your payment. Now, we will proceed to the next round.

**SECTION C: Beliefs about Competence**

*[Do not read: Talk to ${p30}]*

Now I would like to ask you a few questions about the game you have been playing today. We will not share your answers with your spouse.

V1. In general, who, amongst men and women, do you think will be better at this game, i.e. who is making more accurate choices?
[   ] a. Women are better
[   ] b. About the same
[   ] c. Men are better

V2. Who, amongst you and your spouse, do you think is better at this game, i.e. who is making more accurate choices?
[   ] a. Wife is better
[   ] b. About the same
[   ] c. Husband is better

*[Do not read: Talk to ${p31}]*

Now I would like to ask you a few questions about the game you have been playing today. We will not share your answers with your spouse.

V3. In general, who, amongst men and women, do you think will be better at this game, i.e. who is making more accurate choices?
[   ] a. Women are better
[   ] b. About the same
[   ] c. Men are better

V4. Who, amongst you and your spouse, do you think is better at this game, i.e. who is making more accurate choices?
[   ] a. Wife is better
[   ] b. About the same
[   ] c. Husband is better

*[Do not read: Talk to ${p31}.]*

We're at the end of this activity. Before you can learn how much you and your spouse will be earning, we have a few more questions for you.

Both you and your ${p30} got to make many guesses after learning some information about the contents of the different urns. Before I proceed, I would like to assure you that anything you tell us will not be shared with your ${p30}. I request you to answer my following questions. We will not disclose anything to your ${p30}.

Since, both you and your ${p30} made multiple guesses on your own - how much would each of your guesses earn, on an average?

If your answer is within Rs. 30 of the average of the actual earnings, you can earn Rs. 50 that you will be paid separately. However, if your guess is more than Rs. 30 of the average of the actual earnings, you will not earn anything other than the amount disclosed in the envelope as discussed before. One of the answers has already been chosen by the computer and you will be paid for that answer. So, think carefully before answering.

*[Do not read: Use Figure 2 (the payment scale) for the following questions.]*

W1. How much will your ${p30}'s guess earn, on an average? Rs. _____

W2. How much will your guess earn, on an average? Rs. ____

**[if ${p38} = "own guess"]**

W2a. [Calculate: ${p31}'s average earnings _____ ]

**[if  ${w2a} - 30 =< ${w2} =< ${w2a} + 30 ]**

Your guess about your average earnings is within the Rs. 30 of the average of your actual earnings. You will earn an additional Rs. 50 at the end of this survey.

**[if ${w2} < ${w2a} - 30 or ${w2} > ${w2a} + 30]**

Your guess about your average earnings is not within the Rs. 30 of the average of your actual earnings. You will not earn an additional Rs. 50 at the end of this survey.

**[if ${p38} = "spouse's guess"]**

W2b. [Calculate: ${p30}'s average earnings _____ ]

**[if  ${w2b} - 30 =< ${w1} =< ${w2b} + 30 ]**

Your guess about your ${p30}'s average earnings is within the Rs. 30 of the average of their actual earnings. You will earn an additional Rs. 50 at the end of this survey.

**[if ${w1} < ${w2b} - 30 or ${w1} > ${w2b} + 30]**

Your guess about your ${p30}'s average earnings is not within the Rs. 30 of the average of their actual earnings. You will not earn an additional Rs. 50 at the end of this survey.

*[Do not read: Talk to ${p30}.]*

We're at the end of this activity. Before you can learn how much you and your spouse will be earning, we have a few more questions for you.

Both you and your ${p31} got to make many guesses after learning some information about the contents of the different urns. Before I proceed, I would like to assure you that anything

you tell us will not be shared with your ${p31}. I request you to answer my following questions. We will not disclose anything to your ${p31}.

Since, both you and your ${p31} made multiple guesses on your own - how much would each of your guesses earn, on an average?

If your answer is within Rs. 30 of the average of the actual earnings, you can earn Rs. 50 that you will be paid separately. However, if your guess is more than Rs. 30 of the average of the actual earnings, you will not earn anything other than the amount disclosed in the envelope as discussed before. One of the answers has already been chosen by the computer and you will be paid for that answer.So, think carefully before answering.

*[Do not read: Use Figure 2 (the payment scale) for the following questions.]*

W3. How much will your ${p31}'s guess earn, on an average? Rs. ____

W4. How much will your guess earn, on an average? Rs. ____

**[if ${p39} = "own guess"]**

**[if  ${w2b} - 30 =< ${w4} =< ${w2b} + 30 ]**

Your guess about your average earnings is within the Rs. 30 of the average of your actual earnings. You will earn an additional Rs. 50 at the end of this survey.

**[if ${w4} < ${w2b} - 30 or ${w4} > ${w2b} + 30]**

Your guess about your average earnings is not within the Rs. 30 of the average of your actual earnings. You will not earn an additional Rs. 50 at the end of this survey.

**[if ${p39} = "spouse's guess"]**

**[if  ${w2a} - 30 =< ${w1} =< ${w2a} + 30 ]**

Your guess about your ${p30}'s average earnings is within the Rs. 30 of the average of their actual earnings. You will earn an additional Rs. 50 at the end of this survey.

**[if ${w1} < ${w2a} - 30 or ${w1} > ${w2a} + 30]**

Your guess about your ${p30}'s average earnings is not within the Rs. 30 of the average of their actual earnings. You will not earn an additional Rs. 50 at the end of this survey.

**SECTION E: FINAL SECTION**

As mentioned before, the envelope in front of you contains the decision made by the computer. Please open it and have a look at the decision.

F1. [Do not read] Who opened the envelope?
   [  ] a. Husband
   [  ] b. Wife
   [  ] c. Both

F1a. What does the sheet say?

F1b. Which urn does the sheet say is the one that determines your payment?

*[Do not read: Show them the red balls in the urn.]*

**[if ${p4} = 1]**
As you can see, there are ${p7} red balls in the urn.

**[if ${p4} = 2]**
As you can see, there are ${p8} red balls in the urn.

**[if ${p4} = 3]**
As you can see, there are ${p9} red balls in the urn.

**[if ${p4} = 4]**
As you can see, there are ${p10} red balls in the urn.

**[if ${p4} = 5]**
As you can see, there are ${p11} red balls in the urn.

F2. *[Do not read]* Is the finalized guess a post-discussion guess?
   [  ] 0. No
   [  ] 1. Yes

**[if ${f2} = 1]**

The finalized guess is a private guess, and as mentioned before we will not disclose the guess. However, we will explain the amount you will receive.

[*Do not read: With the help of the payment scale, explain their payment to them.]*

**[if ${f2} = 0]**[*Do not read: Show them the grid with responses from each round and point to the one in the envelope. With the help of the payment scale, explain their payment to them.*]

**SECTION Z: CONCLUSION**

Thank you for your time!

Z1. Re-enter CPID: _____

Z2. End Time: |__|__|:|__|__| 24HR

## B.3    Experimental Script for Husbands

**SECTION P: PREAMBLE**

P1. PID: |__|__|__|__|
[. >= 2000 and . <= 2700]

P2. Interviewer

P2a. [Prefilled] Randomized interviewer for the Rounds.

P3. Do you have the following things to proceed with the experiment?
[   ] 1. Sheet with scale for guessing red balls in the urn along with a token
[   ] 2. Sheet with payment mechanism
[   ] 3. Sheet to explain randomization of final guess
[   ] 4. A sample urn with red and white balls (10 each)
[   ] 5. Tray with red and white balls (10 each)
[   ] 6. Lid to cover the urn on the table
[   ] 7. Two practice urns - (16,4) and (9,11)
[   ] 8. Arrange all five urns for the activity at the back of the booth
[   ] 9. Envelope with the guess that counts

P4. Date: |__|__|__|__|__| YYYY/|__|__|MM/|__|__|DD

P5. Interview Start Time: |__|__|:|__|__| 24HR

**General prefills:**
P6. [Prefilled] Randomized order of rounds
P7. [Prefilled] Number of red balls in the urn in Round 1.
P8. [Prefilled] Number of red balls in the urn in Round 2.
P9. [Prefilled] Number of red balls in the urn in Round 3.
P10. [Prefilled] Number of red balls in the urn in Round 4.
P11. [Prefilled] Number of red balls in the urn in Round 5

**Round 1 prefills:**
P12. [Prefilled] Spouse who goes first in Round 1.
P13. [Prefilled] Spouse who goes second in Round 1.
P14. [Prefilled] Spouse 1's number of draws from Round 1.
P15. [Prefilled] Spouse 2's number of draws from Round 1.
P36. [Prefilled] Public/private discussion.

