Learning in the Household*

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Abstract

How well do spouses pool information and learn from each other when they have incentives to do so? 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 husbands' information. In contrast, men's decisions respond only half as much to their wives' 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, at least in our study context, are likely to insufficiently incorporate useful information held by their wives.

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

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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 unilaterally 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 this question using observational data or natural field experiments for two reasons. First, it is difficult to observe each person's information set, which may itself be endogenous to whether their spouse 'listens'. One might forgo acquiring information if one's (decision-making) spouse will simply ignore it. Second, different preferences over outcomes may be hard to rule out in any given domain. A failure to pool information might thus be because of strategic motives.

We 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, men and women perform similarly and have similar self-confidence.

In the treatment conditions, the two signals are split between 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 the importance of communication frictions.

Incentives in the experiment are fully aligned across spouses. Only one of the several guesses made in the experiment is randomly chosen to be paid out based on its accuracy. The payoff is split equally between the spouses, regardless of who made it, creating incentives to pool information. Guesses made individually 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 ($p = 0.04$).

One ex ante plausible mechanism for this finding is asymmetric communication: perhaps men speak up in the discussion while women are hesitant to voice their opinion, or men are less likely to ask for their partner's views. However, we find that the actual mechanism is deeper than such communication frictions. In a treatment in which the experimenter directly informs each participant of their spouse's signals—thus shutting down communication frictions—men *still* discount their wives' signals by an almost identical 43% ($p < 0.01$). In contrast, women place equal weight on their own and their husbands' signals in this treatment (and overall). By design, lack of communication, differences in ability, and/or mistrust between spouses cannot explain husbands' behavior.

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.[1] Husbands thus treat their wife—or at least her information—as they

[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,

would a stranger. Wives instead put more weight on their husband's information than on strangers' (even male strangers') information ($p < 0.01$).[2]

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 information discovered by the spouse with greater decision-making power at home receives greater weight—by both husbands and wives—in both individual and joint guesses. Having more power at home might lead individuals to ignore valuable information held by their spouse. Additional experimental treatments find no role for social signaling to the experimenter or potentially biased perceptions of one's spouse's ability relative to one's own.

Joint decisions. In contrast to husbands' private guesses, we do *not* find evidence of joint household guesses putting differential weights on husbands' compared to wives' information. Instead, when husbands and wives must enter a joint household decision, the decision is on average equally sensitive to the information each of them uncovers. This result is perhaps surprising given the pattern of private guesses. When husbands and wives privately disagree about the right action—as they do in this case—one might ex-ante expect husbands to have more influence on the joint decision. It appears, instead, that joint decision-making mitigates biases through a process of compromise and bargaining that leads to equal weight on both spouses' information. This result is arguably consistent with survey measures of household decision-making power we collect, where we do not find gender differences on average.[3]

Even in the joint household decisions, we do still find evidence of incomplete information sharing: the joint guess is more sensitive to *both* husbands' and wives' signals in the treatment where the experimenter ensures information is shared ($p = 0.01$). This implies that information was not perfectly shared in the absence of external interven-

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).

[2]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.

[3]We take this finding of equality of the genders in household decision-making with a pinch of salt, given recent critiques of such survey questions by Jayachandran et al. (2023).

tion. Consistent with this, discussion transcripts show that in 19% of cases, at least one spouse did not share their signals or guess with their partner.

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 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 each spouse'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). We find that women influence their husbands' decisions less than the reverse, but both spouses' information receives equal weight in joint household decisions.

More broadly, 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), tested whether information diffuses 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), or studied spouses' ability to communicate persuasively (Kala and McKelway, 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 rich and 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 Rs. 100 ($1.40) to cover travel expenses. Participants were required to be ‘married couples’ who could come to the lab together.[4] No more specific information was provided at this point.

Recruitment of strangers. Our ‘strangers’ sample participated in a separate set

[4]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, so our sample consists entirely of couples consisting of one man and one woman.

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.[5]

Descriptive statistics. Table 1 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.

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.[6] This allows us to ask whether underweighting of spouses' information is a mistake: Does it lead to guesses farther from the Bayesian benchmark?

[5]Ideally, we would have randomized married individuals to be matched with their spouse or a stranger. Given the difficulty and slow pace of recruiting married couples, we preferred instead to not spend the scarce married couple time on playing with strangers.

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

Figure 1 illustrates the experimental design.[7] 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 per pair is about \$3 and Rs. 30 is about \$0.40. These incentives are meaningful when compared to the 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.[8] 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.I. Husbands and wives each answered about

[7] Full scripts for the experiment are in Appendix C.

[8] 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.

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 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 as the final three rounds of the experiment.[9]

[9]We include these two new rounds only after the initial *Discussion* and *Individual* rounds because we worried that treatments highlighting the other participants' information might distort participants'

***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.[10]

***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 Guess* treatment we transmit the action (guess) taken based on that signal.[11] When observing others' actions, beliefs about their 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—

behavior in the *Discussion* round. In the main text we show results pooling all rounds together, but in Appendix B.1 we show that husbands indeed appear to put somewhat more weight on wives' signals in the second *Discussion* round, though this difference in behavior compared to the first *Discussion* round is not statistically significant. Thus, if anything, our main results understate the extent to which husbands discount their wives' information.

[10]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.

[11]This round parallels more closely a previous literature which investigates social learning based on others' actions (Weizsäcker, 2010).

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 2 shows the average guess by both husbands and wives as a function of the signal they received. We summarize signals by their number of "net red" draws they comprised: the number of red balls drawn minus the number of white draws. Sensibly, both wives' and husbands' guesses of share of red balls in the urn increases in this measure of the signal they received ($p < 0.01$ for both spouses), and the slope is close to that of the risk-neutral Bayesian (dashed line in Figure 2).

