The Power of Persuasion: Causal Effects of Household Communication on Women's Employment*

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March 19, 2025

Abstract

In many economic settings, agents lack decision rights but provide input. Intra-household decision-making in contexts with restrictive gender norms is one important example; wives often lack final say over decisions but still give input. Their ability to communicate persuasively while doing so could sway decisions in their favor. We conduct a field experiment in rural India to evaluate an effective communication training among married women. We consider effects on women's labor supply, the most common topic of intra-household disagreement in our sample. The treatment shifted women's communication styles towards the techniques taught in the training. We find positive effects on labor supply for women who, at baseline, were more interested than their husbands in the women working. These effects persist for at least one year following the treatment. Mechanisms analyses suggest the changes in labor supply are not due to shifts in bargaining power but rather come from women changing their husbands' preferences around female employment.

1 Introduction

In many economic settings, agents lack decision rights but provide input – these include most sender-receiver models where senders provide information and receivers take decisions, along with a number of applied settings such as bosses and subordinates, salespeople and buyers, or financial advisers and clients. Household decision-making in conservative, developing settings can also be seen through this lens. Patriarchal gender norms coupled with gender inequities in earnings potential, asset ownership, and more (Anderson, 2024; Jayachandran, 2015, 2021; United Nations Statistics Division, 2015; World Bank, 2012) could grant husbands decision rights and limit wives' influence to providing input. Indeed, in our sample in rural India, only half of women report being one of the household members with final say over various decisions, but virtually all of them (90%) report giving input in these decisions.

In standard economic models of such settings, agents providing input communicate optimally. Senders in the usual sender-receiver models who have credible signals that would tilt outcomes in their favor always send them. Benchmark models of the household leave out communication frictions entirely, assuming information is symmetric between spouses. At the other end of the spectrum, popular culture is rife with tips for women to improve their communication and shift household decisions in their favor. Appendix Figure A.1 provides just a few examples: an article from Good Housekeeping instructing women on how to turn a no from their husbands into a yes, tips from Woman's Day on persuading others, and articles from the Ladies' Home Journal on the persuasive power of women's eye contact and on a language of intimate persuasion between spouses termed "husbandese." There is also a vast academic literature across psychology, management, and experimental economics on effective communication (Lazarus, 1973; Peneva and Mavrodiev, 2013; Tannen, 1995; Coffman and Niehaus, 2020), which develops tools for interpersonal communication and documents their importance in determining outcomes.

In this paper, we test whether improving communication of women in India can enable them to shift household decisions about their labor supply, the topic that spouses in our sample most often hold different opinions about. Understanding female labor force participation (FLFP) in India is important in and of itself, since FLFP in the country has been persistently low (ILOSTAT, 2022). Intra-household disagreement regarding women working generally takes the form of wives being more interested than husbands in the wives working; 53% of couples in our sample have different levels of interest in the wives working, and in 81% of those couples, the wife is more interested. This gendered misalignment of attitudes about women's work is not unique to our sample but has been found across India and in

many countries worldwide (Bursztyn et al., 2024).

We conducted a field experiment with 1,540 married women, in partnership with one of India's largest carpet manufacturers as it introduced new employment opportunities for women. These opportunities entail four-months of paid training in carpet weaving, followed by weaving employment for any women who complete training. Both training and employment occur in all-female weaving centers located in women's villages. Our sample includes women who were married, aged 18-40, and would be eligible for this program.

We randomized whether women were offered a communication training before the firm's program began. The communication training was designed by CorStone, an organization that designs and provides evidence-based psychosocial programs in disadvantaged communities worldwide. The training was in assertive communication, a form of communication that involves expressing your own view while still being respectful to others. CorStone combined and adapted existing assertive communication techniques to develop a training relevant for women in our setting. The key technique the curriculum taught was a *see-feel-want* statement (CorStone, 2022); the curriculum trained women when facing an interpersonal disagreement to first describe objectively how they *see* the situation, then describe the emotions it is making them *feel*, and finally to state what they *want* to happen. The training was delivered in six, one-hour sessions held with groups of women over a month. The content was conveyed in a variety of formats, including instruction, storytelling, and group activities. Examples in the curriculum generally focused on communication between husbands and wives, but covered a range of different topics spouses might disagree about, meaning the curriculum was not focused on employment in particular. To control for effects of attending sessions unrelated to communication, we used an active control group; we held the same sort of meetings with women in the control group, but in these meetings, women played games and took surveys.

The firm's program began three weeks after the intervention ended. We observe, in administrative data, whether women applied for the program, whether they attended in each of its first 10 months, and their program earnings (if any) in each of the first 10 months. We administered surveys with women at baseline, five weeks after the intervention's end, and six months after the intervention's end. Husbands were also surveyed at the six-month endline.

We begin the empirical analysis by considering "first stage" effects on women's reported communication styles. On the five-week survey, women were told a story about a husband and wife who disagreed about whether the wife should do something she wanted to do. Surveyors asked women what they would say to their husband if they were in this wife's position, and matched the responses to one or more answer options. This provides rich data on not only whether communication would occur, but also which of several forms it

would take. We find the treatment made women significantly more likely to provide assertive responses and less likely to provide passive responses. On the other hand, the treatment does not appear to have shifted other dimensions of women's empowerment; we see no effects on women's self-efficacy or gender attitudes. The effect on assertive communication persists six months post-treatment but is smaller than at five weeks, not because the treatment group provided fewer assertive responses but because the control group provided more.

We then investigate whether women were able to use the communication skills to convince their husbands they should take the new job with the firm. As mentioned above, women in this setting tend to be more interested than their husbands in the women working, but around half of couples have the same level of interest. We therefore present overall and (pre-specified) heterogeneous effects, where heterogeneity is by an indicator for women reporting at baseline that they were more interested than their husbands in the women working outside the home.

The overall treatment effect on application for the firm's program is positive but small and not statistically significant. This, however, masks heterogeneity by spousal disagreement. Among women who were equally or less interested than their husbands in the women working, the treatment effect on application is -1.9 percentage points and not significant. The treatment effect on women who were more interested than their husbands is significantly larger, at 5.5 percentage points. This represents a 32% increase beyond the application rate among control women in this subgroup.

These patterns translated into differences in actual program earnings. We code earnings as zero for non-participants, and note that participants' earnings are a function of their daily participation and, to a lesser extent, their output on the job; hence earnings are a comprehensive measure of participation at both the extensive and intensive margins. Among women more interested in working than their husbands at baseline, the treatment significantly increased program earnings in each of the first four months of the program (when training occurred). These effects disappeared in months five through eight of the program, which coincided with wedding and agricultural seasons that demand women's time, but the effects re-emerged in months nine and ten. The treatment effect among more interested women in month ten represents a 128% increase above the control mean in this subgroup. Thus, contrary to benchmark models featuring optimal communication, we see that improving communication has large improvements for women's wages in households where there is preference divergence on this dimension.

The persistence of these effects is notable; interventions related to female employment previously evaluated in this setting produced effects on employment in the following months but had no effects one year later (McKelway, 2025b,a). Furthermore, these effects are not

4

simply a result of women shifting their labor supply to the firm and away from another sector; they reflect an increase in overall employment rates. At the six-month endline and among the subgroup of women more interested in work than their husbands, the treatment increased the fraction of women who reported *any* work for income in the previous three months.

We then explore mechanisms, in two parts. We first explore why it was only the subgroup of women more interested than their husbands whose employment increased in response to the treatment. Our interpretation is that this is the subgroup who would have had an incentive to use their communication skills to advocate for their labor supply, but it is possible that some correlate of spousal disagreement about employment is driving our results and not disagreement itself. Three results suggest this is not the case. First, learning from the intervention does not appear to differ by subgroup, with no difference in intervention attendance or first-stage effects by subgroup. Second, we consider whether results could be driven by some characteristic of women who report facing opposition from their husbands rather than facing opposition to employment per se, by controlling for women's reports of opposition in other decisions (getting a new saree, visiting the market, and visiting their natal village). Reported opposition is strongly correlated across decisions, but the pattern of heterogeneity in the employment effects remains when we control for an index of disagreement in other decisions and its interaction with treatment. Finally, we use Lasso to select baseline variables that predict being in our affected subgroup. The pattern of heterogeneity is again robust to including these controls and their interactions with treatment.

We then investigate how treated women in the affected subgroup used communication to shift household decisions about their labor supply.[1] In theory, a household decision could change if either spouse's utility changed or if the household's weighting of the two utilities changed. We test these various channels using data from the five-week endline.[2] In the affected subgroup, we see no effects on an index of women's final say over various household decisions, or on how predictive wives' versus husbands' preferences are of women's actual employment outcomes, both of which suggest effects on bargaining power cannot explain our results. We also see no effects on women's own interest in employment. However, in the affected subgroup, the treatment raised women's reports of their husbands' interest and made women less likely to report they were more interested in work than their husbands.

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[1]In principle it is possible that better communication in the workplace rather than the household could explain an increase in earnings and employment. However, this story would predict positive effects in both subgroups and thus cannot explain our employment effects. Hence we focus on communication in the household to understand mechanisms.

[2]We focus on the five-week rather than six-month endline because we wish to isolate changes in household decision-making that could have led to the effects on labor supply, but data from a longer-term endline is more likely to also capture effects of labor supply on decision-making.

Finally, we explore whether women changed their husbands' preferences by raising their husbands' own expected utility from the women working, by informing husbands of the women's interest in work, or eliciting empathy from their husbands. We find evidence for the first of these three. The mechanisms analyses thus suggest that the communication training raised women's labor supply by allowing women to persuade their husbands that they should work, reducing preference divergence on this issue.