**Round 2 prefills:**
P16. [Prefilled] Spouse who goes first in Round 2.
P17. [Prefilled] Spouse who goes second in Round 2.
P18. [Prefilled] Spouse 1's first number of draws from Round 2.
P19. [Prefilled] Spouse 2's first number of draws from Round 2.
P20. [Prefilled] Spouse 1's second number of draws from Round 2.
P21. [Prefilled] Spouse 2's second number of draws from Round 2.

**Round 3 prefills:**

P22. [Prefilled] Spouse who goes first in Round 3.
P23. [Prefilled] Spouse who goes second in Round 3.
P24. [Prefilled] Spouse 1's number of draws from Round 3.
P25. [Prefilled] Spouse 2's number of draws from Round 3.
P34. [Prefilled] Public/private discussion.

**Round 4 prefills:**
P26. [Prefilled] Spouse who goes first in Round 4.
P27. [Prefilled] Spouse who goes second in Round 4.
P28. [Prefilled] Spouse 1's number of draws from Round 4.
P29. [Prefilled] Spouse 2's number of draws from Round 4.
P35. [Prefilled] Public/private discussion.

**Round 5 prefills:**
P30. [Prefilled] Spouse who goes first in Round 5.
P31. [Prefilled] Spouse who goes second in Round 5.
P32. [Prefilled] Spouse 1's number of draws from Round 5.
P33. [Prefilled] Spouse 2's number of draws from Round 5.
P37. [Prefilled] Public/private discussion.

**Beliefs about competence prefills:**
P38. [Prefilled] Randomized belief chosen for Spouse 2.
P39. [Prefilled] Randomized belief chosen for Spouse 1.

**Finalized round and guess prefills:**
P40. [Prefilled] Randomized final round.
P41. [Prefilled] Randomized final guess.

## SECTION A: INTRODUCTION

*[Do not read: Talk to the husband and ensure that the introduction for the wife starts simultaneously.]*

Thank you for coming today! My name is ${p2}. Would you like something to drink before we start the task? May we offer you some water, or tea, or coffee?

Please turn off your mobile phone till the end of this task. We want to ensure that you are attentive throughout the task.

As discussed before, you and your wife will take part in a task in which you can earn some money. Please take this task seriously. Your choices directly affect how much you earn.

This study aims to contribute to the welfare of the people. So, your participation is important to us. Before you make each choice, think well. Consider these choices to be like decisions you make in real life.

### Section A1: General Overview

We will now explain the activity to you. **Similarly, another surveyor is explaining this activity to your wife.** You and your wife will then participate in a total of five rounds that are all similar. In each round, you will see an urn such as this one.

*[Do not read: Show the sample urn with a few red and white balls.]*

Each urn contains a total of 20 balls. Some of these balls are white and others are red.

*[Do not read: Show the participant a tray with some white balls and some red balls.]*

Now we will ask you some questions about this task.

A1. How many balls are inside each urn?
[   ] a. 20 → Yes, that is correct.
[   ] b. Any other answer → No, there are 20 balls inside each urn.

A2. What are the colors of these balls?
[   ] a. Red and white → Yes, that is correct.
[   ] b. Any other answer → No, the balls are red and white.

In each round, the number of red and white balls will be unknown to you. You will only know that in total there are 20 balls inside the urn.

Your task will be to guess how many of these balls are red. In each round, you can draw some balls from the urn to help you make this guess.

A3. Now, can you describe to me in your own words what we would like you to do in this task?

[*Do not read: Select all points mentioned correctly by the participants*.]

[   ] a. Draw a few balls from the urn.
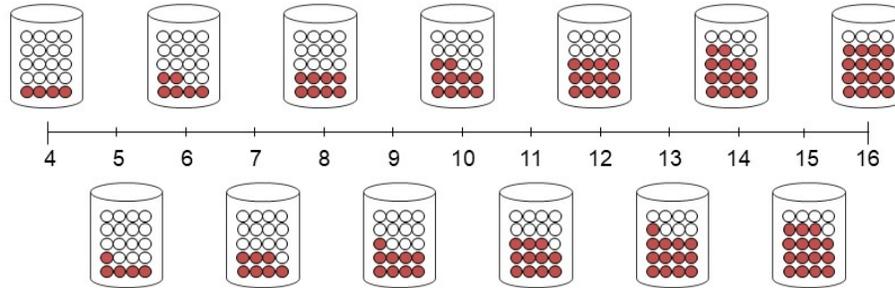[   ] b. Based on the draws, guess how many of the balls in the urn are red.

A3a. *[Do not read: Did the participant describe all steps of the task accurately?]*
[   ] a. Yes → Proceed with the survey.
[   ] b. No, the participant missed or described incorrectly 1 of the 2 points. → Explain that particular point to the participant.
[   ] c. No, the participant missed or described incorrectly both points. → Explain Section A1 to the participant again. Ignore comprehension questions that are part of the text.

## Section A2: Randomization of Red and White Balls

*[Do not read: Show the scale depicting composition of balls in the urn (Figure 1) to the participant as you explain the below text to them.]*

COMPOSITION OF RED AND WHITE BALLS IN THE URN



Your goal is to guess the number of red balls in the urn, in all five rounds. The number of red balls can be any number ranging from 4 to 16, as you can see on this figure.

- The lowest possible number of red balls is 4. *[Do not read: Point to the urn in the figure containing 4 red balls.]*

  A4. Can there be less than 4 red balls in the urn, in any round?
  [   ] a. Yes → No, the lowest number of red balls is 4.
  [   ] b. No → Yes, this is correct.

- The highest possible number of red balls is 16. *[Do not read: Point to the urn in the figure containing 16 red balls.]*

  A5. Can there be more than 16 red balls in the urn, in any round?
  [   ] a. Yes → No, the highest number of red balls is 16.
  [   ] b. No → Yes, this is correct.

- Any other number between 4 and 16 is possible. For example, there could be 6, 7, 11, or 12 red balls in the urn.

We have already used our computer to decide the true number of red balls in the urn in each round. Our computer picked a random number from 4 to 16 for all five rounds. The computer was equally likely to choose any number from 4 up to 16. So, in each round, any number from 4 to 16 is equally likely to be the true number.

In each round, we will ask you to guess the number of red balls in the urn. When we do, we would like you to use this coin to point to the exact number you would like to guess, on this figure.

*[Do not read: Show the participant how to point to the exact number on Figure 1 with the coin.]*

Before we proceed, we will ask you some questions.

A6. What is the highest number of red balls that can possibly be in the urn?
[   ] a. 16 → Yes, that is correct.
[   ] b. Any other answer → No, there can be a maximum of 16 red balls in the urn.

A7. What is the lowest number of red balls that can possibly be in the urn?
[   ] a. 4 → Yes, that is correct.
[   ] b. Any other answer → No, there can be a minimum of 4 red balls in the urn.

A8. How do we decide the correct number of red balls in the urn? Is it you, me, or the computer?
[   ] a. The computer already decided. → Yes, that's correct.
[   ] b. Any other answer → No, the computer decides the correct number of red balls in the urn.

A9. Are some numbers of red balls more likely to occur than others?
[   ] a. Each number is equally likely to be chosen by the computer. → Yes, that's correct.
[   ] b. Any other answer → No, each number is equally likely to be chosen by the computer.

A10. Do you have any questions for us?
[   ] a. Yes → *[Do not read: Clarify any doubts or questions they may have.]*
[   ] b. No → *[Do not read: Proceed with the survey.]*

A10a. **[if ${a10} = 1 ]** *[Do not read]* Specify their question: _____

Let's practice the task a few times. These rounds will not matter for your payment. They are just to help you better understand the task.

Before we begin the example rounds, let me clarify. In the final task, you will have one set of draws, while your wife has another set of draws from the same urn. In the example rounds, you will have both sets of draws. Similarly, your wife in the other booth will also have both sets of draws in the example rounds.