Next, Figure A.II Panel A plots spouses' average performance—as measured by 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.[12] In 48% of couples, the wife outperforms the husband.

Men and women are both—equally—overconfident about their own ability, as reported in Figure A.II and Table 1. After completing the experimental rounds, we asked participants to privately predict their own and their partner's average expected earnings excluding any joint guesses.[13] Men correctly believe that their wives are as good as they are, but intriguingly, women *incorrectly* predict that their husbands are 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.[14]

[12]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 1.

[13]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.

[14]Figure A.III shows similar patterns of actual performance in our sample of strangers: their average guesses in the individual round approximately track the risk-neutral Bayesian benchmark, and their

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. Let $\textit{First Signal}_{irt}$ and $\textit{Second Signal}_{irt}$ 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 $r \in \{1, 2, 3, 4, 5\}$ and treatment/control condition t. We estimate the following equation by OLS:

$$\begin{aligned} \textit{Guess}_{irt} = \alpha + \beta_1 \cdot \textit{First Signal}_{irt} + \beta_2 \cdot \textit{Second Signal}_{irt} \\ + \boldsymbol{\beta_3} \cdot \mathbf{T}_{irt} \cdot \textit{Second Signal}_{irt} + \epsilon_{irt} \end{aligned} \tag{1}$$

where $\textit{Guess}_{irt}$ is i's private guess of the number of red balls in treatment condition t in round r.β_1 captures the "weight" that participants put on their first set of draws, averaging across all treatments.[15] β_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 indicators 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. 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

expected earnings increase in their number of draws. In contrast to couples, we do see that both genders perceive themselves to be better at the task than their partner.

[15] 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.II), we allow β_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.

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., $\boldsymbol{\beta}_3 = 0$.[16] If instead $\boldsymbol{\beta}_3 < 0$, then participants in the corresponding treatment either do not fully learn their partner's information or under-weight it relative to had it been their own. Our main tests are whether $\boldsymbol{\beta}_3 = 0$ for husbands and wives, respectively, as well as whether $\boldsymbol{\beta}_3$ is equal across husbands and wives.

Our analysis does not assume that participants are Bayesian. We only test if the response to signals is similar regardless of who drew them. Any general deviation from Bayesian updating should apply equally to signals drawn by oneself or by one's partner, since they are drawn independently from the same distribution. Testing the average response to each signal is also 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 or not—when playing alone.

In the main text, we use the net number of red draws as an intuitive summary of the content of each spouse's signal. However, this statistic loses some information: for example, a Bayesian would react differently to a signal of one red draw than to five red draws and four white draws, despite them each having one net red draw. In Appendix B.2, we additionally describe and estimate a model of quasi-Bayesian belief updating that accounts for the full signal structure, where we show the same pattern of results as the reduced-form analysis that we focus on in the main text.

4.2 Couples Experiment: Individual Decisions

We begin by studying the private guesses made by each participant. We interpret these as being individual decisions made by each family member which could still benefit from incorporating their spouse's knowledge. Figure 3 plots the average weights husbands and wives place on their own vs. their spouse's information, pooling across the different treatment rounds. Figure 4 breaks up the results by treatment condition. Table 2 shows the corresponding regression results, pooling treatment conditions in odd columns and showing them separately in even columns.

[16] 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.

Husbands. Husbands' private guesses are much less sensitive to signals collected by their wives compared to their own signals. Husbands put 46 percent less weight (0.29 vs. 0.54) on the second signal when it is collected by their wives than when they draw it themselves in the *Individual* condition ($p < 0.01$, Table 2 column 1 and Figure 3). This implies that *husbands do not learn efficiently from their wives.*[17]

Why do husbands fail to learn well from their wives? At a high level, we designed our experiment to test for two broad classes of mechanisms: failure to communicate/listen versus a failure to properly weight information coming from one's spouse. Figure 4 shows that husbands discount their wives' information in *every* treatment condition. In the *Discussion* treatment, husbands discount their wives' signals by 41 percent (0.22/0.54). When we shut down any communication frictions between spouses by directly informing the husband about their wife's signals—in the *Informed of Draws* treatment—husbands continue to discount their wives' signals by 43 percent.[18] Husbands also put 56 less weight on their wives' signal in the *Informed of Partner's Guess* treatment ($p < 0.01$), where the experimenter shares with them their wife's guess, rather than her signals. The directionally stronger discounting of wives' signals in this treatment might be explained by difficulties recovering the signal from the guess, or by men mistrusting their wife's ability to make good guesses.

By design, discounting in the *Informed of Draws* treatment 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. Even when communicated perfectly, with aligned incentives husbands treat their wives' knowledge as being substantially less relevant in their private decisions.

Wives. Wives, in stark contrast to husbands, do *not* significantly under-weight their spouse's information relative to their own (Figure 3 and Table 2 column 3). They place about 10 percent lower weight on their husband's information pooling across treatment conditions compared to their own information in the *Individual* condition, a difference that is statistically indistinguishable from zero ($p = 0.38$). Wives discounting of their husband's information is significantly different from husbands' treatment of their wives'

[17]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 therefore move even further away from a Bayesian benchmark.

[18]Here, we include both the private guesses made after being informed by the experiments, one before and one after the couples discuss face-to-face. Table A.III shows that this discounting is stronger in the pre-discussion private guess.

information ($p = 0.04$). Thus, unlike husbands, *wives learn (nearly) as efficiently from their husbands' signals as their own.*

This pattern largely holds across treatments, as shown in Figure 4 and Table 2 column 4. Most importantly, merely being informed by the experimenter of their husband's draws leads to very similar effects as having a face-to-face discussion with their husband, suggesting that women's behavior is not driven by (say) a compelling or forceful argument made by the husband personally. The only specification in which women's underweighting of their husbands' signals is marginally significant is the *Informed of Guess* treatment, which is likely because of the difficulty of fully extracting the husband's information from his guess alone.