This paper contributes to three bodies of literature. First, is literature on intra-household decision-making. The benchmark models of household decision-making assume household decisions are efficient but do not take a stance on the decision process, including the nature of spousal communication (Browning and Chiappori, 1998; Chiappori, 1988, 1992; Manser and Brown, 1980; McElroy and Horney, 1981). We show that training women in assertive communication has large and persistent effects on an important household decision, female labor supply; this implies women face frictions to communicating optimally in status quo. Our results may have implications for other economic applications in which agents provide input into decisions, and inform models of such interactions. In related work, Ashraf et al. (2020) find that training adolescent girls in negotiation skills allows them to stay in school longer and they reciprocate this parental investment with increased labor in household chores. The skills this intervention taught are distinct from those taught in our curriculum – the negotiation curriculum trained girls to propose mutually beneficial compromises, whereas our curriculum helped women convey their own perspectives more effectively – and we show that our results are consistent with persuasion rather than negotiation. Björkman et al. (2024) find that layering a communication training on a health and nutrition program had limited impacts on child health and adoption of health behaviors.[3]

Second, we contribute to literature on effective communication. This work tends to be done in wealthy countries or in tightly-controlled lab environments (Coffman and Niehaus, 2020; Lazarus, 1973; Peneva and Mavrodiev, 2013; Tannen, 1995).[4] There are many reasons why the returns to effective communication may be different in real-world settings, such as higher stakes or pre-existing bargaining impacting communication. Likewise, differences in norms and levels of human capital mean the returns to communication training may be

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[3]There is also research in developing countries which finds improving women's economic positions (e.g. their income or inheritance rights) raises their control in the household (see Chang et al. (2020) for a summary); we contribute evidence which suggests soft, interpersonal skills can allow women to advocate for preferred outcomes in the household. Our intervention was similar to female empowerment trainings evaluated in the literature (Bandiera et al., 2020b,a; Buchmann et al., 2018; Edmonds et al., 2023) but was more narrowly targeted on communication skills.

[4]A related literature, summarized by DellaVigna and Gentzkow (2010), studies persuasion directed at people with whom the communicator does not have a relationship per se e.g. consumers, voters, donors, and investors. This work is also largely done in developed settings.

different in developing countries. Indeed, as we discuss further below, our implementation partner had to innovate on standard, best-practice assertive communication techniques to develop a training that would be applicable to a developing country setting. Our results suggest that effective communication techniques can be trained through a short-term field intervention in a developing country, and that the returns to doing so can be large for women with limited decision rights.

Finally, we add to literature on constraints to women's employment. Descriptive evidence finds husbands in settings with restrictive gender norms voice less support for female employment than wives, and husbands have a great deal of influence over their wives' labor supply (Bernhardt et al., 2018; Bursztyn et al., 2024; Field et al., 2021; Lowe and McKelway, 2024). This suggests an intra-household constraint to female employment: husbands keep their wives from working. Field et al. (2021) provide causal evidence of this constraint, showing an intervention that gave women more financial control – and, in theory, bargaining power – increased their employment. We provide more direct evidence of this constraint, showing a training designed to make women communicate more effectively with their husbands increased labor supply for women who faced opposition to their employment from their husbands.

2   Setting

Our field experiment was set in rural Uttar Pradesh, India. We outline four stylized facts about this setting which motivate our experiment. First, it is a setting of extreme gender inequality. Gender inequality is high in India relative to other countries (Anderson, 2024; Jayachandran, 2015), and Uttar Pradesh has some of the highest levels of gender inequality within India (NITI Aayog, 2018). In our control group, 42% of wives have zero education versus 10% of their husbands,[5] 0.35 wives work for every husband who does, and the amount of money husbands expect they could earn in a month from working is 3.09 times what wives expect they could earn. In theory, such inequalities would tend to give wives low threat points relative to husbands and thus low control within marriage. Indeed, less than 10% of women in our sample say they alone have final say over various household decisions, and only around 50% report being one of the household members with final say (Figure 1). This level is in line with what Jayachandran (2015) finds in the poorest countries in the world.

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[5]The statistic on women's education here differs slightly from the one in Appendix Table A.1 because here we only include women if we also surveyed their husbands at the second endline and observe the husbands' education.

Women are nevertheless active in the decision-making process. While only half of women in our sample report having final say over various decisions, around 90% report giving input on these decisions (Figure 1). They also take actions to try to sway their husbands' opinions. At baseline, we asked women to imagine a situation in which they wanted one thing but their husband wanted another. We then asked if they would take any of several approaches to try to change their husbands' mind. Virtually all of them – 95% – would try, and they would typically do so through some form of communication (Appendix Figure A.2). Interestingly, the most commonly used communication strategies do not fit into standard economic models. Less than 15% of women would argue their case with facts, and each of the two negotiation-style responses – offering a compromise in this situation, and offering to support the husband in another situation – was selected by just 20% of women. The most common responses were to explain why the decision means so much to the respondent and to use an especially nice demeanor around one's husband, selected by over 70% and 50% of women, respectively.

Our third stylized fact is that women's labor supply is the most common topic couples disagree about. At endline, surveyors asked women the following question: *Husbands and wives often have different opinions about what choices their households should make ... For example, they might have different opinions on how money should be spent, on whether the wife can go out for various reasons, or on decisions related to their children. In what sorts of decisions do you and your husband often have different opinions?* Surveyors were instructed not to read answer options aloud. The most common response in the control group, provided nearly 25% of the time, was whether the respondent could work outside the home (Figure 2). The second most common response, provided by nearly the same number of women, was that the couple did not have disagreements.

Fourth, disagreement about wives' labor supply tends to take the form of wives being more interested than husbands in the wives working. At endline, the average woman in the control group reported being somewhat interested (3 on a 1-4 scale) in working, while her husband reported being somewhat uninterested (2 on a 1-4 scale) in her working. This gap in interest is much larger than for other decisions spouses often disagree about: whether the wife can visit her natal village, go to the market, or get a new saree (Figure 3).

Motivated by these stylized facts, we designed a field experiment to ask whether improving the effectiveness of women's communication with their husbands would allow them to successfully advocate for their labor supply.

3 Experimental Design

3.1 Partner Firm

We partnered with a firm that was introducing new jobs for women in our setting. The firm, Obeetee, is one of India's largest carpet manufacturers. As part of its Corporate Social Responsibility (CSR) initiatives and to alleviate shortages of male carpet weavers, the firm developed a program to train and employ women as weavers. The program begins with four months of paid training in weaving, followed by the option of long-term weaving employment for any women who complete training. Training pay is substantial, close to what women ultimately earn as weavers. Both training and employment are full time, and both occur in all-female weaving centers located in women's villages.

We partnered with Obeetee as it expanded this program in seven villages. It constructed new female weaving centers in all villages, each with capacity for 20 weavers. These centers opened for the program's training phase on December 1, 2022 (see Figure 4 for a study timeline). The long-term weaving jobs began four months later, on April 1, 2023.

3.2 Sample Recruitment

Our sample includes 1,540 married women who would be eligible for our partner firm's program. We worked with the new female loom centers to identify catchment areas for each center, i.e. village neighborhoods where the loom centers recommended recruiting women for the program. Catchment areas typically included all neighborhoods in walking distance of the loom center where lower caste (i.e. scheduled or other backwards castes) lived as male weavers generally come from those castes.

In September 2022, surveyors went door-to-door in the seven catchment areas to recruit women for the study. Surveyors introduced themselves as part of a team from J-PAL collaborating with Obeetee's CSR team to understand women's daily lives and offer initiatives to promote their wellbeing. Surveyors explained that the J-PAL team would be surveying women and their families, and also hosting meetings with groups of women. They explained that in the group meetings, women would discuss aspects of village life or things to facilitate their household lives, in particular, how to best communicate with other household members. Surveyors also explained that the J-PAL team would be assessing women's interest in Obeetee's female weaving program but that the program was separate from the J-PAL team's activities, such that women could participate in the study but not in the female weaving program.

In the door-to-door visits, surveyors identified eligible women in each household and

invited them to participate in the study. To be eligible, women needed to be married, aged 18-40, and not be the mother or mother-in-law of another eligible woman in their household.[6] We also required women be present when surveyors visited their homes so they could consent for the study, though surveyors re-visited homes of unavailable, eligible women at a later time to attempt to enroll them in the study. 98% of eligible women consented, giving a total consented sample of 1,540 women from 1,416 households.

3.3 Randomization

We randomized women to receive the communication training or to an active control group in two steps. We first assigned women to meeting groups, the unit at which the treatment would be delivered. We formed 240 groups of around 6-7 women from the same neighborhood. Group assignment was at the household level. We used stratification within neighborhood to assign multi-woman households to different groups and to generate age variation within the groups.[7] The second step of randomization assigned half of the meeting groups to treatment and half to control. We stratified this randomization by village and, within village, by neighborhood.[8]

The randomization achieved balance on baseline characteristics (Appendix Table A.1). We also see balance within each of the two subgroups our heterogeneity analyses consider (i.e. wives who were equally or less interested than their husbands in the wives' employment at baseline, and wives who were more interested) (Appendix Tables A.2 and A.3). Note that our analyses include baseline variables selected using post-double-selection (PDS) lasso (Belloni et al., 2014), which helps address any important chance imbalances.

3.4 Intervention Delivery

The intervention was delivered in October and November 2022. It was delivered in a series of six, one-hour meetings with the assigned groups of women held over four weeks. Meetings were held in private in various locations within participants' neighborhoods, such as private homes or schools. Women were given small gifts for attending each meeting. In

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[6]The 18-40 age range is the age range Obeetee targets for its program. We did not allow mothers/mothers-in-law of other eligible women to participate because their presence in the intervention meetings might have made their daughters/daughters-in-law reluctant to speak about household issues.