*[Do not read: Take practice urn 1 that contains 16 red balls and 4 white balls. Use the scale.]*

This urn contains 20 balls. Your goal will be to guess how many of them are red. Please draw one ball from this urn. I will shuffle the balls in the urn before you draw from the urn.

A11. Color of the ball: _____
[SurveyCTO check: Limit string length to exactly 1 and display as field list.]

*[Do not read: Ask them to use Figure 1 and the coin.]*

A12. How many red balls do you think are in this urn? _____

Please draw an additional five balls from this urn. I will shuffle the balls in the urn before each of your draws.

A13. Order of the draws: _____
[SurveyCTO check: Limit string length to exactly 5 and display as field list.]

*[Do not read: Ask them to use Figure 1 and the coin.]*

A14. How many red balls do you think are in this urn? Note that you should use the information from all six draws for your guess. _____

Do you have any questions for us so far?

*[Do not read: Clarify any doubts or questions they may have.]*

Let's now see how many red balls there are actually in the urn.

*[Do not read: Empty the urn in front of the participant and count the number of red balls.]*

As you can see, this urn contains mostly red balls. 16 of the balls are red and 4 of them are white.

Let me try to give you a few tips based on this example:

- **Tip 1:** Your draws help you make your guesses.

  - Suppose you draw more red balls than white balls. Then it makes sense to guess that there are more red balls in the urn. For example, if you draw four red balls and one white ball, then there are probably more red than white balls in the urn overall.

  - Suppose you draw more white balls. It makes sense to guess that there are more white balls in the urn.

  - Suppose you draw the same number of red and white balls. It makes sense to guess that the number of red and white balls are the same.

- **Tip 2:** The more balls you draw, the more confident you can be in your guess.

  - For example, suppose you draw only one ball. You do not learn much. Since there are many balls in the urn and you might draw a white ball by chance even if most balls are red.

- Suppose you draw many balls and most of the balls are red. Then, you can be fairly sure that most balls in the urn are red. Suppose you draw many balls and most of the balls are white. Then, you can be fairly sure that most balls in the urn are white.

A15. Can you tell us if you can learn more about the number of red balls from 1 draw or from 5 draws?

[  ] a. I will learn more when I draw 5 balls → Yes, that's correct.

[  ] b. I will learn more when I draw 1 ball → No, that's incorrect. You can learn more when you draw 5 balls.

[  ] c. I will learn the same regardless of how many balls I draw. → No, that's incorrect. You can learn more when you draw 5 balls.

- **Tip 3**: Shuffling the balls in the urn will be helpful. You will be able to learn more about the contents of the urn.

    - In this activity, I will ask you to draw a ball from the urn. Once you have a looked at the a ball, you put it back into the urn, and then draw another ball. Then you draw the next ball without shuffling the balls properly, there is a higher chance that you will draw the same ball again. If you draw the same ball again, you are not learning anything new. Thus, it is important to shuffle the urn to learn more about the contents of the urn. In each round, I will shuffle the balls in the urn before each of your draws.

Could you please repeat each of these three tips in your own words? I want to be sure I have explained things clearly.

A16. [*Do not read: Select all points mentioned correctly by the participant*.]

[  ] a. The more red balls you draw from the urn, the higher the chance that majority of the balls are red.

[  ] b. The more balls you draw, the more confident you can be in your guess.

[  ] c. Shuffling the balls in the urn can help you learn more.

*[Do not read: Repeat the particular tips that they missed or incorrectly explained just once.]*

Let's do another example.

*[Do not read: Take practice urn 2 that contains 9 red balls and 11 white balls. Use Figure 1 and the coin.]*

Please draw nine balls from this urn.

*[Do not read: Shuffle the balls in the urn, before each draw.]*

A17. Order of the draws: _____
[SurveyCTO check: Limit string length to exactly 9 and display as field list.]

*[Do not read: Ask them to use Figure 1 and the coin.]*

A18. How many red balls do you think are in this urn? _____

Please draw an additional ball from this urn.

*[Do not read: Shuffle the balls in the urn, before each draw.]*

A19. Color of the draw: _____
[SurveyCTO check: Limit string length to exactly 1 and display as field list.]

*[Do not read: Ask them to use Figure 1 and the coin.]*

A20. How many red balls do you think are in this urn? Note that you should use the information from all ten draws for your guess.

_____

Let's now see how many red balls there are in the urn.

*[Do not read: Empty the urn in front of the participant and count the number of red balls.]*

As you can see, the urn contains more white balls than red balls. There are 9 red balls in the urn and 11 white balls in the urn.

**Section A3: Explanation of the Number of Draws**

As we said before, you and your wife have to guess the correct number of red balls in the urn. We will pay you according to how close your guess is to the true number of red balls in the urn.

You will make many draws and guesses for five different urns. Similarly, so will your wife. Now let me tell you more about the number of draws.

The number of draws each of you get will vary between 1,5, and 9.
The number of draws you and your wife will get might be different from each other.
The number of draws you and your wife will get might also be different across sections.

A21. Is it possible that you get exactly 4 draws in any particular round?
[   ] a. Yes, I think I can get 4 draws in a round. → No, that is incorrect. You can get either 1, 5 or 9 draws in a round.
[   ] b. No, I don't think I can get 4 draws in a round. → Yes, that is correct. You can get either 1, 5 or 9 draws in a round.

A22. How do you think your number of draws will be across rounds? *[Do not read: Read all options and mark one]*
[   ] a. You will have the same number of draws across each round. → No, that is incorrect. You may have the same or different number of draws across each round.
[   ] b. You will have different number of draws across each round. → No, that is incorrect. You may have the same or different number of draws across each round.
[   ] c. You may have the same or different number of draws across each round. → Yes, that is correct.

A23. In any given round, do you think you and your wife will have the same number of draws?
[   ] a. Yes, we will both have the same number of draws. → No, that is incorrect. You might or might not have the same number of draws.
[   ] b. No, we will not have the same number of draws. → No, that is incorrect. You might or might not have the same number of draws.
[   ] c. We might or might not have the same number of draws. → Yes, that is correct.

**Section A4: Randomization of the Guess to be Implemented**

Now, let me tell you more about the guesses you and your wife will make.

Some of these guesses will be on your own. Some others you will make together with your wife. We will record all your choices on this sheet. *[Do not read: Show the participant the sheet in which you record the choices.]* The computer has chosen only one of these guesses to be the one that counts for your payment. Since you do not know which of those choices will be selected when making your choices, you should take each single choice very seriously.

| | Wife Guess 1 | Husband Guess 1 | Wife Guess 2 | Husband Guess 2 | Joint Guess |
|---|---|---|---|---|---|
| **Round 1** | | | | | |
| **Round 2** | | | | | |
| **Round 3** | | | | | |
| **Round 4** | | | | | |
| **Round 5** | | | | | |

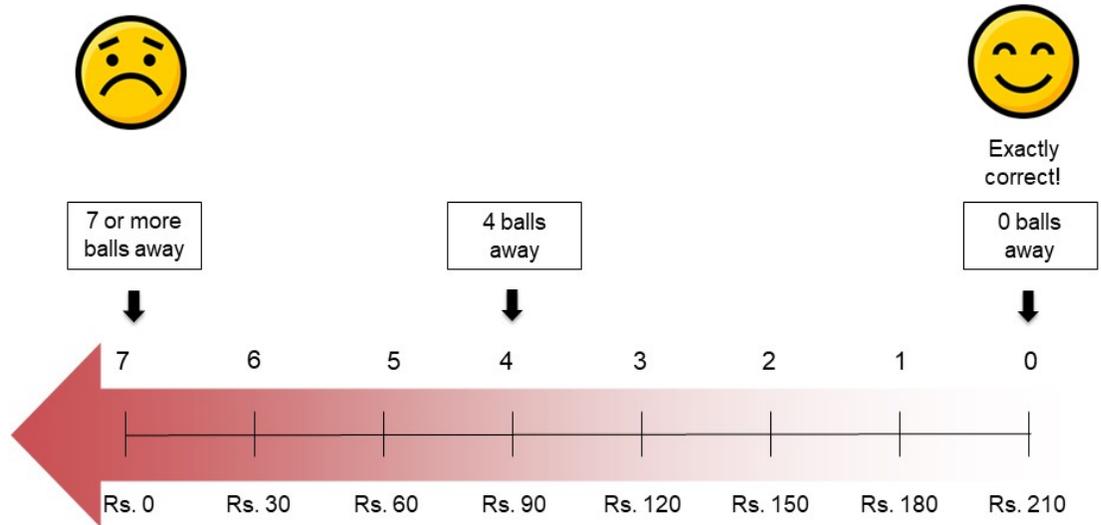## Section A5. Payment Depending on Performance

*[Do not read: Show them Figure 2 to explain the payment scheme.]*

Now, let me explain how the payment scheme works with this figure.