Earnings. Husbands' discounting of their wives' signals is costly for couples. Table 3 regresses expected earnings on the (randomized) number of draws in each signal. Husbands (column 1) earn 68% less (1.72/2.53) per additional draw when this draw comes from their wife rather than themselves ($p < 0.01$). In contrast, for wives (column 2), the difference in expected earnings from additional own vs. their husband's draws is small in magnitude (14%) and statistically insignificant ($p = 0.37$).

4.3 Couples Experiment: Joint Household Decisions

We next turn to the joint guesses. With frictionless, rational learning within the household, all information should be shared and both spouses should have identical posterior beliefs.[19] The joint guess should then be identical to the final private guesses. In practice, husbands' and wives' final private guesses differ from each other 62% of the time, and the joint guess differs from at least one private guess 69% of times.[20] The joint household guess may thus be thought of as emerging from some decision-making process (e.g. bargaining or compromise) in the face of disagreement about the optimal decision. It is an empirical question whether the joint guess will more closely resemble the husband's guesses—placing more weight on the husband's information—or the wife's guesses, placing similar weight on both sets of information.

[19] Strictly speaking, identical beliefs need not result in identical guesses. A more risk averse participant who carefully thinks through the incentive scheme would be more conservative in updating away from 50-50 than a less risk-averse participant. But we do not find evidence of gender differences in conservatism in updating in the *Individual* round.

[20] The joint guess agrees with the husband's final guess 53% of the time and with the wife's final guess 50% of the time.

Equal weights on information. To analyze the relative weight that each spouse's information gets in the joint guess, we estimate equation 2 by OLS:

$$Guess_{cr} = \alpha + \beta_1 \cdot \textit{Husband's Signal}_{cr} + \beta_2 \cdot \textit{Wife's Signal}_{cr} + \epsilon_{cr}, \tag{2}$$

where $Guess_{cr}$ is couple c's joint guess in round r, while $\textit{Husband's Signal}_{cr}$ and $\textit{Wife's Signal}_{cr}$ are the net number of red draws in the husband's and wife's signals, respectively, in that round. Figure 5 displays the results. Strikingly, we find very similar weights on husbands' and wives' information in the joint guesses. This holds when pooling across treatments and in every single treatment. In no treatment do we find statistically significant differences in weights placed on husbands' and wives' information (Table 4). In this sense, couples deciding jointing appear to update similarly to wives deciding on their own: we cannot reject that joint guesses and wives' private guesses give the same relative weight to each signal ($p = 0.31$), but we can reject that joint guesses and husbands' guesses do so ($p < 0.01$).[21] Consistent with husbands' and wives' information receiving equal weight, husbands' and wives' additional draws have nearly identical impacts on the expected earnings of joint guesses (Table 3 column 3).

Incomplete information sharing. Our analysis so far has largely focused on whether husbands, wives, and households *equally* weight information from both spouses. However, information pooling also requires that *all* information is shared. Along this dimension, we find evidence of information-sharing failures even in joint guesses. Specifically, the joint guess is more sensitive to *both* husbands' and wives' signals in the *Informed of Draw* treatment, where the experimenter ensures information is shared, than in the Discussion round (Figure 5). 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 4). Joint guesses thus weight information from both spouses equally, but not fully.

Turning to transcripts of the discussion, which were recorded with participants' permission, we see clear evidence of failures of information sharing. Spouses fail to share either their previous guess or the composition of their draws about one third of the time (36.3% for husbands, 31.2% for wives). Information not shared is unlikely to be fully incorporated into the joint guess.

Overall quality of joint versus individual guesses. Overall, joint household

[21] These p-values come from seemingly unrelated regressions comparing the specifications in Table 2, columns 1 and 3, with the specification in Table 4 column 1.

guesses outperform individual guesses. Joint guesses benefit significantly more from additional draws—as measured by their increase in expected earnings—than individual guesses made by either husbands and wives in the same round, though the effect is larger for husbands (Table 3, cols 1 to 3). Joint guesses counter husbands' tendency to neglect useful information possessed by their wives, but may also improve decision-making in general by helping process information better. This is consistent with the literature on performance gains from joint deliberation in groups (Blinder and Morgan, 2005; Cooper and Kagel, 2005; Goeree and Yariv, 2011; Charness and Sutter, 2012).

5 Mechanisms

What explains the failures of information pooling we document? Most importantly, why do husbands underweight information from their wives? Second, why do wives (and joint guesses) instead equally weight information from both spouses? Below, we discuss potential mechanisms using additional experimental variations and survey data collected from the married couples in our experiment.

5.1 Ruling out confounds

We being by discussing a set of possible explanations which are unlikely to drive our findings given the design of the experiment.

Our findings cannot be explained by people engaging in **non-Bayesian reasoning** or simply finding the task difficult. Our empirical tests do not assume that people follow Bayes' Rule. Regardless of the model of belief updating participants use, they should respond similarly to two equivalent pieces of information regardless of source.

A similar logic explains why factors such as **risk aversion** and possible differences in risk aversion across husbands and wives cannot explain our findings. If men were more risk averse than women, their guesses might react less to signals given our incentive structure. But this should apply equally to signals drawn by either spouse.

Mistrust of one's spouse should also not explain our results. Incentives are aligned and there should be no reason to misreport your draws to your spouse. Still, suppose men distrust what their wives report. This should be alleviated by the *Informed of Draws* treatment, where the experimenter informs players of their spouse's draws.

Conlon et al. (2026) also show that under-responding to signals drawn by others persists even when participants observe their teammate drawing balls from the urn with their own eyes. All these factors point against conscious mistrust playing an important role.