[7]Specifically, we stratified by a categorical variable that denoted whether a household had multiple women, and then among the single-woman households, whether the woman was above or below median age in her neighborhood. The purpose of the multi-woman household stratification was to keep group size consistent, while we stratified by age with the idea that women of different ages would bring different perspectives on household communication to the group discussions.

[8]Any neighborhoods that had enough women to form only one meeting group were pooled with other small neighborhoods in their villages to form the neighborhood stratification variable.

these meetings, the groups assigned treatment received the training in assertive communication, while the groups assigned control played games and took group surveys. Both the communication curriculum and control group meetings are described in detail below.

All meetings, treatment and control, were facilitated by 40 female members of our J-PAL field team. Facilitators were randomly assigned to facilitate treatment or control meetings, and randomly assigned particular meeting groups. An additional 40 members of the field team were assigned to support each facilitator with the logistics of hosting the group meetings, such as gathering the participants for the meeting, playing with their children during the meeting, or talking with passersby so they did not interrupt the meetings.

Compliance was high and balanced by treatment. 90% of women attended at least one meeting and the average woman attended 4.60 meetings. Compliance does not differ by treatment in the full sample or in either of our two subgroups of interest (Appendix Table A.4).

3.4.1 Assertive Communication Curriculum

The communication training focused on one particular form of effective communication: assertive communication. Communicating assertively means expressing your point of view clearly while still being respectful to others. The concept of assertive communication was initially proposed by the psychologist Arnold Lazarus (1973), and has been the focus of much research and practice in psychology since (see Peneva and Mavrodiev (2013) for a summary). This work has developed specific strategies for communicating assertively, and documented the importance of assertive communication in helping individuals reach their objectives in joint decisions while maintaining good relationships with the people they communicate with. Note that the meaning of assertive communication in academic psychology, which is the definition we adopt in this study, differs from the colloquial use; colloquially, assertiveness can mean pushy or rude behavior, whereas assertiveness in the literature means being clear about your wants and needs while still being respectful.

We evaluate an assertive communication training designed by CorStone for women in our setting (CorStone, 2022). CorStone is an organization that offers evidence-based, psychosocial programs in India and other developing countries. Randomized evaluations of their programs targeting soft skills like resilience and self-efficacy have found them to be effective in improving psychological, health, and economic outcomes (Leventhal et al., 2015, 2016; McKelway, 2025b).

CorStone combined and evolved existing assertive communication techniques to develop a training relevant for our sample. Drawing from the "I-message" technique (Gordon, 2008) and DESC model (King et al., 2008), CorStone developed the *see-feel-want* statement (Cor-

Stone, 2022). This is a technique for explaining your perspective to someone who may disagree with you that involves first describing objectively how you *see* the situation, then describing the emotions the situation is making you *feel*, and finally stating what you *want* to happen. A key piece of the feel step is to use the pronoun "I" rather than "you" to explain your feelings without sounding accusatory, as in the I-message technique (Gordon, 2008). For example, a woman who wants to work might say to her husband: *"Our children's school expenses are rising. You work hard, but it's hard these days to run a household with just one income. This makes me feel worried and anxious. I think I should start working so we could have some extra money."* CorStone developed the see-feel-want statement for the purpose of our study; we are thus the first to evaluate it. In our population with low education, Cor-Stone found the see-feel-want statement to be a useful and accessible heuristic which also lent itself to hand motions and visuals (Appendix Figure A.3). The see-feel-want statement consolidates a number of components of assertive communication that are consistent across models: the importance of clearly communicating your perspective (see), the importance of communicating your emotions (feel), and the centrality of communicating what you want and need (want). As noted in Section 1, this type of communication is substantively different than negotiation, which trains people to come up with and offer mutually beneficial trades, and in Section 6.1, we show that while strategies for assertive communication increased, strategies for negotiation did not change.

The curriculum was designed to be delivered over six, one-hour sessions with groups of women. The see-feel-want statement was taught in the final three sessions, while the first three built prerequisite skills to help women formulate see-feel-want statements and deliver them effectively. The first session provided an introduction to the curriculum and developed listening skills. The second developed women's abilities to recognize and manage emotions, giving them tools to express their feelings and to process their emotions before discussing difficult topics. The third session asked women to reflect on what they wanted in life so that they could clearly communicate their wants to others. The fourth session introduced three communication styles to women: passive, aggressive, and assertive. The curriculum explained why assertive communication was the most effective of the three and introduced see-feel-want statements as a way to communicate assertively. Women practiced using see-feel-want statements in session five. The final session asked women to anticipate challenges they might encounter when communicating assertively and taught them a problem-solving strategy to overcome such obstacles.

Concepts were taught in a variety of formats, including instruction, visuals, group activities, discussion, and story-telling. Four stories were told across the six sessions, each about a husband and a wife having different opinions about a household decision. The four decisions

were whether the wife should get a new saree, where to send children to school, whether the wife should work for NREGA, and whether the wife should visit the market. The curriculum therefore focused on communication within households, and between husbands and wives in particular. However, many different decisions households might communicate about were discussed; the curriculum would not have come across as promoting women's employment or any other particular behavior.

Women were told at the start of the curriculum that the meetings would discuss things to facilitate their household lives, in particular, how to best communicate with their household members. They were told the meetings would be a place where they could spend time together and learn from each other.

Facilitators were trained by CorStone to deliver the intervention. The training included both general facilitation skills and training on delivering this particular intervention.

3.4.2 Active Control Group Meetings

In the control group, meetings involved playing games and taking group surveys. The surveys covered a variety of topics related to day-to-day life in women's villages. As detailed above, the communication curriculum included four stories about particular areas of day-to-day life; the corresponding control sessions included questions about those areas. For instance, the fourth treatment session included a story about a household deciding whether the wife should work in NREGA; one of the survey modules covered in the fourth control session was about NREGA work in the village, e.g. how many women and men work for NREGA, what the NREGA work involves, and where it occurs.[9]

Women were told during the first meeting that they would be discussing various aspects of life in their village during the meetings. Like the treatment group, they were told the meetings would be a place where they could spend time together and learn from each other.

The control-group facilitators received training in general facilitation skills from CorStone, alongside the treatment-group facilitators. The two groups of facilitators split up after this, and those assigned control received training on the control curriculum from our J-PAL team while the treatment facilitators were trained by CorStone on the communication curriculum.

The goal of using an active control group was to hold fixed effects of attending meetings unrelated to assertive communication, such as spending time outside of the home, meeting

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[9]The games were simple and familiar games, but ones women enjoyed playing. For instance, they played the Chidhiya Udh Game in session four. In this game, women put their index fingers on the ground, the facilitators named things (e.g. birds, animals, other items), and the women would raise their fingers when something that could fly was named. Anytime a woman lifted her finger at the name of something that could not fly, she had to sing a song for the group.

13

other women, or exposure to the research team.

3.5   Recruitment, Application, and Start of Firm's Program

One week after the intervention ended, surveyors visited women individually to deliver information about Obeetee's program. Any family members around when surveyors visited were free to hear the information as well. Surveyors explained that assessing interest in Obeetee's program was one component of the J-PAL team's program and that, with Obeetee's permission, the J-PAL team would administer application for the program to assess interest. Surveyors then provided information about the program, both reading from a script and showing a video in which Obeetee administrators and program participants discussed the program. Finally, surveyors explained how women could apply for the program and gave women application tickets with their unique study IDs which they could present at the time of application to expedite the process.

Program information was successfully delivered to 88.2% of women in the control group. The treatment increased this by 3.5 percentage points ($p = 0.019$), and this effect is driven by the subgroup of women who were more interested than their husbands in the women working at baseline (Appendix Table A.4). This difference does not guarantee an effect on application as receiving the information and one's ticket was neither necessary nor sufficient to apply, but it does provide an initial indication of positive effects on employment for this subgroup.

Women could apply for the program by going to their village's new female weaving center on one of two application days, held at the end of November 2022. Women were required to attend with their husband, parent-in-law, or household head to ensure they were applying with the support of their family members. Once at the loom center, women and their family members completed a brief application process administered by a surveyor. If women had brought an application ticket, surveyors recorded the ID on the ticket and asked several questions to ensure it corresponded to the ID of the woman who had come to enroll; otherwise, surveyors asked more detailed identifying questions about the applicant. Women's ages were verified, either with an identification card presented at the time of application or later with their village pradhans, and only those in Obeetee's target range (18-40) could apply.

There was oversubscription for all seven centers. We therefore held public lotteries at each center following the application days, in which we determined which women could begin the program from its start along with a waitlist ordering for the rest. The research team delivered results of the lotteries to applicants in the final days of November 2022, and the

program's training phase began December 1. The research team drew women from the waitlist if participants dropped out of the program in the initial weeks (before it was too late for a newcomer to catch up with training).

4   Conceptual Framework

We discuss assertive communication in the context of a simple household decision-making framework. The purpose of this framework is to fix ideas about the potential effects of communication, to motivate our (pre-specified) heterogeneity analysis, and to provide a taxonomy of potential mechanisms which we test for in Section 7.

The framework is simple; the household maximizes a weighted sum of the spouses' utility functions, maximizing $U_h + \mu U_w$. μ represents the weight the household places on the wife's preferences, which could come from threat points or other "distribution factors" (Browning and Chiappori, 1998). This framework can be micro-founded in a standard principle-agent problem where the principle (the husband) maximizes their utility subject to a participation constraint of the agent (the wife), and is equivalent to the benchmark collective model of the household (Browning and Chiappori, 1998; Chiappori, 1988, 1992).