- Regardless of your choices, you and your wife together will receive a flat payment of Rs. 300. Besides this flat payment, both of you have a chance to make some more money. How much more money you can earn depends on how close both your guesses are to the true number of balls in the urn. Each of you will be paid half of the total amount you earn separately.

- As we mentioned above, only one of your guesses will be chosen by the computer.

- If the chosen guess is exactly correct, then you and your wife together could receive, besides the flat payment, at the most Rs. 210. So, your total payment could be at most Rs. 510. If your guess is very wrong, then you will make no extra money from the guess. You would only receive the flat payment of Rs. 300. If you are in middle of these two extremes, you get an amount that is between Rs. 0 and Rs. 210.

- Along with this, you and your wife will have an opportunity to earn an additional Rs. 50 each at the end of this activity.

- Let me give you an example. Suppose the true number of red balls is 5.

  [*Do not read: Use Figure 2 to explain this entire section*.]

# PAYMENT SCALE



- If your guess is 5, your guess is exactly correct. So, you would receive the maximum of Rs. 210 from the guesses (and Rs. 510 in total).

- If your guess is 9, it is 4 balls away from the truth since 9 minus 5 is 4. You will lose Rs. 30 for each of the 4 balls. Therefore, you would lose Rs. 120 and receive Rs. 90 from the guess.

- If your guess is 12, it is 7 balls away from the truth since 12 minus 5 is 7. You will lose Rs. 30 each for the 7 balls. Therefore, you would lose Rs. 210 and receive nothing from the guesses.

- If your guess is 16, it is 11 balls away from the truth since 16 minus 5 is 11. This guess is quite far away from the truth, so you would not receive any additional payments.

Do you have any questions about how the payment is decided?

Now, we will ask you a few questions before we proceed with the activity.

*[Do not read: Ask the participant to use Figure 2 for the following questions.]*
A24. Suppose that the true number is 6 red balls for the guess that counts. If you guess that there are 7 red balls in the urn, how many balls are you away from the true number of red balls? How much would you be paid from the guess?
[ ] a. 1 ball away from the true number. Rs. 180 → Yes, that's correct. [if ${a24} = 180]

[  ] b. Any other answer → *[Do not read: Explain the payment mechanism again with the help of Figure 2.]* No, you will be paid Rs. 180. [if ${a24} != 180]

A25. Suppose that the true number is 15 red balls for the guess that counts. If you guess that there are 4 red balls in the urn, how many balls are you away from the true number of red balls? How much would you be paid from the guess?

[  ] a. 11 balls away from the true number. Rs. 0 → Yes, that's correct. [if ${a25} = 0]
[  ] b. Any other answer → *[Do not read: Explain the payment mechanism again with the help of Figure 2.]* No, you will be paid Rs. 0. [if ${a25} != 0]

A26. Suppose that the true number is 12 red balls for the guess that counts. If you guess that there are 8 red balls in the urn, how many balls are you away from the true number of red balls? How much would you be paid from the guess?
[  ] a. 4 balls away from the true number. Rs. 90→ Yes, that's correct. [if ${a26} = 90]
[  ] b. Any other answer → *[Do not read: Explain the payment mechanism again with the help of Figure 2.]*  No, you will be paid Rs. 90. [if ${a26} != 90]

## Section A6: Overview of the Activity

Before we begin the activity, let me now tell you about the structure of the activity:

- The number of draws for each of you will vary between 1, 5 and 9 over time. Each of you might get a different number of draws. We will inform you about this number in each round.
- Based on your draws, you will each make a few guesses - some on your own, some with your wife.

We are interested in learning how you decide. Thus, in some of the rounds, we will be present to observe how you make decisions. This procedure has nothing to do with what we think of the decisions you make. We follow it with all the participants.

Do you have any questions before we begin?

*[Do not read: Clarify any doubts or questions they may have.]*

**Comprehension scores:** *[In-built CTO Check to calculate their comprehension]*

${p2a} will continue with the rest of the survey.

## SECTION B: ROUNDS

### ROUND 1: Classic

Here is the first urn. Both of you will each make draws from the same urn. Until the completion of this round, we will be using only this urn. As you can see, this urn is green in color - for each round, we will use a different colored urn.

The computer has decided that ${p12} starts first in this round. In this round, you will draw a few balls and guess the number of red balls in the urn; then your ${p13} will draw a few balls and guess. Following this, we will ask you to make a joint guess.

*[Do not read: Ask the ${p13} to leave and talk to the ${p12}.]*

### A: Spouse 1 Individual Guess

Before we start the activity, can you now please explain to me in your own words what we are asking you to do?

R1_a. *[Do not read: Did the participant mention the following points correctly?]*
[   ] a. Draw balls
[   ] b. Guess number of red balls

*[Do not read: Repeat and correct points that are missing or incorrect.]*

This urn contains 20 balls. You can now draw ${p14} balls from the urn to try and learn how many red balls and how many white balls are in the urn. Draw a ball from the urn, have a look at it, and put it back into the urn. Please draw ${p14} balls in total. I will shuffle the balls in the urn before each of your draws.

*[Do not read: Ensure that the participant draws ${p14} times and note down the composition.]*

Q1. Order of red/white balls drawn: _____
[SurveyCTO check: Limit string length to exactly ${p14} and display as field list.]

Q2. *[Do not read]* How many red balls did the ${p12} draw? ____

Q3. How many red balls do you think are in the urn? ____ *[Do not read: Have them move the coin to make their decision]*

Thank you for your guess. It is now your ${p13}'s turn. We will not change the contents of the urn and they will remain the same, while you are waiting.

*[Do not read: Ask the ${p12} to wait and ask the ${p13} to join. Once the ${p13} joins, ask the ${p12} to leave.]*

## B. Spouse 2 Individual Guess

Before we start the activity, can you now please explain to me in your own words what we are asking you to do?

R1_b. *[Do not read: Did the participant mention the following points correctly?]*
[   ] a. Draw balls
[   ] b. Guess number of red balls

*[Do not read: Repeat and correct points that are missing or incorrect.]*

This urn contains 20 balls and your ${p12} got a chance draw some balls from it. Now it is your turn. You can draw ${p15} balls from the urn. Draw a ball from the urn, have a look at it, and put it back into the urn. Please draw ${p15} balls in total. I will shuffle the balls in the urn before each of your draws.

*[Do not read: Ensure that the participant draws ${p15} times and note down the composition.]*

Q4. Order of red/white balls drawn: ____
[SurveyCTO check: Limit string length to ${p15} and display as field list.]

Q5. How many red balls did the ${p13} draw? ___

Q6. How many red balls do you think are in the urn? ___ *[Do not read: Have them move the coin to make their decision]*

*[Do not read: Ask the ${p13} to wait and ask the ${p12} to join.]*

## C. Joint Discussion
Now, we would like you to decide together the number of red balls in the urn.

**[if ${p36} = "public"] <u>C1. Public Discussion</u>**

*[Do not read: Remain in the booth for the discussion.]*

We are going to remain in the booth while you make your decision together. This is only because we would like to see your decision-making process.

Our staying here has nothing to do with whether you made 'good' or 'bad' decisions in previous rounds. This task is designed to be difficult. Most couples find it hard to come up with a good answer. Don't worry about saying anything wrong in front of us. Just try to do your best.

Now both of you will make a decision together. Remember, this does not have to be the same as either of your previous guesses.