Competitiveness should also not play a role in our experiment. Payoffs are split equally between spouses, and even if husbands gain utility from their guesses outperforming their wives', this should at most cause them to hide information but not to ignore the information revealed to them (especially if revealed by the experimenter).

5.2 Mechanisms

We next discuss mechanisms which we considered ex-ante plausible and therefore tested experimentally or with the help of survey data.

Communication frictions. The high-level mechanisms we designed our experiment around were communication frictions versus information-processing biases. Ex ante, we thought it plausible that women might hesitate to speak up in the discussions, leading to men neglecting their information (Coffman, 2014; Isaksson, 2018). As described above, we find that this is not the fundamental mechanism in our setting, since men neglect their wife's information even when it is communicated perfectly in the *Informed of Draws* treatment. This implies that the correct mechanism involves some form of information-processing friction.

Gender differences in social learning. One possibility emerging from the results so far is that women might be better at learning from others in general. For example, women might be more attuned to cues from others or more open to learning from others' experiences. Alternatively, our findings could be specific to the marital context (e.g. a norm of women defering to their husbands). We turn to the *Strangers Experiment* to disentangle these competing explanations.

We find that there is *no gender difference in learning from strangers*. Interestingly, *both* men and women significantly discount their partner's information when their partner is a stranger. This is true overall (Figure 6) and in each treatment condition (Figure A.IV). We cannot reject that men and women discount strangers' information by equal amounts overall ($p = 0.61$) and in every single treatment (Table 2 columns 6 and 8). Further, neither men nor women place significantly different weight on their partner's signals when the partner shares their gender.[22]

Both men and women paired with a stranger discount their partner's signals by about 50 percent ($p < 0.01$, Table 2 columns 5 and 7). This is similar to the magnitude of discounting husbands displayed towards their wives' information in our main experiment. In a sense, husbands in our main experiment thus treated their wives like strangers, while wives gave far greater weight to their husband's information than a stranger's (see Table A.IV for a formal test).[23,24]

Recall that participants were not randomly assigned to play with their spouses versus a stranger. Instead, participants were recruited separately for the two experiments (although from the same neighborhoods, using a similar recruitment protocol). One might therefore worry that participants differ across the two experiments. First, it is worth noting that married and unmarried individuals discount strangers' information similarly, both pooling across participants (Table A.V, 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 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.V).

Gender differences in confidence and beliefs about spouse's ability. Ex ante, one hypothesis we considered was that men might be overconfident about their ability relative to their wives, or that women might be under-confident about their ability. This, in turn, could affect their propensity to speak up in discussions or value

[22]Recall that, in the strangers experiment, participants are randomly paired with another participant of a different gender, but play one of the two *Discussion* rounds—randomly chosen—with a different partner of the same gender.

[23]Specifically, 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.IV, column 1). Men treat others' information quite similarly when partnered with their wives versus with strangers (8% difference, $p = 0.41$). In contrast, while women place no more weight on their partner's information than men do when playing with strangers (16% difference, $p = 0.74$), they place significantly more weight on their partner's information when that partner is their husband (64% difference, $p < 0.01$).

[24]Table A.VI shows roughly equal weight on men's and women's signals in the joint guess, both overall and disaggregating across treatments.

each other's judgment.[25]

Contrary to this hypothesis, we found using incentivized belief elicitations that men and women were equally over-confident about their own ability in absolute terms (Table 1).[26] We also compare two experimental conditions in which beliefs about ability should matter differentially. In the *Informed of Guess* treatment, participants are only told their spouse's guess, while in the *Informed of Draws* treatment, they learn their spouse's signals themselves. The former has room for beliefs about one's spouse's ability to play a role while the latter does not. As we have seen, husbands underweight their wives' signals even in the latter condition. Thus, confidence or beliefs about ability cannot drive our results.

Social signaling. We next consider the possibility that our results are driven by a desire to signal certain gender norms to the experimenters. Of course, it is not obvious which way this would shift behavior. But it is plausible that men might want to signal to outsiders their domination by showing they ignore their wives or women might want to signal their deference to their husband by attending to his opinion. To investigate this, we randomized within-couple whether the experimenter was present in the booth during the discussion in each round. The idea was that the experimenter's presence might distort the content of the discussion relative to a private discussion (e.g., that women may be silent in public but speak up in private). Overall, we find no evidence that the experimenter's presence affects husbands' or wives' weighting of their spouses' signals (Table A.VII).

Household decision-making power. Since gender differences in social learning emerge only in the household, it is natural to examine whether power in the household colors how information itself is valued, as in Hoff et al. (2017). This would be inefficient: even a spouse with absolute decision-making rights would benefit from using all available information.

To test the connection between information weights and household decision-making

[25] If so, this would still be inefficient. Ability at processing information should not affect the weight placed on the signals themselves — the more competent spouse can always 'do the math' themselves after extracting relevant information from their partner.

[26] However, wives on average expressed a view that their husband was better than them (while husbands on average said, accurately, that their wife was as good at the task as them). In an exploratory correlational analysis of these relative ability beliefs, we find that the information of the spouse who is seen as better at the task receives more weight in both spouses' decisions as well as in joint decisions (Table A.VIII).

power, we separately ask both spouses which of them primarily makes decisions about household finances, education, health, shopping, travel, savings, and loans, as well as who primarily manages money for the household and who the primary household decision-maker is (see Table A.IX). We average the answers across both spouses for each question and normalize this variable to produce an index where larger numbers indicate more reported decision-making power for husbands relative to wives. Table A.IX reports summary statistics on each of these components. We then estimate:

$$\begin{aligned} Guess_{ij} = \alpha + \beta_1 \textit{Husband's Signal}_{ij} + \beta_2 \textit{Wife's Signal}_{ij} \\ + \gamma_1 \textit{Husband's Signal}_{ij} \times \mathbf{X}_j + \gamma_2 \textit{Wife's Signal}_{ij} \times \mathbf{X}_j, + \epsilon_{ij} \end{aligned} \tag{3}$$

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. $\textit{Husband's Signal}_{ij}$ and $\textit{Wife's Signal}_{ij}$ 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 including the normalized index of the relative household decision-making power of the husband relative to the wife.