As this framework makes clear, three factors can determine household outcomes: the wife's utility, the husband's utility, and the weight given to the two utilities. In principle, our treatment could have affected any of these three; communication skills might be a distribution factor affecting μ, could enable women to persuade their husbands and change husbands' utilities, or may influence what women view as feasible in life and thus shape their own utilities.

Another important point which this model highlights is that communication skills are likely to matter most when spouses have different utility functions at baseline. That is the case when changing the balance of power would change outcomes, and when a wife would have the incentive to persuade her husband. The story may be different if communication skills shifted the wife's utility, but this seemed the least likely of the three mechanisms ex ante. This motivates our focus on the subgroup of women whose views about female employment diverged from their husbands' at baseline.

We ultimately find the strongest evidence for the treatment working by shifting U_h. To explore how exactly communication could change husbands' preferences, we write $U_h = E_h(U_h) + \lambda_h E_h(U_w)$; h gets utility from his own consumption and altruistic utility from his wife's wellbeing, $\lambda_h \in [0,1]$ describes h's weighting of his wife's utility relative to his own, and we allow h to be uncertain both about their own utility and their spouse's utility. There are several different ways in which women's use of assertive communication might have changed

15

husbands' utilities. First, women could shift $E_h(U_w)$ by communicating what they want to their husbands. Second, the communication training could make husbands more sympathetic towards their wives and increase λ_h, for instance, by enabling women to communicate their emotions, or improving their listening skills or emotion regulation. Finally, women could provide information when communicating that shifts $E_h(U_h)$, either by changing husbands' beliefs in $E_h(.)$ or preferences in U_h; for instance, in the case of women's employment, women's assertive communication could shift the probability husbands assign to different possible outcomes should the wife work (a shift in $E_h(.)$), or change how husbands assesses the benefits and costs of women's employment (a shift in U_h). We find the strongest evidence for shifts in $E_h(U_h)$.

5   Data and Empirical Specifications

5.1   Data

We use three sources of data. The first are women's decisions to apply for Obeetee's program, which we observed by administering the application process. We match applicants to respondents in our data using IDs from application tickets and identifying information provided at the time of application. Application is observed for all women in our sample.

Second, we digitized registers in each loom center for the first 10 months of the program. This includes the four training months (December 2022 - March 2023) and the first six months of employment (April - September 2023). The registers are paper records each center maintains on women's daily attendance, daily productivity, and monthly earnings. We sent members of the research team to the loom centers throughout the 10-month period to ensure the registers were being maintained and were being maintained in a way that would allow us to identify individuals in our study from the registers. Members of our team then entered the information from each center's register in each month into a survey form. Each register's data was recorded separately by three members of our team to ensure accuracy. In practice, the loom centers' record keeping was imperfect and much of the daily data are missing. We therefore focus on monthly variables from this data that are rarely missing: women's monthly earnings and whether they attended at least once each month. Earnings are missing for some participants in certain months;[10] we set these women's earnings to the average earnings in their center in that month, though results look similar if we instead set these earnings to zero (Appendix Table A.5). With these imputations, and noting that

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[10]Earnings are never missing for participants in January, February, March, July, or September, and are missing for 1-2% of participants in December and April, for 10% of participants in May, and for 36% of participants in June and August.

program earnings are zero for non-participants, we observe whether women participated in the program and how much they earned from the program in each of these 10 months for the full sample.

Third, we collected survey data. We conducted baseline surveys with women in September 2022. The survey asked about intra-household decision-making as well as sources of disagreement between them and their husbands. Summary statistics are presented in Table A.1. Women are on average 30 years old, and about 40% received no education. About 33% of women report working for pay, and have about two children on average. Figure 2 reports common sources of disagreement, and shows that women's employment is the most commonly reported source of disagreement.

We also collected endline data in two follow-up surveys. The first endline survey was conducted about five weeks after end of treatment (EL1), and asked about their labor force participation, as well as common sources of disagreement and how they resolved them. We also asked them (as in the baseline) to guage their husband's interest in activities such as their (the women's) labor force participation, and asked them about the communication strategies taught in the training to establish a first-stage. The second endline survey was conducted about six months after conclusion of treatment with women and additionally surveyed the husbands separately (EL2). This covered similar topics and questions as in the first endline, in addition to asking husband's about their perceptions about their wife's interest in labor force participation as well as her communication style. There is about 10% attrition on the endline survey for the women we surveyed. We have greater non-response in the husband's survey (about 25%), reflecting the fact that husbands often work long hours outside the home and can be hard to schedule surveys with. Reassuringly, these attrition rates are balanced by treatment (Table A.4).

5.2   Empirical Specifications

We estimate overall treatment effects with regressions of the form

$$Y_{i,m} = \beta T_m + \mu_s + \gamma X_{i,m} + \varepsilon_{i,m} \tag{1}$$

and estimate heterogeneous effects with

$$Y_{i,m} = \beta_1 T_m + \beta_2 W_{i,m} + \beta_3 T_m \times W_{i,m} + \mu_s + \gamma X_{i,m} + \varepsilon_{i,m} \tag{2}$$

$Y_{i,m}$ is an outcome for woman i from meeting group m, and T_m is the treatment assignment. $W_{i,m}$ is an indicator for the woman reporting greater interest than her husband in the woman working outside the home at baseline (recall this is measured on a four-point

scale). We measure the husband's interest from the respondent's prediction (we did not survey husbands at baseline). 43% of respondents report greater interest than their husbands, 47% of husbands and wives agree, while only 10% of husbands are predicted to be more interested. As discussed in the conceptual framework above, communication is most likely to raise labor supply when women are more interested in employment than their husbands.[11] Note that given the distribution, $W_{i,m}$ is equivalent to an indicator for being above median in wife-minus-husband interest. This dimension of heterogeneity, including the split at the median, was pre-specified.

μ_s are stratification controls. Recall that assignment of meeting groups to treatment was stratified by village and neighborhood within village, while assignment of households to meeting groups within their neighborhood was stratified by age and multi-woman household. We have limited variation within each strata for the heterogeneity specification; 33% of our sample comes from a cell that does not have a woman from each of the four combinations of T_m and $W_{i,m}$. We therefore control for village fixed effects, our highest level of stratification, in place of full strata controls in all of our regressions. In principle, this should not affect our estimates as the probability of assignment to treatment was 50% for all women. However, in practice, it could make a difference as the fraction of treated women in a strata does often deviate from 50%, due to uneven numbers within each strata and group-level treatment assignment. Given this, we also include fixed effects for bins of the fraction of respondents treated within each strata. In sum, throughout our regressions, μ_s denotes village and fraction-treated-within-strata fixed effects.

Finally, $X_{i,m}$ denote controls selected using Post-double selection Lasso (PDS Lasso) (Belloni et al., 2014). We cluster standard errors by meeting group.

6   Outcome Measurement and Results: Main Outcomes

6.1   Communication

We begin by showing that the communication training did change women's preferred communication strategies towards those consistent with assertive communication, relative to the active control group i.e. there is a first-stage in changing communication skills. We measured this in two ways. First, we directly asked them if they remembered learning about the primary communication tool taught in the training, the See-Feel-Want statement, and what the three parts of this strategy comprised. Our outcome from this question is the

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[11]In theory, communication could reduce employment when women are less interested than their husbands, but this is true for a very small number of women in our sample, and hence we pool such couples with those who are equally interested.

percent of the three parts that women gave correctly. Second, we used vignette studies that posed a hypothetical situation where a husband and wife disagreed about a decision, and asked the respondent to imagine that they were the wife in this hypothetical situation. It then asked them, first, whether they would initiate communication about the topic, and second, what they would say. The decision itself was randomized to be of one of two types: the first was working outside the home, and the second was visiting her natal village.[12]

The surveyors recorded which of the several possible strategies the respondent said they would use (without reading them out aloud to avoid social desirability or ordering effects). Based on feedback from the implementation partner that designed the training, we classified these into four types of strategies: assertive (what they were trained on), passive, aggressive, or negotiation. The exact classification of strategies to communication type is in the Appendix.

Results are presented in Table 1. First, Column 1 shows that treatment increases the percent of parts correctly reported of the See-Feel-Want statement by nearly 30 percentage points in the first endline survey, and is highly statistically significant. The control group is (unsurprisingly) largely unaware of the components of this communication strategy, with only 3.6 percent of the components correctly reported in the first survey- thus, the treatment increased the knowledge of this type of communication by over 8.5 times. Second, Column 2 shows that there is no difference in whether respondents report that they would initiate a conversation about the disagreement, with 87% of the control group reporting in the affirmative for this outcome. This indicates that the treatment did not change *whether* communication was initiated, but does change how it is conducted. Third, from the vignette, Column 3 shows that there is 4.5 percentage point increase in the percent of assertive communication strategies used. Overall, there is a strong increase in the knowledge and predicted used of the communication strategies taught in the program.

Columns 4 to 7 present treatment effects for each of the different assertive communication strategies chosen in the vignette. These can help identify what precisely changed in terms of

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[12]The vignette and questions were presented as follows (with [X] being one of the two decisions that was asked about):

> *Now I will tell you a story about a household. The household consists of a man named Sanjay, his wife Rekha, and their children. Sanjay is 35 years old and Rekha is 30. They have four children.*

> *They are making a decision about whether Rekha should [do X]. Rekha wants to [do X] but Sanjay doesn't think she should.*

> *Imagine you were Rekha in this situation. Would you bring up the topic with your husband or would you wait for him to bring it up?*

> *Suppose you brought up the topic with your husband. What would you say to him? (Surveyor: do not read options aloud)*

assertive communication- for instance, whether information about preferences is communicated, or whether it is other aspects of communication that change due to treatment. We see that two types of stagies are more likely to be used- summarizing the situation (an increase in 7.2 p.p, about a 12.5% increase relative to the mean in the first endline), as well as *why* they preferred a course of action (an 8.2 p.p. increase, a 15% increase relative to the control mean). In contrast, there is no change in communicating what the respondent wanted i.e. no new information about their preferred course of action is differentially communicated. There is a small, though noisy, increase in describing one's emotions. Thus, these results indicate that the training led women to communicate information on how they see the situation and their rationales for their preferred courses of action.