Q7a. *[Do not read: Discussion start time: |__|__|:|__|__| 24HR]*

Q7b. *[Do not read: Discussion end time:* |__|__|:|__|__| *24HR]*

Q7c. *[Do not read]* Did they share information?
    [ ] 0. No
    [ ] 1. Yes

**[if ${q7c} = 1; for Q7d – Q7h]**
Q7d. *[Do not read]* Who shared information?
    [ ] a. Husband
    [ ] b. Wife
    [ ] c. Both

Q7e. *[Do not read]* What information did the wife share?
    [ ] a. Number of draws
    [ ] b. Color composition
    [ ] c. Guess

Q7f. *[Do not read]* What information did the husband share?
    [ ] a. Number of draws
    [ ] b. Color composition
    [ ] c. Guess

Q7g. *[Do not read]* Who made the decision?
    [ ] a. Husband
    [ ] b. Wife
    [ ] c. Both

Q7h. *[Do not read]* Notes on interaction: _____

**[if ${p36} = "private"] C2. Private Discussion**
Remember, this does not have to be the same as either of your previous guesses. We will now let you two decide. Let us know once you have made a decision together.

*[Do not read: Leave the booth and enter once they have made the decision. Keep the urn with the lid behind the table. Once you enter, place the urn on the table.]*

Q7i. *[Do not read: Discussion start time:* |__|__|:|__|__| *24HR]*

Q7j. *[Do not read: Discussion end time:* |__|__|:|__|__| *24HR]*
**C3. Joint Guess**

Q8. How many red balls do you think there are in the urn? ___ *[Do not read: Have them move the coin to make their decision]*

Q9. [*Do not read: Which spouse moved the coin last on the scale?*]
    [ ] a. Husband
    [ ] b. Wife

[  ] c. Both

We will keep aside the urn now. We will show you the number of red balls in the urn, if this urn is chosen at the end.

## C4. Post-Discussion Guesses

*[Do not read: With the other surveyor, ask the participants the following questions simultaneously in separate booths. ${p12} will remain in the same booth. Ask ${13} to go to the other booth with the other surveyor.]*

Both of you discussed and made a joint guess. You now each have a chance to make another guess based on the information you learnt. We will not share your guess with your spouse. This guess may be different from your previous guesses or it may the same. Based on all the information you learnt, how many red balls do you think are in this urn?

Q10. What is the ${p12}'s updated guess? _____ *[Do not read: Have them move the coin to make their decision]*

Q11. What is the ${p13}'s updated guess? _____ *[Do not read: Have them move the coin to make their decision]*

We will show you the number of red balls in the urn, if this urn is chosen at the end to be the one that determines your payment. Now, we will proceed to the next round.

## ROUND 2: Within-Person Updating

Here is the second urn. Both of you will each make draws from the same urn. Until the completion of this round, we will be using only this urn. As you can see, this urn is orange in color - for each round, we will use a different colored urn.

The computer has decided that ${p16} starts first in this round. In this round, you will draw a few balls and guess, then your ${p17} will draw a few balls and guess. You will not get to discuss and guess together in this round. We will also not share your guess with each other.

*[Do not read: Ask the ${p17} to leave and talk to the ${p16}.]*

## A: Spouse 1 Individual Guess

This urn contains 20 balls. We will now do something slightly different than mentioned before. You can draw ${p18} balls from the urn to try and learn how many red balls and how many white balls are in the urn. Draw each ball from the urn, have a look at it, and put it back into the urn. I will shuffle the balls in the urn before each of your draws.

R1. *[Do not read]* Order of red/white balls drawn: _____
[Constraint: Limit the number characters that can be entered to ${p18}and display as field list.]

R2.*[Do not read]* How many red balls did the ${p16} draw? ___

R3. How many red balls do you think are in the urn? ___ *[Do not read: Have them move the coin to make their decision]*

*[Do not read: Ask the participant to wait for 5 minutes before proceeding with the survey.]*

You can now draw ${p20} more balls to learn more about the contents of the urn. Please draw ${p20} balls in total.

R4. *[Do not read]* Order of red/white balls drawn: _____
[Constraint: Limit the number characters that can be entered to ${p20} and display as field list..]

R5.*[Do not read]* How many red balls did the ${p16} draw? ___

R6. Now that you have had the chance to learn more about the content of the urn, can you tell us how many red balls you think are in the urn? [Updated guess] ___ *[Do not read: Have them move the coin to make their decision]*

Thank you for your guess. It is now your ${p17}'s turn. We will not change the contents of the urn and they will remain the same, while you are waiting.

*[Do not read: Ask the ${p16} to wait and ask the ${p17} to join. Once the ${p17} joins, ask the ${p16} to leave.]*

## B. Spouse 2 Individual Guess

This urn contains 20 balls. We will now do something slightly different than mentioned before. You can draw ${p19} balls from the urn to try and learn how many red balls and how many white balls are in the urn. Draw each ball from the urn, have a look at it, and put it back into the urn. I will shuffle the balls in the urn before each of your draws.

R7. *[Do not read]* Order of red/white balls drawn: ____
[Constraint: Limit the number characters that can be entered to ${p19}and display as field list.]

R8. *[Do not read]* How many red balls did the ${p17} draw? ___

R9. How many red balls do you think are in the urn? ___ *[Do not read: Have them move the coin to make their decision]*

*[Do not read: Ask the participant to wait for 5 minutes before proceeding with the survey.]*

You can now draw ${p21} more balls to learn more about the contents of the urn. Please draw ${p21} balls in total.

R10. *[Do not read]* Order of red/white balls drawn: ____
[Constraint: Limit the number characters that can be entered to ${p21}and display as field list.]

R11. *[Do not read]* How many red balls did the ${p17} draw? ___

R12. Now that you have had the chance to learn more about the content of the urn, can you tell us how many red balls you think are in the urn? [Updated guess] ___ *[Do not read: Have them move the coin to make their decision]*

## ROUND 3: Enforced Guess Sharing

Here is the third urn. Both of you will each make draws from the same urn. Until the completion of this round, we will be using only this urn. As you can see, this urn is blue in color - for each round, we will use a different colored urn.

The computer has decided that ${p22} starts first in this round. In this round, you will draw a few balls and guess, then your ${p23} will draw a few balls and guess. We will share your guesses with each other. Once you learn your spouse's guess, you will make another guess. Following this, we will ask you to make a joint guess.

*[Do not read: Ask the ${p23} to leave and talk to the ${p22}.]*

## A: Spouse 1 Individual Guess

This urn contains 20 balls. Similar to the previous round, you can draw ${p24} balls from the urn to try and learn how many red balls and how many white balls are in the urn. Draw a ball from the urn, have a look at it, and put it back into the urn. Please draw ${p24} balls in total. I will shuffle the balls in the urn before each of your draws.

*[Do not read: Ensure that the participant draws ${p24} times and note down the composition.]*

S1. *[Do not read]* Order of red/white balls drawn: ____
[Constraint: Limit the number characters that can be entered to ${p24}and display as field list.]

S2. *[Do not read]* How many red balls did the ${p22} draw? ___

S3. How many red balls do you think are in the urn? ___ *[Do not read: Have them move the coin to make their decision]*

Thank you for your guess. It is now your ${p23}'s turn. We will not change the contents of the urn and they will remain the same, while you are waiting.

*[Do not read: Ask the ${p22} to wait and ask the ${p23} to join. Once the ${p23} joins, ask the ${p22} to leave.]*

## B. Spouse 2 Individual Guess

This urn contains 20 balls and your ${p22} got a chance draw some balls from it. Now it is your turn. Similar to the previous round, you can draw ${p25} balls from the urn. Draw a ball from the urn, have a look at it, and put it back into the urn. Please draw ${p25} balls in total. I will shuffle the balls in the urn before each of your draws.

*[Do not read: Ensure that the participant draws ${p25} times.]*

S4. *[Do not read]* Order of red/white balls drawn: ____

[Constraint: Limit the number characters that can be entered to ${p25}and display as field list.]

S5. *[Do not read]* How many red balls did the ${p23} draw? ___

S6. How many red balls do you think are in the urn? ___ *[Do not read: Have them move the coin to make their decision]*

## C. Spouse 2 Updated Individual Guess

We will now share your ${p22}'s guess with you. Using this information and your own information, we will ask you to make a new guess. This guess can be the same as your previous guess or it can be different from your previous guess. It is entirely your choice.