Table 5 shows the results. We begin by pooling all the guesses (individual and joint) made in the *Discussion* treatment in Column 1. The interaction of the husband's decision-making power with the husband's signal is positive and significant, 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 (+0.12, $p = 0.03$). 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. Columns 2 through 4 show that this difference is driven equally by the guesses of husbands, of wives, and of joint decisions. 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.[27]

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. Note that this is not simply because

[27]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 (Table A.X).

wives do not speak up: transcripts of the discussion reveal that wives are no less likely to share information as their household decision-making power declines, although their husbands do become more likely to lead or initiate the conversation (Table A.XII).

5.3 Conclusions regarding mechanisms

The analyses in this section shed light on the mechanisms underlying our main results. Why do husbands underweight information uncovered by their wives? First, we have argued that this is not due to women not speaking up or husbands distrusting their wives: even when information is perfectly communicated by the experimenter, husbands still react less when the information came from their wife. The experiment with strangers reveals that this is how both men and women treat information coming from strangers of either gender. Thus, there is a general tendency to react less to information coming from others, which men also apply to their wives. Conlon et al. (2026) explore this general tendency in much more depth.

Why are wives an exception to this rule, placing equal weight on information coming only from their husbands? Since there no a gender difference *outside* the household, it follows that the reason is somehow related to the household decision-making context. We find suggestive, correlational evidence that both spouses place greater weight on information coming from the spouse with greater reported household decision-making power. Power in the household may thus extend to information itself, not just to how different preferences are weighted. A caveat is that this does not statistically "explain away" the asymmetry between husbands and wives, since our survey measures do not find higher reported decision-making power for husbands on average (see Table A.IX).[28]

Why do joint guesses resemble wives' guesses in placing equal weights on both spouse's information? Husbands' and wives' private guesses often disagree with each other and with the joint guess. We interpret the joint guess as emerging from some process of bargaining or compromise. The equal weights on information we find in the

[28] This is particularly driven by husbands being less likely to report that they have primary decision-making power. We take this reported equality of decision-making power with a healthy pinch of salt, given that our survey measures of household decision-making power—while fairly standard—are highly imperfect (Jayachandran et al., 2023; Jayachandran and Voena, 2025). It is possible that husbands over-report the decision-making power of wives, absent which decision-making power might go some way towards explaining the difference between husbands and wives. Note that wives are much more likely to report that their husbands are the primary decision-maker for many categories of decisions, and overall.

joint decisions are arguably consistent with the survey measures of household-decision making we collect, which do not find systematic gender differences.[29] More work will be required to unpack the mechanics of household decision-making when it comes to information aggregation.

6 Discussion and 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

[29] Another interpretation is that wives buy in to the household decision while husbands do not. But recall that wives place equal weights on information even without a discussion and before any joint guess, when they are simply informed of their husband's draws by the experimenter.

information aggregation within the household is helpful.

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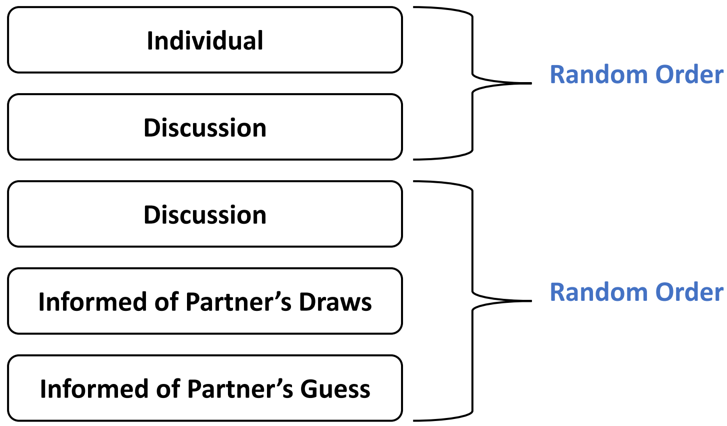
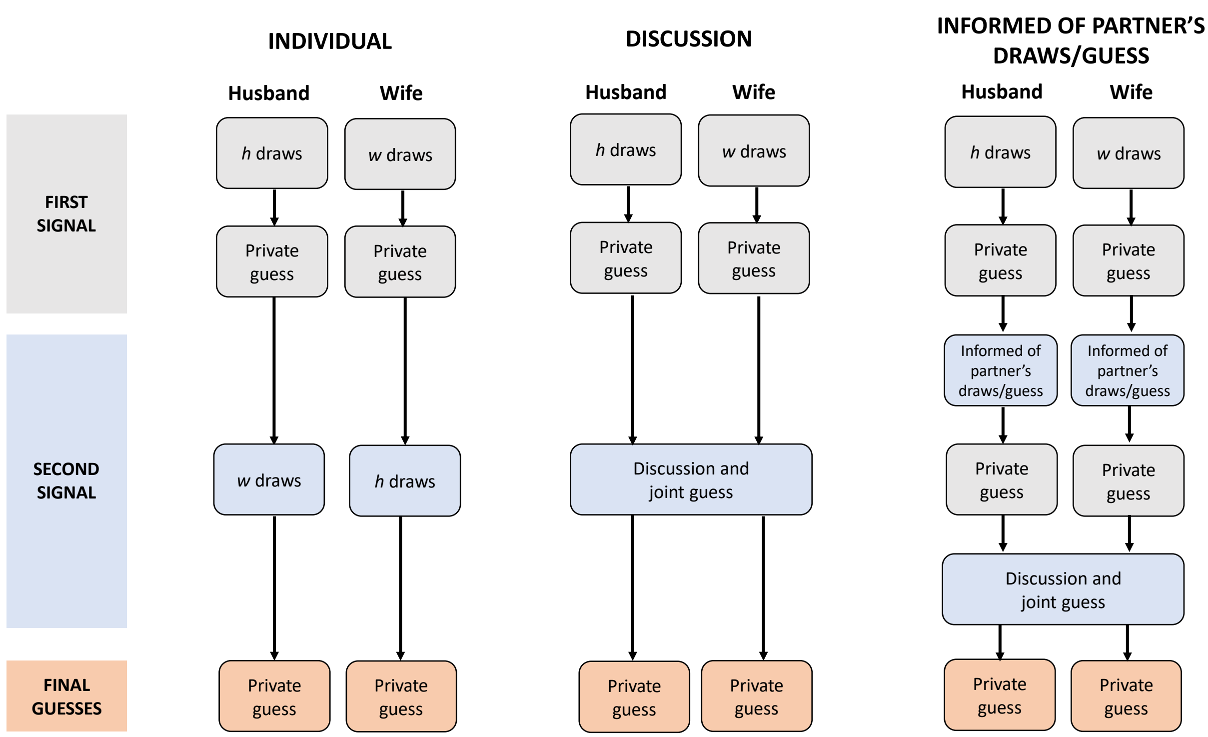
Figure 1: Experimental Design