While the treatment increased assertive communication, it is also possible that it affected other types of communication. Columns 8 to 10 present impacts on three alternative types of communication. The first is aggressive communication, such as directly contradicting the spouse and engaging in conflict- there is no change in this type of communication, and it is worth mentioning that in this setting, this is rarely used even in the control group (less on 3% on average). The second is passive communication, namely, communicating that they will go with whatever the husband's decision is. We see a decrease of 4.5% for type of communication in the first endline, a 17% change relative to the control group mean. There is no change in whether the respondent negotiates, indicating that the impacts of driven by changes in the assertive communication style rather than their increased capacity to find and engage in mutually beneficial bargaining.

Could it be that control group used assertive communication just as much as the treated group, but treated women were better at articulating these strategies, making their responses easier to match to communication types? We do not believe this impacts the interpretation of these results for two reasons. First, better articulation is part of precise communication, so is consistent with the treatment group using these strategies. Second, the control group is not more likely to provide response that the surveyor categorized as "other"; if anything, the treatment group was actually more likely to provide other responses, consistent with them being more communicative in general (Appendix Table A.7). Thus, the results indicate that the treatment substantially increase the treated group's knowledge and use of the communication strategies imparted in the training.

Finally, it is worth mentioning that we do not find evidence of empowerment on other margins at five weeks. In particular, we find no effects on women's self-efficacy or gender attitudes (Appendix Table A.10). This is consistent with the intervention being narrowly targeted on communication, and suggests its "first stage" effects were indeed about shifting women's communication.

6.2 Labor Supply and Earnings

Next, we test whether the communication skills resulting from the training translated into changes in womens' labor supply and earnings. As mentioned previously, women are often more interested in work than their husbands (43% of our sample at baseline), but a significant part of the sample comprises households in agreement on this issue (47%). Therefore, we estimate overall treatment effects (from equation 1) as well as heterogeneous effects (from equation 2). As detailed in Section 5.2, this is heterogeneity by an indicator for women reporting greater interest in their employment at baseline than they predicted for their husband.[13] This subgroup – of women who are more interested in employment than their husbands are in their employment – is the group for which theory would predict positive effects of treatment on labor supply.[14]

We have three types of main outcomes. The first is a binary variable that takes the value 1 if the respondent applied to the job with the partner firm, and 0 otherwise. The second are monthly earnings that we observe for ten months post-treatment. The compensation scheme changed slightly across time. The first four months of the job are on-the-job training. In the first month, workers are paid a daily wage conditional on attending (regardless of output). In months two to four, they also get a daily wage, but the amount is higher if they reach a target threshold of knots. From month five onward, they are paid a piece-rate for each knot they weave, adjusted for the complexity of the carpet (in practice, the amount earned per day is highly driven by attendance). We present treatment effects on participation in the job as well as earnings for each month separately. The third measure of labor force participation is a survey measure from the second endline survey, where we asked women if they worked outside the home in the last three months (this includes any paid work outside the home, not necessarily with the partner firm).[15]

Results are presented in Table 2. On average, there is no effect of the training on applying for the job, however, there is a positive effect of treatment on households where women are more interested than their spouse in their participation in the labor force. The magnitude is an increase of 5.5 percentage point increase for this group (summing up the coefficients for the interaction term and whether women is more interested), an increase of 32% relative to the control for the group. Second, we observe a large increase in earnings. The effects for the first four months are highly statistically significant, with a drop in effects in months five to

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[13]We did not survey husbands in the baseline, hence this specification.

[14]As discussed in Section 5.2, theory would predict negative effects on employment when husbands are more interested in their wives working than the women herself is in working, but that describes only 10% of our sample, so we pool such households with households in agreement on this issue.

[15]We do not use this measure from the first endline as an outcome, since only a week had elapsed from the end of training when that survey was conducted.

21

eight, and a re-emergence of the treatment effects in months nine and ten. Figure 5 presents the size of the earnings effects in the subgroup of interest (women who are more interested in working than their husbands are in them working). As in the table, the effects are large in magnitude; the effect in month one was an 83% increase relative to the control for that group, while the month ten effect was a 128% increase. Why do effects disappear in the middle of this period? April-June are usually times of low labor force engagement, due to women working in agriculture and also coincides with other household responsibilities such as festivals. This is consistent with out survey results, with women's interest in working declining significantly between the first endline in December) and the second survey conducted between March and May in both subgroups as well as both treatment arms (Appendix Table A.15).

The impacts on earnings could be due to an increase in participation, productivity, or a combination of the two. Appendix Table A.11 presents effects on indicators for ever attending in each of the ten months. There are significant extensive margin participation effects in the group where women are more interested in their labor force participation than their spouse in months one through four, as well as eight through ten. Appendix Table A.12 presents differences in earnings among participants, running the same regressions as in Table 2, but limiting the sample to participants in a given month. The treatment-control differences in the subgroup are generally not significant, except in the first month, which is the month when earnings were exclusively a function of attendance and not productivity. Thus, the effects on earnings in the group with disagreement appear to be driven by participation in the program rather than productivity, and mostly extensive margin participation (whether they participated at all) rather than intensive margin (how many days they participated).

These effects on women's labor supply, which are present nearly a year after the intervention, are large and persistent relative to other interventions in similar settings. Notably, in a prior experiment, (McKelway, 2025b,a) evaluates an intervention to alleviate family opposition to women's employment, randomizing whether women's husbands and parents-in-law were shown a video promoting Obeetee's program for women. This study was done in villages separate from the ones studied here, but also where Obeetee was expanding its program. This intervention significantly increased women's employment, in the program and in general, four months later, but the effect had faded one year post intervention. Likewise, Dean and Jayachandran (2019) find no employment effects from interventions that featured video testimonials by working women elsewhere in India 13 months post treatment. This suggests empowering women with communication skills to change their husbands' minds over time was important – e.g. it could have allowed women to address different concerns of their households related to their work that arose over time. Along these lines, Field et al. (2021) find employment effects at one year from an intervention in India that gave women more

financial control and thus would have raised their bargaining power.[16]

Finally, Column 3 in Table 2 shows impacts on whether women reported working outside the home in the last three months in any paid work. There is an increase in any labor force participation for the disagreement group by 7.4 p.p.[17] This indicates the employment effects with the partner firm are not driven by women substituting into this type of employment and away from other employment. Rather, it indicates that the treatment increased overall employment and earnings for the subgroup of interest.

7 Outcome Measurement and Results: Mechanisms

In this section, we explore which mechanisms underlie the impacts on labor market outcomes. We begin by asking why we only see effects in the subgroup of households where women reported greater interest in employment than their husbands; we rule out that greater learning from the training or a correlate of baseline preference misalignment drive results, suggesting the heterogeneity is due to women in this subgroup having an incentive to use their communication skills to advocate for their labor supply. We then investigate how treated women in this subgroup shifted household decisions, through the lens of the parsimonous household bargaining framework from Section 4. We end the section with a discussion of persistence of effects on communication and labor supply.

7.1 Why was this subgroup affected?

Table A.4 presents results for attending any intervention session and number of sessions attended. Columns 1 and 3 show that treated and active control participants were no more likely to attend a session or attend more sessions, respectively. Columns 2 and 4 show that these results are not heterogeneous by the group where impacts on labor force participation are concentrated. Table A.6 presents effects on communication skills at five weeks by subgroup. We see no statistically significant differences in treatment effects by subgroup, indicating no differential learning of communication skills in one subgroup versus

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[16]Another related study is Bursztyn et al. (2020), which randomized whether husbands in Saudi Arabia were told about other husbands' support for women working outside the home. The main outcome comes from a decision husbands made immediately afterwards. The authors did conduct a survey about four months later, when they see a directionally positive effect on women's employment, but they are not powered to detect it with precision.

[17]The any-employment measure from the first endline is in Appendix Table A.13, but as mentioned earlier, since this was measured in the week after training ended, we do not expect to see treatment effects for this measure. Indeed, the impacts are similar across treatment and control, including in the subgroup where women are more interested in their labor force participation than their spouse.

the other. Thus, we conclude that the heterogeneous effects on labor supply are not likely to be driven by greater learning of the skills that were taught or increased attendance.

Second, we test whether the correlation of this baseline characteristic with other plausible mechanisms is driving the effects on labor force outcomes. The baseline survey had asked women to report their own interest and their perception of their husband's interest in them undertaking several activities, based on commonly reported sources of disagreement. Other than women's labor force participation, this included three other activities: visiting their natal village, buying a new saree, and visiting the market. In line with the main subgroup analysis, for each of these, we create indicators for whether the women reported more interest in undertaking this activity than their husband's interest in them doing this activity. From these three binary variables, we standardized them and created an index, and included this index and its interactions with the treatment dummy in the specification estimated in Equation 2. The point of this estimation is to test whether after controlling for other types of disagreement, we still see impacts on labor outcomes for the main subgroup of interest. This index is correlated with the main conflict we are interested in i.e. that the wife is more interested in working than the husband is interested in her working (Column 1 in Table 3). However, as Columns 2 through 13 show, the results are very similar in magnitude and significance if we control for this general divergence in preferences, indicating that the latter is not driving the results.