Your ${p22} drew ${p24} balls from this urn and guessed that there are ${s3} red balls in this urn.

S7a. Can you tell me how many balls you drew from this urn? ___

S7b. Can you tell me what you had guessed? ____

Now that you learned your spouse's guess, how many red balls do you think there are in the urn? Please take your time to think about your choice.

S7. What is the ${p23}'s updated guess? ___ *[Do not read: Have them move the coin to make their decision]*

*[Do not read: Ask the ${p23} to wait and ask the ${p22} to join. Once the ${p22} joins, ask the ${p23} to leave.]*

## D. Spouse 1 Updated Individual Guess

We will now share your ${p23}'s guess with you. Using this information and your own information, we will ask you to make a new guess. This guess can be the same as your previous guess or it can be different from your previous guess. It is entirely your choice.

Your ${p23} drew ${p25} balls from this urn and guessed that there are ${s6} red balls in this urn.

S8a. Can you tell me how many balls you drew from this urn? ___

S8b. Can you tell me what you had guessed? ____

Now that you learned your spouse's guess, how many red balls do you think there are in the urn? Please take your time to think about your choice.

S8. What is the ${p22}'s updated guess? ___ *[Do not read: Have them move the coin to make their decision]*

*[Do not read: Ask the ${p22} to wait and ask the ${p23} to join.]*

**E. Joint Discussion**

Now, we would like you to decide together the number of red balls in the urn.

**[if ${p34} = "public"] <u>E1. Public Discussion</u>**

*[Do not read: Remain in the booth for the discussion.]*

We are going to remain in the booth while you make your decision together. This is only because we would like to see your decision-making process.

Our staying here has nothing to do with whether you made 'good' or 'bad' decisions in previous rounds. This task is designed to be difficult. Most couples find it hard to come up with a good answer. Don't worry about saying anything wrong in front of us. Just try to do your best.

Now both of you will make a decision together. Remember, this does not have to be the same as either of your previous guesses.

S9a. *[Do not read: Discussion start time: |__|__|:|__|__| 24HR]*

S9b. *[Do not read: Discussion end time: |__|__|:|__|__| 24HR]*

S9c. *[Do not read]* Did they share information?
   [  ] 0. No
   [  ] 1. Yes

**[if ${s9c} = 1; for S9d – S9h]**
S9d. *[Do not read]* Who shared information?
   [  ] a. Husband
   [  ] b. Wife
   [  ] c. Both

S9e. *[Do not read]* What information did the wife share?
   [  ] a. Number of draws
   [  ] b. Color composition
   [  ] c. Guess

S9f. *[Do not read]* What information did the husband share?
   [  ] a. Number of draws
   [  ] b. Color composition
   [  ] c. Guess

S9g. *[Do not read]* Who made the decision?
   [  ] a. Husband

[ ] b. Wife
[ ] c. Both

S9h. *[Do not read]* Notes on interaction: _____

**[if ${p34} = "private"] <u>E2. Private Discussion</u>**

Remember, this does not have to be the same as either of your previous guesses. We will now let you two decide. Let us know once you have made a decision together.

*[Do not read: Leave the booth and enter once they have made the decision. Keep the urn with the lid behind the table. Once you enter, place the urn on the table.]*

S9i. *[Do not read: Discussion start time: |\_\_|\_\_|:|\_\_|\_\_| 24HR]*

S9j. *[Do not read: Discussion end time: |\_\_|\_\_|:|\_\_|\_\_| 24HR]*

**<u>E3. Joint Guess</u>**

S10. How many red balls do you think there are in the urn? \_\_\_ *[Do not read: Have them move the coin to make their decision]*

S11. [*Do not read: Which spouse moved the coin last on the scale?*]
    [ ] a. Husband
    [ ] b. Wife
    [ ] c. Both

We will keep aside the urn now. We will show you the number of red balls in the urn, if this urn is chosen at the end.

**<u>E4. Post-Discussion Guesses</u>**

*[Do not read: With the other surveyor, ask the participants the following questions simultaneously in separate booths. ${p22} will remain in the same booth. Ask ${23} to go to the other booth with the other surveyor.]*

Both of you discussed and made a joint guess. You now have a chance to make another guess based on the information you learnt. We will not share your guess with your spouse and will note it down. This guess may be different from your previous guesses or could be the same. So based on all the information you learnt, how many red balls do you think are in this urn?

S12. What is the ${p22}'s updated guess? \_\_\_\_\_ *[Do not read: Have them move the coin to make their decision]*

S13. What is the ${p23}'s updated guess? \_\_\_\_\_ *[Do not read: Have them move the coin to make their decision]*

We will show you the number of red balls in the urn, if this urn is chosen at the end to be the one that determines your payment. Now, we will proceed to the next round.

**ROUND 4: Enforced Information Sharing**

Here is the fourth urn. Both of you will each make draws from the same urn. Until the completion of this round, we will be using only this urn. As you can see, this urn is brown in color - for each round, we will use a different colored urn.

The computer has decided that ${p26} starts first in this round. In this round, you will draw a few balls and guess, then your ${p27} will draw a few balls and guess. After you have made your guesses, we will then share the draws you saw with your spouse. Then you will make another guess. Following this, we will ask you to make a joint guess.

*[Do not read: Ask the ${p27} to leave and talk to the ${p26}.]*

**A: Spouse 1 Individual Guess**

This urn contains 20 balls. Similar to the previous round, you can draw ${p28} balls from the urn to try and learn how many red balls and how many white balls are in the urn. Draw a ball from the urn, have a look at it, and put it back into the urn.

Please draw ${p28} balls in total. I will shuffle the balls in the urn before each of your draws. As discussed, we will share your draws with your spouse. However, we will not share your guess.

A1. Which of the following information will we be sharing with your ${p27}?
[   ] 1. Your guess
[   ] 2. Draws

*[Do not read: Ensure that the participant draws ${p28} times and note down the composition.]*

T1. *[Do not read]* Order of red/white balls drawn: ____
[Constraint: Limit the number characters that can be entered to ${p28} and display as field list.]

T2. *[Do not read]* How many red balls did the ${p26} draw? ___

T3. How many red balls do you think are in the urn? ___ *[Do not read: Have them move the coin to make their decision]*

Thank you for your guess. It is now your ${p27}'s turn. We will not change the contents of the urn and they will remain the same, while you are waiting.

*[Do not read: Ask the ${p26} to wait and ask the ${p27} to join. Once the ${p27} joins, ask the ${p26} to leave.]*

**B. Spouse 2 Individual Guess**

This urn contains 20 balls and your ${p26} got a chance draw some balls from it. Now it is your turn. Similar to the previous round, you can draw ${p29} balls from the urn. Draw a ball from the urn, have a look at it, and put it back into the urn.

Please draw ${p29} balls in total. I will shuffle the balls in the urn before each of your draws. As discussed, we will share your draws with your spouse. However, we will not share your guess.

A2. Which of the following information will we be sharing with your ${p26}?
[   ] 1. Your guess
[   ] 2. Draws

*[Do not read: Ensure that the participant draws ${p29} times and display as field list.]*

T4. *[Do not read]* Order of red/white balls drawn: ____
[Constraint: Limit the number characters that can be entered to ${p29}]

T5. *[Do not read]* How many red balls did the ${p27} draw? ___

T6. How many red balls do you think are in the urn? ___ *[Do not read: Have them move the coin to make their decision]*

**C. Spouse 2 Updated Individual Guess**

We will now share your ${p26}'s draws with you. Using this information and your own draws, we will ask you to make a new guess. This guess can be the same as your previous guess or it can be different from your previous guess. It is entirely your choice.

Your ${p26} drew a total of ${p28} balls from this urn, of which ${t2} were red balls.

T7a. Can you tell me how many balls you drew from this urn? ___

T7b. Can you tell me how many red balls you drew from this urn? ___

How many red balls do you think there are in the urn? Please take your time to think about your choice.

T7. What is the ${p27}'s updated guess? ___ *[Do not read: Have them move the coin to make their decision]*

*[Do not read: Ask the ${p27} to wait and ask the ${p26} to join. Once the ${p26} joins, ask the ${p27} to leave.]*

**D. Spouse 1 Updated Individual Guess**

We will now share your ${p27}'s information with you. Using this information and your own information, we will ask you to make a new guess. This guess can be the same as your previous guess or it can be different from your previous guess. It is entirely your choice.