Panel A: Overall Design



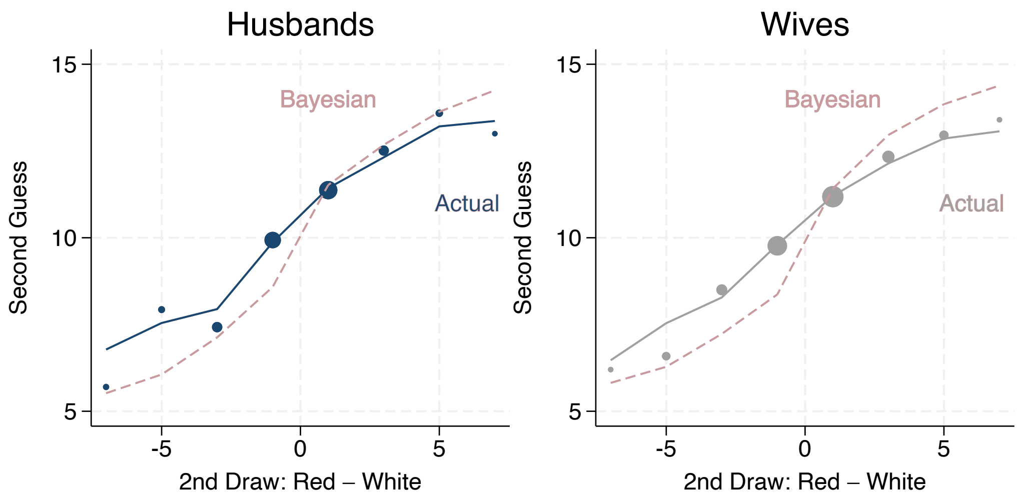
Panel B: Structure of *Individual*, *Discussion*, and *Informed* conditions



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.

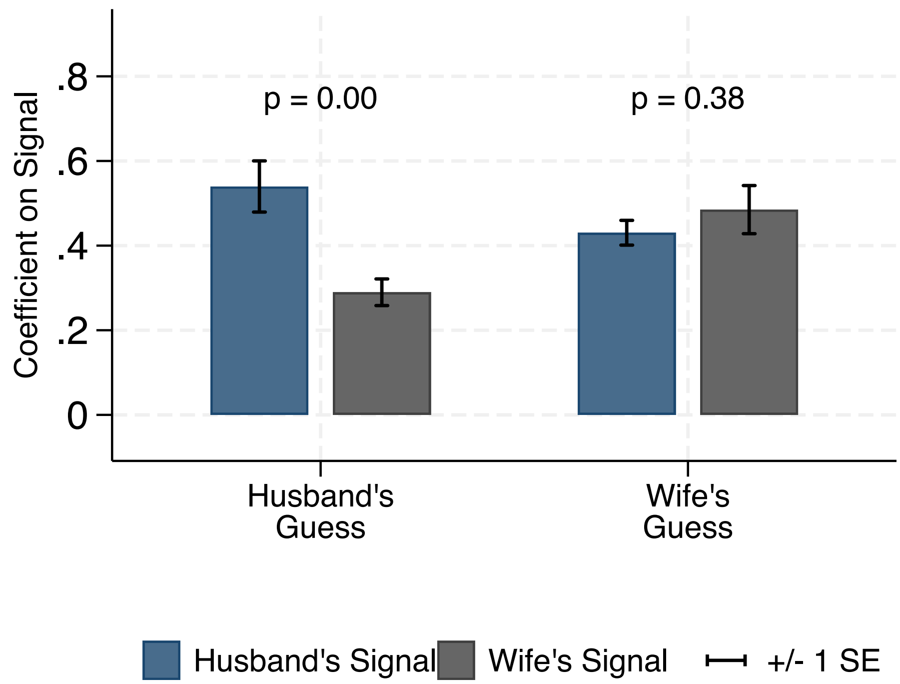
Panel B describes the structure of the different conditions. In the *Individual* condition, each spouse gets two sets of private draws from the urn and makes a private guess after each set of draws. In the *Discussion* treatment, each spouse makes one set of draws followed by a private guess. The two 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: Guesses Compared to Risk-Neutral Bayesian Benchmark