We also conduct a second, more general test that is agnostic about the source of omitted variable bias impacting these results. We use a Lasso to select predictors of being in this subgroup (that the wife is more interested in working than the husband is interested in her working) from a variety of baseline characteristics, and then control for these variables and their interaction with treatment. Results are presented in Table 4 and are consistent with those in Tables 2 and Table 3. Thus, we conclude that the results for this group are driven by women using their newly acquired communication skills to overcome intra-household opposition and engage in the labor force, with large impacts on earnings up to ten months later.[18]

7.2   How did treated women change household decisions?

The simple conceptual framework in Section 4 lays out three possible changes that could cause the impacts on female labor market outcomes: changes to the wife's utility, husband's

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[18]Finally, while in principle it is possible that better communication in the workplace, not the household, drives impacts on earnings and employment, that would predict positive effects in both subgroups (households with and without baseline disagreement about the woman working), and thus cannot explain our treatment effects.

utility, or the weighting of the two. We use empirical proxies of each of these to test these different possible mechanisms. For this analysis, we focus on the five-week endline as we wish to isolate changes in household decision-making that could have led to the effects on labor supply, but data from the longer-term endline are likely to also capture effects of labor supply or other outcomes on decision-making. We also note that, in principle, better communication in the workplace rather than the household could increase earnings, but this story would predict positive effects in both subgroups and thus cannot explain our effects; we therefore focus our mechanisms analyses on communication in the household.

We begin by testing whether the treatment impacted women's interest in working i.e. changed their preference. Column 1 in Table 5 presents effects on this, and finds that it did not. This indicates that changes to the women's preference is unlikely to be the mechanism for changes in labor force outcomes.

Column 2 presents effects for women's prediction of their husband's interest, consistent with the baseline measurement (we did not survey husbands in this first endline). It shows a significant, positive effect on (predicted) husbands' interest among women who were more interested in working than their husbands at baseline. The effect is economically and statistically significant, about 11% relative to the control mean. Combining these two outcomes, we test for disagreement in women's employment as an outcome in Column 3. It shows results for whether the women is more interested in employment, and shows a 25% reduction in this outcome relative to the control mean. These results are consistent with women using communication skills to align their husbands' views with their own.

Next, we test for whether the third possibility, namely, the weighting of preferences or bargaining power, was impacted by treatment. Bargaining power is difficult to measure, but two analyses suggest an increase in bargaining power did not drive the effects on employment. We first consider effects on a widely-used proxy for bargaining power: women's final say in household decision-making. This comprises an index of indicators for women reporting have final say over a number of decisions about the allocation of resources in the household (spending on food, clothing, whether to purchase a large household item, and spending of the husband's decision-making). There was no effect on an index of women's final say in our subgroup of interest (Column 4 of Table 5).

Second, we conduct a test that does not rely on a direct measure of bargaining power. Bargaining power reflects the weight that the household places on woman's versus husband's preference in making its decisions. Thus, one way to capture women's bargaining power is to examine how predictive their endline interest in employment is of their actual employment relative to their husbands' endline interest. We can then test for a treatment effect on bargaining power in our subgroup by examining whether the treatment increases the pre-

dictiveness of wives' interest relative to husbands' interest. The p-values in columns (5) and (6) of Table 5 conduct these tests, for the two employment outcomes closest in time to the first endline survey: application for the firm's program and month one program earnings. Neither p-value is significant ($p = 0.345$ and 0.848), suggesting effects on bargaining power do not explain our results.

These results suggest that the mechanism was women using their communication skills to change their husbands preferences. Testing precisely what about husbands' preferences changed is harder to answer definitively, but we explore two potential mechanisms within preferences outlined in Section 4: providing preference-relevant information to husbands and improving husbands' knowledge of their wives' preferences. The results provide the most support for the first channel. First, note that the effects on assertive communication in Table 1) were driven by effects on women summarizing the situation and explaining their rationale to their husbands. We also see that effects on take-up of the firm's program, as measured by application and month one program earnings, were concentrated among women in the subgroup who were not working at baseline (columns 7 and 8 in Table 5). Husbands of such wives are more likely to lack information about what their household life might look like were their wife to work, and hence seeing effects concentrated in this group is consistent with an information channel.

Second, we test whether husbands are now better informed about their spouses' preferences regarding working outside the home. We surveyed both husbands and wives in the second endline, and can use these survey responses to see whether husbands correctly predicted their wives' interest in employment. While this is a different time horizon than for the first endline, and the shorter time horizon is preferable for understanding mechanisms, but we present these results as suggestive. We find no treatment effect in our subgroup on husbands' knowledge of their wives' interest in employment (Appendix Table A.15), indicating that the results are unlikely to be driven by husbands' knowledge of wives' preferences. This is further consistent with the fact that even in the first endline survey, there is no effect on women telling their husbands what they want in Table 1 i.e. they are not providing information on their preference for work, but rather their reasons for working and why it is important to them to do so.

7.3   Longer-Term Impacts on Communication and Other Outcomes

We find persistent impacts on womens' labor force participation and earnings. Is this due to a persistent effect on communication, or because it allowed women to overcome the fixed costs of intra-household disagreement and start working, which then had persistent effects?

26

Table A.8 presents impacts on communication in the longer-term (i.e. the same outcomes as those in Table 1, but from the second endline). The effect is still positive, albeit smaller, in the second endline. This could be due to spillovers and information sharing between the treatment and control groups. This is consistent with the fact that treatment group was actually more likely to use assertive communication in the second endline survey rather than the first (indicating that the knowledge of the treatment group did not deteriorate over time). It is highly unlikely that this type of spillover effect would affect our main labor supply outcomes, since women couldn't participate in firm's program unless they applied, and the application process was just prior to the first endline survey. This pattern of results is consistent with women using their communication skills to join the firm's program, and once in the program, many stayed.

We also present results from the husbands' survey at six months to test whether husbands report noticing differences in communication styles. To measure this, we gave the husbands the same vignette as the women and asked what their wives would say to them to convince them to undertake the decision being discussed in the vignette. The results for this are inconclusive: we find no effects on husbands' reports of the various communication styles used by their spouse (Appendix Table A.9). This could be because changes in communication may be too subtle to be easily discernable, or because, as discussed in the previous paragraph, communication skills had eroded by then.

8   Other Decisions Couples Disagree About

Finally, we consider effects on other decisions couples often have diverging preferences over: women taking trips to their natal villages and to the market, as well as spending on women's goods. We use two sources of data. First, both of our endline surveys asked whether women had visited their natal village, gone to the market, or gotten a new saree in the preceding three months. We consider effects on indicators for each, along with an index of these three indicators and the analogous indicator for any employment. We estimate overall and heterogeneous effects, where heterogeneity for effects on a given activity is by an indicator for the woman reporting greater interest than her husband in that activity at baseline.[19]   For the index of all four indicators, heterogeneity is by an index of the four woman-more-interested baseline variables.

The second source of data are lab-in-the-field games we invited husbands and wives to play. Most games were played at the end of December 2022, though we continued to conduct

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[19]For example, for the natal village outcome, we estimate heterogeneity by an indicator for the wife reporting to be more interested than her husband in her visiting her natal village at baseline.

the games through March 2023 for couples who had not been available earlier. As discussed in Section 5.1, it can be hard to reach husbands in this setting due to their work schedules, and hence we were only able to complete the games for 70% of couples. Couples who played the games played two games: a dictator game (in which husbands were endowed with 10 tokens and chose how many to give to their wives), and a trust game (in which any of 10 tokens husbands sent to their wives were doubled, and wives could then send back tokens to their husbands). Couples were given a chance to communicate in private before the husband's choice in one of the games, and we randomized which one. After each game, each spouse was asked how they would spend their tokens across 10 goods, each of which is typically used in the setting by either men or women but not both.[20] At the end of a meeting, couples drew coins from a bag to determine whether their choices would be implemented and in which game (we did not have enough budget to allocate the chosen prizes to everyone). Our main outcome here is the number of tokens women ended each game with; this is equal to the number of tokens sent by husbands in the first game, and in the second game, the number of tokens the husband sent, times two, less the number wives returned.

We find few effects on these other decisions. Starting with the survey outcomes (Appendix Table A.13), we see a negative effect on the overall index of decisions at the first endline, driven by negative effects on the natal village and saree outcomes.[21] All of these effects come from the subgroups of women who were equally or less interested in the activities than their husbands, potentially due to uninterested women advocating against the activities. However, at the second endline, we see no effects on the index or on any of the components aside from employment. Turning to the games (Appendix Table A.14), we see no treatment effects on women's tokens in any of the four versions (trust and dictator, crossed with pre-play communication) of the game.

We can only speculate as to why the treatment affected employment but produced few effects on these other decisions. One possible explanation is that persuading one's husband is costly and these other decisions are not as important to women as employment. Employment has been found to improve a number of outcomes that women care about, raising their control in the household and increasing human capital investments in their children (see Heath and Jayachandran (2018) for a summary). Making a trip to one's natal village or the market, or acquiring more women's goods, could be enjoyable for women but ultimately less important.

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[20]The 10 goods, each of which cost between one and five tokens, were cologne, lipstick, men's sunglasses, earrings, a male watch, an anklet, a male necklace chain, a jewelry set, cloth for men's shirts, and a saree.

[21]A programming error in first endline survey resulted in the natal village question not being asked on initially-fielded versions of that survey, hence we only observe that outcome at the first endline for 57% of the sample. There is a small treatment-control difference in whether this outcome was observed (6.3 percentage points, $p = 0.084$). Reassuringly, the effects on the index of activities at the first endline looks very similar if we exclude the natal village outcome.