Your ${p27} drew a total of ${p29} balls from this urn, of which ${t5} were red balls.

T8a. Can you tell me how many balls you drew from this urn? ___

T8b. Can you tell me how many red balls you drew from this urn? ___

How many red balls do you think there are in the urn? Please take your time to think about your choice.

T8. What is the ${p26}'s updated guess? ___ *[Do not read: Have them move the coin to make their decision]*

*[Do not read: Ask the ${p26} to wait and ask the ${p27} to join.]*

**E. Joint Discussion**

Now, we would like you to decide together the number of red balls in the urn.

**[${p35} = "public"] E1. Public Discussion**

*[Do not read: Remain in the booth for the discussion.]*

We are going to remain in the booth while you make your decision together. This is only because we would like to see your decision-making process.

Our staying here has nothing to do with whether you made 'good' or 'bad' decisions in previous rounds. This task is designed to be difficult. Most couples find it hard to come up with a good answer. Don't worry about saying anything wrong in front of us. Just try to do your best.

Now both of you will make a decision together. Remember, this does not have to be the same as either of your previous guesses.

T9a. *[Do not read: Discussion start time: |__|__|:|__|__| 24HR]*

T9b. *[Do not read: Discussion end time: |__|__|:|__|__| 24HR]*

T9c. *[Do not read]* Did they share information?
   [ ] 0. No
   [ ] 1. Yes

**[if ${t9c} = 1; for T9d – T9h]**
T9d. *[Do not read]* Who shared information?
   [ ] a. Husband
   [ ] b. Wife
   [ ] c. Both

T9e. *[Do not read]* What information did the wife share?
    [ ] a. Number of draws
    [ ] b. Color composition
    [ ] c. Guess

T9f. *[Do not read]* What information did the husband share?
    [ ] a. Number of draws
    [ ] b. Color composition
    [ ] c. Guess

T9g. *[Do not read]* Who made the decision?
    [ ] a. Husband
    [ ] b. Wife
    [ ] c. Both

T9h. *[Do not read]* Notes on interaction: _____

**[if ${p35} = "private"] <u>E2. Private Discussion</u>**

Remember, this does not have to be the same as either of your previous guesses. We will now let you two decide. Let us know once you have made a decision together.

*[Do not read: Leave the booth and enter once they have made the decision. Keep the urn with the lid behind the table. Once you enter, place the urn on the table.]*

T9i. *[Do not read: Discussion start time: |\_\_|\_\_|:|\_\_|\_\_| 24HR]*

T9j. *[Do not read: Discussion end time: |\_\_|\_\_|:|\_\_|\_\_| 24HR]*

**<u>E3. Joint Guess</u>**

T10. How many red balls do you think there are in the urn? \_\_\_ *[Do not read: Have them move the coin to make their decision]*

T11. [*Do not read: Which spouse moved the coin last on the scale?*]
    [ ] a. Husband
    [ ] b. Wife
    [ ] c. Both

We will keep aside the urn now. We will show you the number of red balls in the urn, if this urn is chosen at the end.

**<u>E4. Post-Discussion Guesses</u>**

*[Do not read: With the other surveyor, ask the participants the following questions simultaneously in separate booths. ${p26} will remain in the same booth. Ask ${27} to go to the other booth with the other surveyor.]*

Both of you discussed and made a joint guess. You now have a chance to make another guess based on the information you learnt. We will not share your guess with your spouse and will note it down. This guess may be different from your previous guesses or could be the same. So based on all the information you learnt, how many red balls do you think are in this urn?

T12. What is the ${p26}'s updated guess? _____ *[Do not read: Have them move the coin to make their decision]*

T14. What is the ${p27}'s updated guess? _____ *[Do not read: Have them move the coin to make their decision]*

We will show you the number of red balls in the urn, if this urn is chosen at the end to be the one that determines your payment. Now, we will proceed to the next round.

**ROUND 5: Classic**

Here is the fifth urn. Both of you will each make draws from the same urn. Until the completion of this round, we will be using only this urn. As you can see, this urn is black in color - for each round, we will use a different colored urn.

The computer has decided that ${p30} starts first in this round. In this round, you will draw a few balls and guess the number of red balls in the urn;then your ${p31} will draw a few balls and guess. Following this, we will ask you to make a joint guess.

*[Do not read: Ask the ${p31} to leave and talk to the ${p30}]*

**A: Spouse 1 Individual Guess**

This urn contains 20 balls. Similar to the previous round, you can draw ${p32} balls from the urn to try and learn how many red balls and how many white balls are in the urn. Draw a ball from the urn, have a look at it, and put it back into the urn. Please draw ${p32} balls in total. I will shuffle the balls in the urn before each of your draws.

*[Do not read: Ensure that the participant draws ${p32} times and note down the composition.]*

U1. *[Do not read]* Order of red/white balls drawn: ____
[Constraint: Limit the number characters that can be entered to ${p32} and display as field list.]

U2. *[Do not read]* How many red balls did the ${p30} draw? ___

U3. How many red balls do you think are in the urn? ___ *[Do not read: Have them move the coin to make their decision]*

Thank you for your guess. It is now your ${p31}'s turn. We will not change the contents of the urn and they will remain the same, while you are waiting.

*[Do not read: Ask the ${p30} to wait and ask the ${p31} to join. Once the ${p31} joins, ask the ${p30} to leave.]*

**B. Spouse 2 Individual Guess**

This urn contains 20 balls and your ${p30} got a chance to draw some balls from it. Now it is your turn. Similar to the previous round, you can draw ${p33} balls from the urn to try and learn how many red balls and how many white balls are in the urn. Draw a ball from the urn, have a look at it, and put it back into the urn. Please draw ${p33} balls in total. I will shuffle the balls in the urn before each of your draws.

*[Do not read: Ensure that the participant draws ${p33} times.]*

U4. *[Do not read]* Order of red/white balls drawn: ____

[Constraint: Limit the number characters that can be entered to ${p33}]

U5. *[Do not read]* How many red balls did the ${p31} draw? ___

U6. How many red balls do you think are in the urn? ___ *[Do not read: Have them move the coin to make their decision]*

*[Do not read: Ask the ${p31} to wait and ask the ${p30} to join.]*

## C. Joint Guess

Now, we would like you to decide together the number of red balls in the urn.

### [if ${p37} = "public"] C1. Public Discussion

We are going to remain in the booth while you make your decision together. This is only because we would like to see your decision-making process.

Our staying here has nothing to do with whether you made 'good' or 'bad' decisions in previous rounds. This task is designed to be difficult. Most couples find it hard to come up with a good answer. Don't worry about saying anything wrong in front of us. Just try to do your best.

Now both of you will make a decision together. Remember, this does not have to be the same as either of your previous guesses.

U7a. *[Do not read: Discussion start time: |__|__|:|__|__| 24HR]*

U7b. *[Do not read: Discussion end time: |__|__|:|__|__| 24HR]*

U7c. *[Do not read]* Did they share information?
   [ ] 0. No
   [ ] 1. Yes

### [if ${u7c} = 1; for U7d – U7h]
U7d. *[Do not read]* Who shared information?
   [ ] a. Husband
   [ ] b. Wife
   [ ] c. Both

U7e. *[Do not read]* What information did the wife share?
   [ ] a. Number of draws
   [ ] b. Color composition
   [ ] c. Guess

U7f. *[Do not read]* What information did the husband share?
   [ ] a. Number of draws
   [ ] b. Color composition

    [ ] c. Guess

U7g. *[Do not read]* Who made the decision?
    [ ] a. Husband
    [ ] b. Wife
    [ ] c. Both

U7h.  *[Do not read]* Notes on interaction: _____

**[if ${p37} = "private"] <u>C2. Private Discussion</u>**
Remember, this does not have to be the same as either of your previous guesses. We will now let you two decide. Let us know once you have made a decision together.