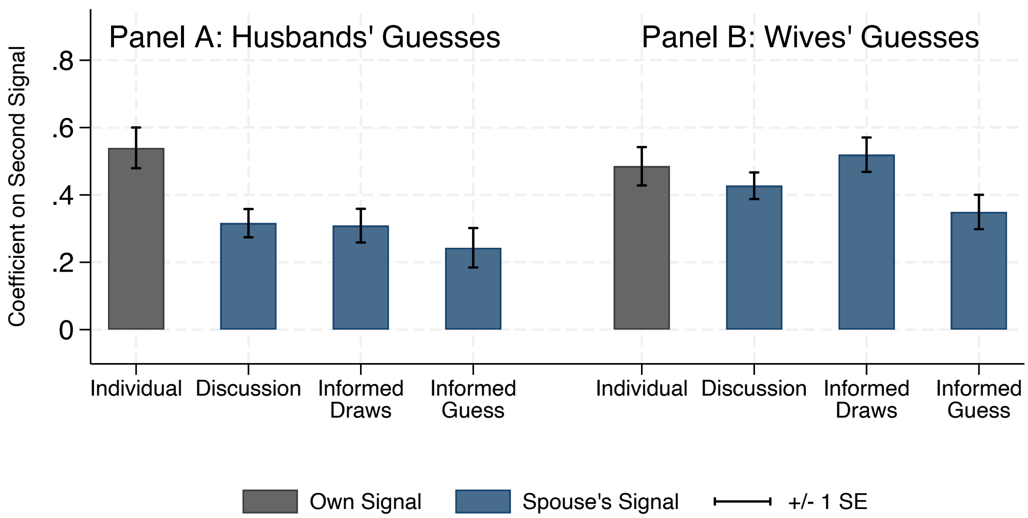
Notes: This figure shows the average second private guess in the *Individual* condition depending on the net number of red draws (i.e., red draws minus white draws) in participants' second signal. The blue and grey curves show locally-weighted means (lowess) for husbands and wives, respectively. The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

Figure 3: Weights on Husbands' vs. Wives' Information (Couples Experiment)



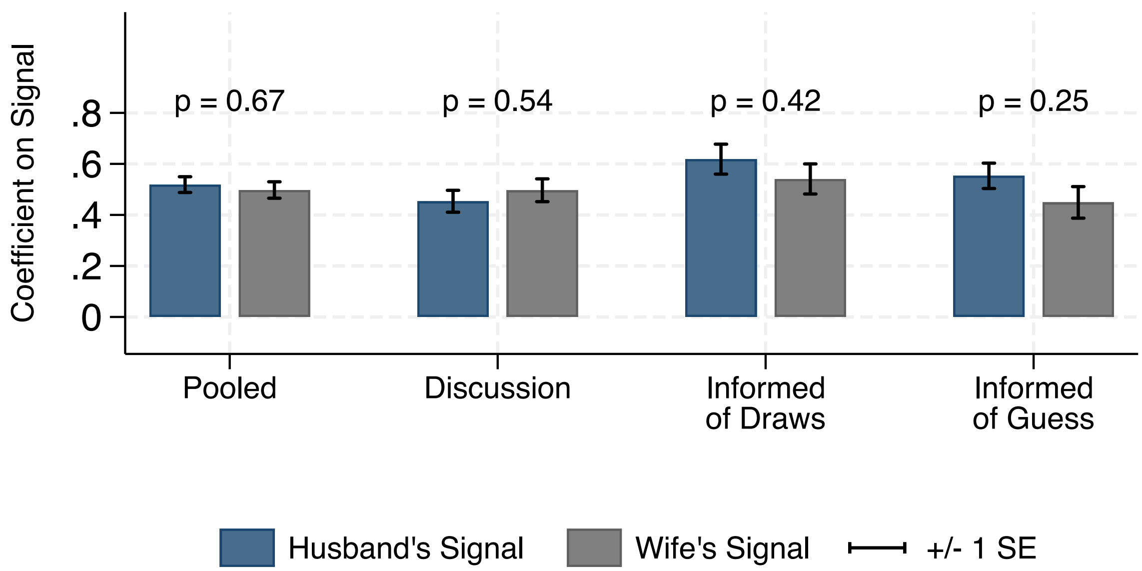
Notes: Each pair of bars shows the weight that husbands' and wives' private guesses place on the husband's vs. the wife's signal. Blue bars indicate weight on the husband's signal, while gray bars indicate weight on the wife's signal. These incorporate the *Individual* round to control for order effects: for the guesser's own signal, they show β_2, the weight participants put on their second signal in the *Individual* round; for the 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. The p-value above each pair tests the equality of the two weights.

Figure 4: Weights on Own vs. Spouses's Information (Couples' Experiment)



Notes: This figure shows the weights participants in the Couples Experiment put on their first and second signals across treatments. Separately for husbands and wives, 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; (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.

Figure 5: Weights in Joint Decisions (Couples Experiment)