To the extent that persuading one's husband takes time and effort, women may deem it worthwhile to use their communication skills only in domains that matter a great deal to them. Another, related explanation is that intra-household disagreement is weaker for these other decisions than for employment. We saw in Figure 2 that employment is the most common topic of intra-household disagreement; these other topics are sometimes mentioned, but less often. While our heterogeneity analyses should help with this, it is possible that our measures of baseline disagreement do not fully capture the intensity of spousal misalignment in employment versus other domains.

9   Conclusion

In this paper, we show that communication frictions significantly impede household decision-making in an important economic setting. A training in assertive communication produced large and persistent increases in labor supply for women who face opposition to their employment from their husbands. Household decision-making in conservative, rural India is one of many economic settings in which agents provide input but lack decision rights. Standard economic models of such settings feature communication that is friction-less or at least optimal from the perspective of the agent. Our results instead imply that, absent intervention, women face frictions to communicating optimally.

Our results suggest an approach policymakers could take to improve women's agency and outcomes even when husbands have decision rights. In settings with entrenched gender norms and inequalities, improving women's communication skills may be easier and more culturally acceptable than raising their bargaining power. Testing the relative efficacy of these two approaches, and the impact of communication skills in other settings, remain interesting questions for future work.

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Main Text Figures and Tables

Figure 1: Percentage of Women with Final Say versus Giving Input on Various Decisions
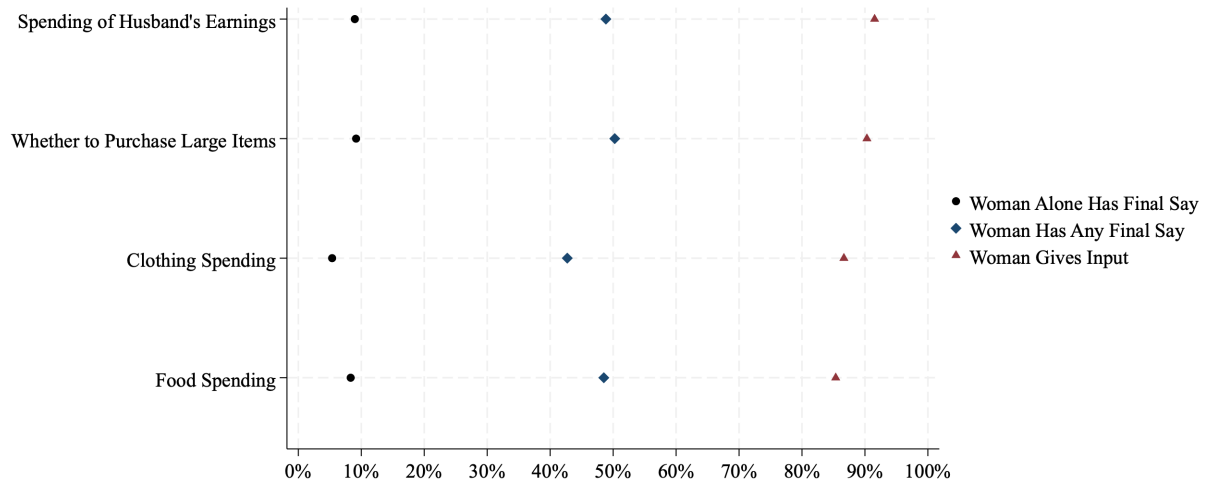
Notes: This figure visualizes women's responses at baseline to the following questions concerning various household decisions: *Who generally has the final say? Do you usually provide input?* "Woman Alone Has Final Say" refers to women who report making the decision alone, while "Woman Has Any Final Say" refers to women who report making the decision alone or in conjunction with others. The sample sizes for the final say variables are 1,537 (food spending), 1,536 (clothing spending), 1,526 (large items), and 1,527 (husband's earnings). For the input variables, the sample sizes are 1,536 (food spending), 1,538 (clothing spending), 1,529 (large items), and 1,530 (husband's earnings).

Figure 2: Distribution of Decisions in Which Couples Hold Different Opinions
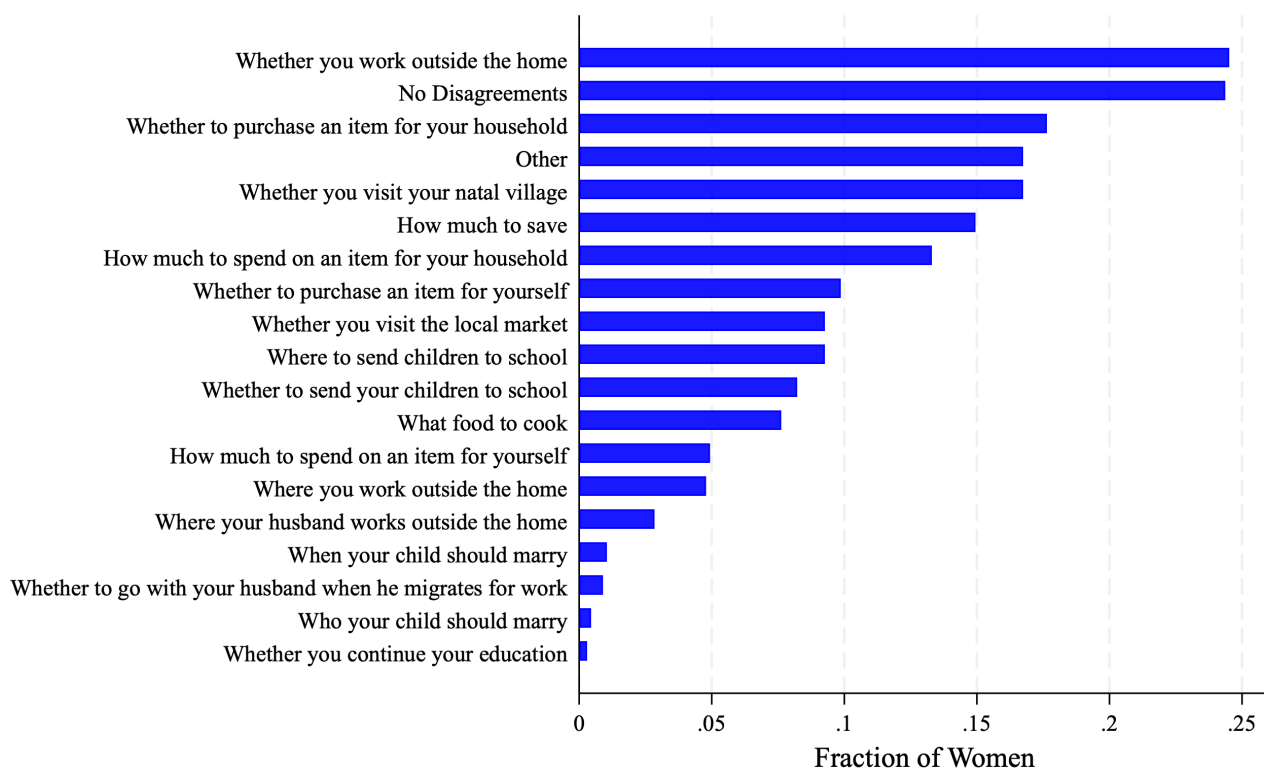
Notes: This figure visualizes women's responses to the question asking women what decisions they and their husbands often have different opinions about. Responses are from the control group at the second endline, and respondents could select multiple responses. The sample size is 669.

Figure 3: Women's and Husbands' Interest in Women Doing Various Activities
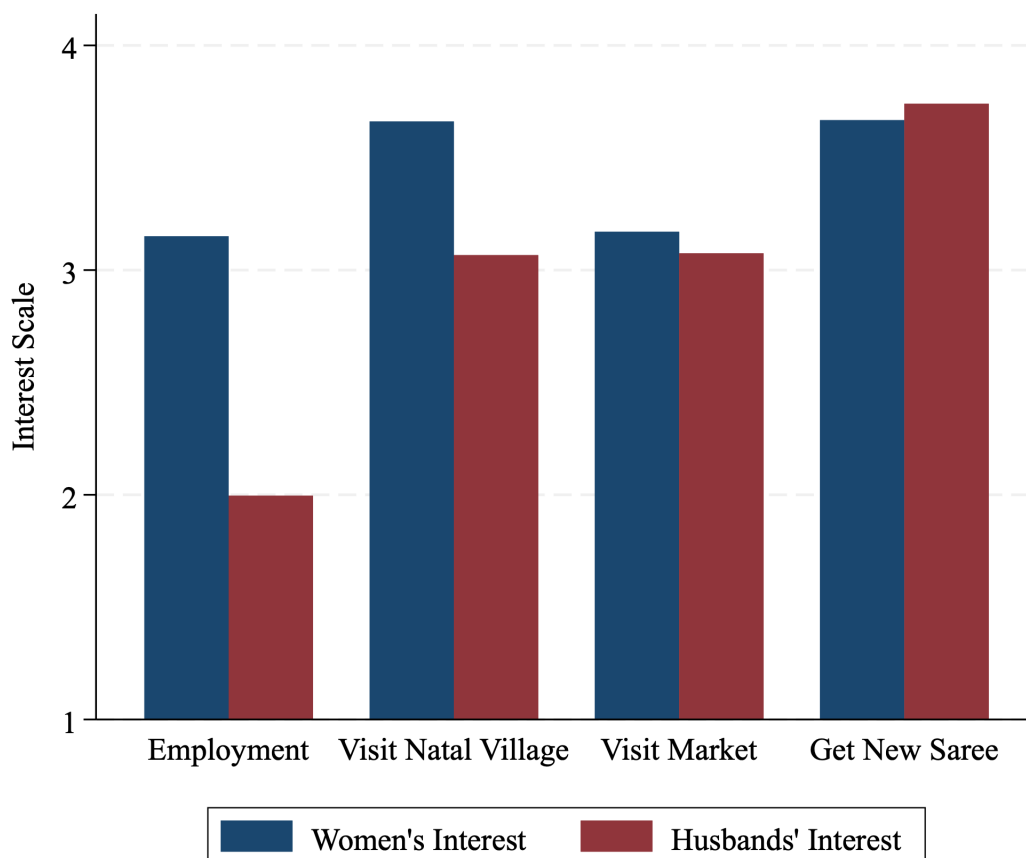
Notes: This figure visualizes women's and husbands' interest at the second endline in the woman working outside the home, visiting their natal village, going to their local market, and getting a new saree. The interest scale is coded as follows: 1 = very uninterested, 2 = somewhat uninterested, 3 = somewhat interested, 4 = very interested. The sample is restricted to (1) the control group and (2) couples where both were surveyed and responded. The sample sizes are 532, 526, 533, and 532 respectively.