*[Do not read: Leave the booth and enter once they have made the decision. Keep the urn with the lid behind the table. Once you enter, place the urn on the table.]*

U7i. *[Do not read: Discussion start time: |\_\_|\_\_|:|\_\_|\_\_| 24HR]*

U7j. *[Do not read: Discussion end time: |\_\_|\_\_|:|\_\_|\_\_| 24HR]*

**<u>C3. Joint Guess</u>**

U8. How many red balls do you think there are in the urn? \_\_\_ *[Do not read: Have them move the coin to make their decision]*

U9. [*Do not read: Which spouse moves the coin on the scale?*]
    [ ] a. Husband
    [ ] b. Wife
    [ ] c. Both

We will keep aside the urn now. We will show you the number of red balls in the urn, if this urn is chosen at the end.

**<u>E4. Post-Discussion Guesses</u>**

*[Do not read: With the other surveyor, ask the participants the following questions simultaneously in separate booths. ${p30} will remain in the same booth. Ask ${p31} to go to the other booth with the other surveyor.]*

Both of you discussed and made a joint guess. You now each have a chance to make another guess based on the information you learnt. We will not share your guess with your spouse. This guess may be different from your previous guesses or it may the same. Based on all the information you learnt, how many red balls do you think are in this urn?

U10. What is the ${p30}'s updated guess? \_\_\_\_\_ *[Do not read: Have them move the coin to make their decision]*

U11. What is the ${p31}'s updated guess? _____ *[Do not read: Have them move the coin to make their decision]*

We will show you the number of red balls in the urn. if this urn is chosen at the end to be the one that determines your payment. Now, we will proceed to the next round.

## SECTION C: Beliefs about Competence

*[Do not read: Talk to ${p30}]*

Now I would like to ask you a few questions about the game you have been playing today. We will not share your answers with your spouse.

V1. In general, who, amongst men and women, do you think will be better at this game, i.e. who is making more accurate choices?
[   ] a. Women are better
[   ] b. About the same
[   ] c. Men are better

V2. Who, amongst you and your spouse, do you think is better at this game, i.e. who is making more accurate choices?
[   ] a. Wife is better
[   ] b. About the same
[   ] c. Husband is better

*[Do not read: Talk to ${p31}]*

Now I would like to ask you a few questions about the game you have been playing today. We will not share your answers with your spouse.

V3. In general, who, amongst men and women, do you think will be better at this game, i.e. who is making more accurate choices?
[   ] a. Women are better
[   ] b. About the same
[   ] c. Men are better

V4. Who, amongst you and your spouse, do you think is better at this game, i.e. who is making more accurate choices?
[   ] a. Wife is better
[   ] b. About the same
[   ] c. Husband is better

*[Do not read: Talk to ${p31}.]*

We're at the end of this activity. Before you can learn how much you and your spouse will be earning, we have a few more questions for you.

Both you and your ${p30} got to make many guesses after learning some information about the contents of the different urns. Before I proceed, I would like to assure you that anything you tell us will not be shared with your ${p30}. I request you to answer my following questions. We will not disclose anything to your ${p30}.

Since, both you and your ${p30} made multiple guesses on your own - how much would each of your guesses earn, on an average?

If your answer is within Rs. 30 of the average of the actual earnings, you can earn Rs. 50 that you will be paid separately. However, if your guess is more than Rs. 30 of the average of the actual earnings, you will not earn anything other than the amount disclosed in the envelope as discussed before. One of the answers has already been chosen by the computer and you will be paid for that answer. So, think carefully before answering.

*[Do not read: Use Figure 2 (the payment scale) for the following questions.]*

W1. How much will your ${p30}'s guess earn, on an average? Rs. _____

W2. How much will your guess earn, on an average? Rs. ____

**[if ${p38} = "own guess"]**

W2a. [Calculate: ${p31}'s average earnings _____ ]

**[if  ${w2a} - 30 =< ${w2} =< ${w2a} + 30 ]**

Your guess about your average earnings is within the Rs. 30 of the average of your actual earnings. You will earn an additional Rs. 50 at the end of this survey.

**[if ${w2} < ${w2a} - 30 or ${w2} > ${w2a} + 30]**

Your guess about your average earnings is not within the Rs. 30 of the average of your actual earnings. You will not earn an additional Rs. 50 at the end of this survey.

**[if ${p38} = "spouse's guess"]**

W2b. [Calculate: ${p30}'s average earnings _____ ]

**[if  ${w2b} - 30 =< ${w1} =< ${w2b} + 30 ]**

Your guess about your ${p30}'s average earnings is within the Rs. 30 of the average of their actual earnings. You will earn an additional Rs. 50 at the end of this survey.

**[if ${w1} < ${w2b} - 30 or ${w1} > ${w2b} + 30]**

Your guess about your ${p30}'s average earnings is not within the Rs. 30 of the average of their actual earnings. You will not earn an additional Rs. 50 at the end of this survey.

*[Do not read: Talk to ${p30}.]*

We're at the end of this activity. Before you can learn how much you and your spouse will be earning, we have a few more questions for you.

Both you and your ${p31} got to make many guesses after learning some information about the contents of the different urns. Before I proceed, I would like to assure you that anything

you tell us will not be shared with your ${p31}. I request you to answer my following questions. We will not disclose anything to your ${p31}.

Since, both you and your ${p31} made multiple guesses on your own - how much would each of your guesses earn, on an average?

If your answer is within Rs. 30 of the average of the actual earnings, you can earn Rs. 50 that you will be paid separately. However, if your guess is more than Rs. 30 of the average of the actual earnings, you will not earn anything other than the amount disclosed in the envelope as discussed before. One of the answers has already been chosen by the computer and you will be paid for that answer.So, think carefully before answering.

*[Do not read: Use Figure 2 (the payment scale) for the following questions.]*

W3. How much will your ${p31}'s guess earn, on an average? Rs. ____

W4. How much will your guess earn, on an average? Rs. ____

**[if ${p39} = "own guess"]**

**[if ${w2b} - 30 =< ${w4} =< ${w2b} + 30 ]**

Your guess about your average earnings is within the Rs. 30 of the average of your actual earnings. You will earn an additional Rs. 50 at the end of this survey.

**[if ${w4} < ${w2b} - 30 or ${w4} > ${w2b} + 30]**

Your guess about your average earnings is not within the Rs. 30 of the average of your actual earnings. You will not earn an additional Rs. 50 at the end of this survey.

**[if ${p39} = "spouse's guess"]**

**[if ${w2a} - 30 =< ${w1} =< ${w2a} + 30 ]**

Your guess about your ${p30}'s average earnings is within the Rs. 30 of the average of their actual earnings. You will earn an additional Rs. 50 at the end of this survey.

**[if ${w1} < ${w2a} - 30 or ${w1} > ${w2a} + 30]**

Your guess about your ${p30}'s average earnings is not within the Rs. 30 of the average of their actual earnings. You will not earn an additional Rs. 50 at the end of this survey.

**SECTION E: FINAL SECTION**

As mentioned before, the envelope in front of you contains the decision made by the computer. Please open it and have a look at the decision.

F1. [Do not read] Who opened the envelope?
   [ ] a. Husband
   [ ] b. Wife
   [ ] c. Both

F1a. What does the sheet say?

F1b. Which urn does the sheet say is the one that determines your payment?

*[Do not read: Show them the red balls in the urn.]*

**[if ${p4} = 1]**
As you can see, there are ${p7} red balls in the urn.

**[if ${p4} = 2]**
As you can see, there are ${p8} red balls in the urn.

**[if ${p4} = 3]**
As you can see, there are ${p9} red balls in the urn.

**[if ${p4} = 4]**
As you can see, there are ${p10} red balls in the urn.

**[if ${p4} = 5]**
As you can see, there are ${p11} red balls in the urn.

F2. *[Do not read]* Is the finalized guess a post-discussion guess?
   [ ] 0. No
   [ ] 1. Yes

**[if ${f2} = 1]**

The finalized guess is a private guess, and as mentioned before we will not disclose the guess. However, we will explain the amount you will receive.

[*Do not read: With the help of the payment scale, explain their payment to them.]*

**[if ${f2} = 0]**[*Do not read: Show them the grid with responses from each round and point to the one in the envelope. With the help of the payment scale, explain their payment to them.*]

**SECTION Z: CONCLUSION**

Thank you for your time!

Z1. Re-enter CPID: _____

Z2. End Time: |__|__|:|__|__| 24HR