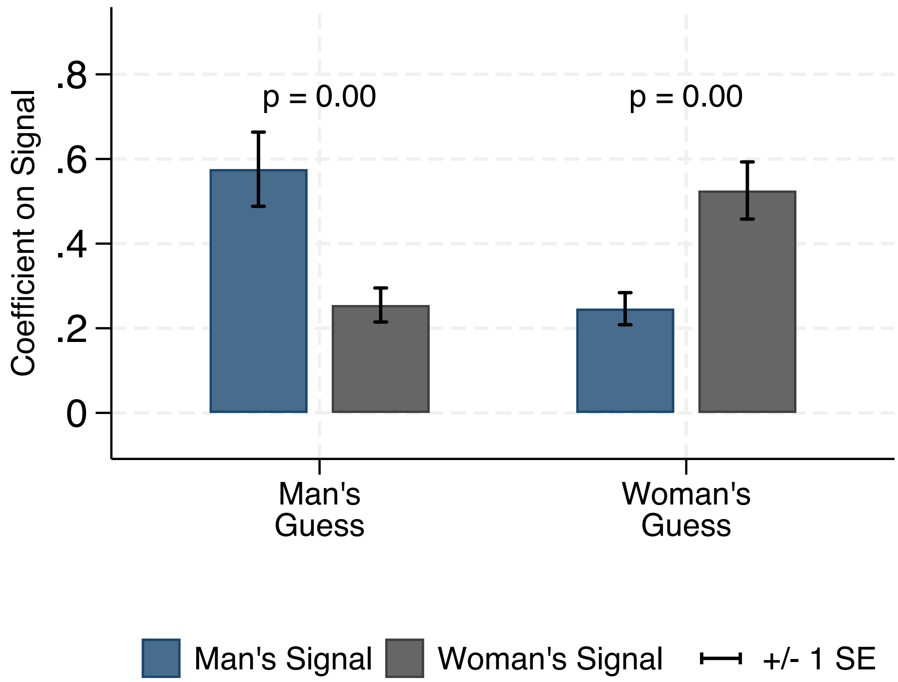


Notes: Each pair of bars above shows OLS estimates of β_1 and β_2 in the following equation:

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

$Husband\text{'}s\ Signal_{irt}$ is defined as the number of "net red draws" (i.e., red draws minus white draws) in the husband's set of signals. $Wife\text{'}s\ Signal_{irt}$ is the number of net red draws in the wife's set of signals. The 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. Whiskers denote standard errors clustered at the couple level.

Figure 6: Weights on Men's vs. Women's Information (Strangers Experiment)



Notes: Each pair of bars shows the weight that men's and women's private guesses place on the man's vs. the woman's signal. Blue bars indicate weight on the man's signal, while gray bars indicate weight on the woman's signal. These incorporate the *Individual* round to control for order effects: for the guesser's own signal, they show β_2, the weight participants put on their second signal in the *Individual* round; for the 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. The p-value above each pair tests the equality of the two weights.

Table 1: 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 3×9?" " | " 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 2: Couples' and Strangers' Weight on Own vs. Others' Information

	Couples				Strangers			
	Husbands		Wives		Men		Women	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
β_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)
β_2: Second Signal	0.54***	0.54***	0.49***	0.49***	0.57***	0.57***	0.52***	0.52***
	(0.06)	(0.06)	(0.06)	(0.06)	(0.09)	(0.09)	(0.07)	(0.07)
$\beta_{3,0}$: 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		-0.22***		-0.06		-0.30***		-0.16*
		(0.07)		(0.07)		(0.10)		(0.09)
$\beta_{3,2}$: Second Signal X Informed of Draws		-0.23***		0.03		-0.29***		-0.25***
		(0.08)		(0.07)		(0.11)		(0.09)
$\beta_{3,3}$: Second Signal X Informed of Guess		-0.30***		-0.14*		-0.32***		-0.39***
		(0.08)		(0.08)		(0.11)		(0.09)
β^{pf}: Second Signal X Discussion X Partner Female						-0.07		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				0.10				0.34
p-value: $\beta_{3,2}$ equal across genders				0.02				0.73
p-value: $\beta_{3,3}$ equal across genders				0.18				0.65
p-value: $\beta_{3,1}$ to $\beta_{3,3}$ equal across genders				0.13				0.45

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

Table 3: Earnings – Individual and Joint Guesses

	Couples			Strangers		
	Husbands (1)	Wives (2)	Joint (3)	Men (4)	Women (5)	Joint (6)
β_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)
β_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: β_m equal to joint	0.83	0.04		0.42	0.00	
p-value: β_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 4: Signal Weights in Couples' Joint Guesses by Round

	All	Discussion	Informed of Draws	Informed of Guess
	(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

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 level. *, **, and *** indicate significance at the p<0.10, 0.05, and 0.01 levels.

Table 5: Heterogeneity across Couples: Decision-Making Power (Discussion)

	Pooled (1)	Husbands (2)	Wives (3)	Joint (4)
Husband's Signal	0.46***	0.52***	0.42***	0.45***
	(0.04)	(0.04)	(0.04)	(0.04)
Wife's Signal	0.43***	0.32***	0.48***	0.50***
	(0.04)	(0.04)	(0.04)	(0.04)
Husband's Signal X Husband's Decision-Making Power	0.07**	0.07*	0.07*	0.07*
	(0.03)	(0.04)	(0.04)	(0.04)
Wife's Signal X Husband's Decision-Making Power	-0.05	-0.04	-0.05	-0.06
	(0.03)	(0.04)	(0.04)	(0.04)
Constant	10.56***	10.39***	10.65***	10.65***
	(0.09)	(0.11)	(0.11)	(0.11)
N	2,400	800	800	800
p-value: HHDM Interactions Equal	0.03	0.08	0.05	0.05

Notes: OLS estimates of Equation (3) for the Couples Experiment, *Discussion* treatment. The dependent variable is participants' private guesses (excluding first private guesses). Column 1 pools husbands', wives', and joint guesses; columns 2–4 report the husband's guesses, the wife's guesses, and the couple's joint guesses, respectively. "Husband's Signal" / "Wife's Signal" are the net red draws (red minus white) in each spouse's signal. The Household Decision-Making Index is the average of couples' answers to whether the husband primarily decides over finances, education, health, shopping, travel, savings, and loans, manages the money, and is the main household decision-maker, normalized to mean zero and standard deviation one. "p-value: HHDM Interactions Equal" tests whether the husband's-signal and wife's-signal interactions with the index are equal. Standard errors clustered at the couple level. *, **, *** denote significance at the 10%, 5%, and 1% levels.