Figure 4: Study Timeline
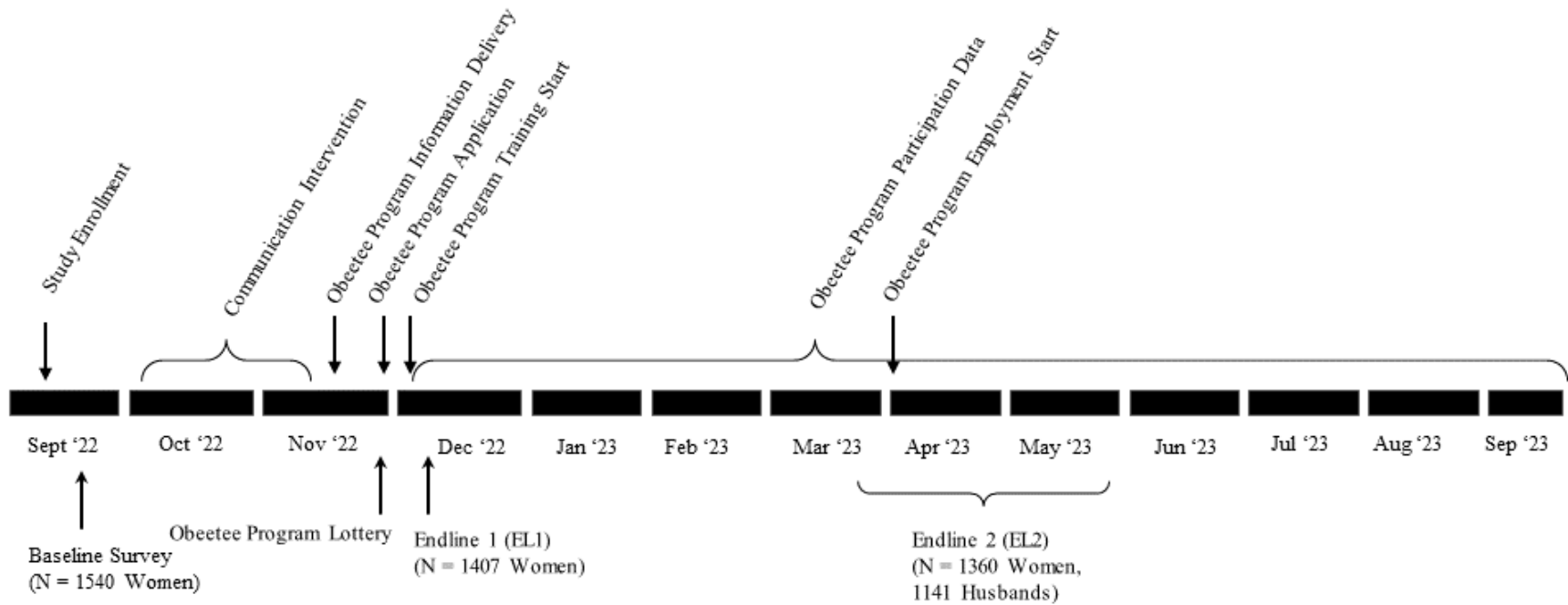
Figure 5: Effects on Obeetee Earnings by Month, in W More Interested Subgroup
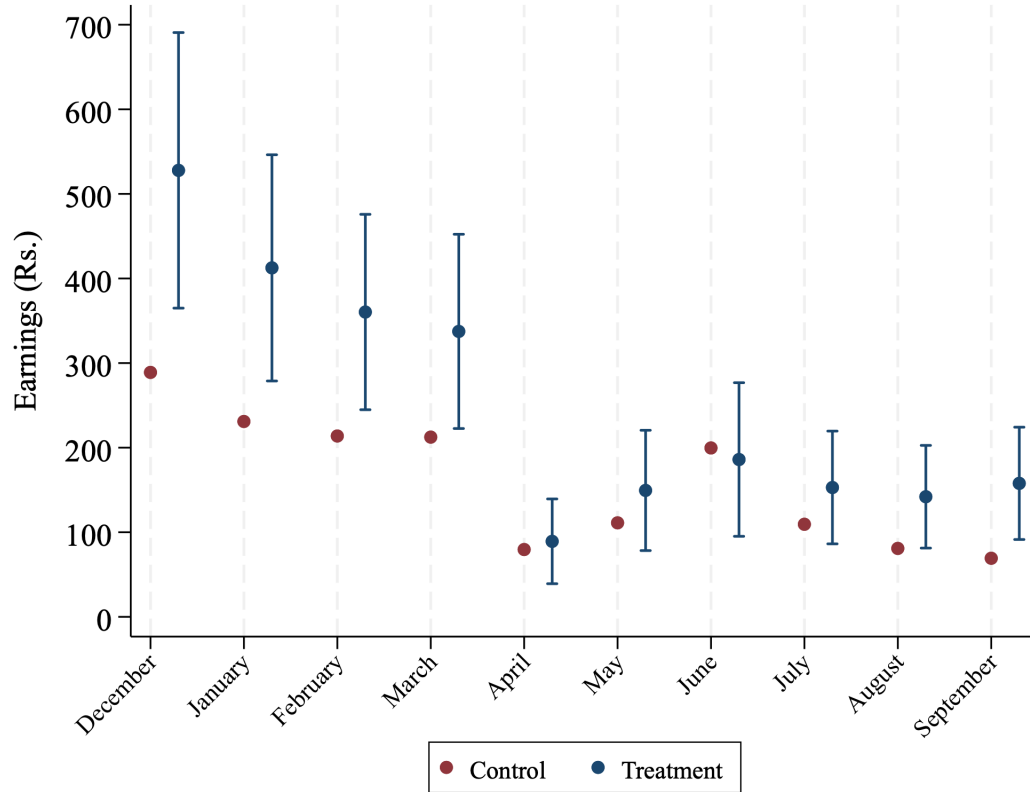
Notes: This figure presents the effects on Obeetee earnings, in rupees, for the subgroup of women who are more interested in employment than their husband's at baseline. These results come from columns (3)-(12) of Table 2. The red dots are the sum of the omitted group mean and the coefficient on W More Interested, while the blue dots are the sum of the omitted group mean and the coefficients on Treat, W More Interested, and Treat x W More Interested. Blue bars are the 90% confidence intervals for the sum of the coefficients on Treat and Treat x W More Interested. The sample size is 1523.

Table 1: Effects on Women's Communication

	See-Feel-Want Statement	Initiate Conversation, Vignette	Total Assertive Communication, Vignette	Components of Assertive Communication, Vignette				Other Communication Styles, Vignette		
	% of Parts Known	(=1)	% of Components Used	Summarize Situation (=1)	Describe Emotions (=1)	Tell Him What (=1)	Tell Him Why (=1)	Aggressive (=1)	Passive (=1)	Negotiation (=1)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Treat	29.895***	0.022	4.495***	0.072***	0.038	-0.003	0.082***	-0.005	-0.045*	0.024
	(1.859)	(0.018)	(1.538)	(0.027)	(0.024)	(0.028)	(0.029)	(0.010)	(0.024)	(0.016)
Strata Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PDS Lasso Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Omitted Group Mean	3.613	0.870	48.512	0.575	0.248	0.582	0.536	0.029	0.263	0.102
N	1406	1402	1400	1400	1400	1400	1400	1400	1400	1400

Notes: All outcomes are from women's five week surveys (EL1). Women were asked about whether they remembered learning about See-Feel-Want statements during the intervention and what the three parts of the See-Feel-Want statement were (Describe how you see the situation, Describe how you feel about the situation, and Say what you want). The outcome in column (1) is the percent of the three parts the women gave correctly. The rest of the outcomes come from the vignettes described in Section 6.1. Data are pooled across vignette topic. The outcome in column (2) is an indicator for women saying they would initiate a conversation with their husbands. The rest of the outcomes are based on the question asking women what they would say to their husbands. Assertive communication is represented by the following responses: 1) summarizing the situation, 2) describing one's emotions about the situation, 3) telling one's husband what you want, and/or 4) telling one's husband why you want what you do. The outcome in column (3) is the total percentage of these 4 responses the woman uses and the outcomes in columns (4)-(7) are indicators for each of the four components of assertive communication. The outcome in column (8) is an indicator for a woman responding that she would tell her husband that he is wrong/ unreasonable/ stupid/ never lets her get what she wants. The outcome in column (10) is an indicator for a woman responding that she will do whatever her husband wants. The outcome in column (9) is an indicator for a woman responding that she would offer a compromise. Standard errors are clustered by meeting group. * p <0.10, ** p < 0.05, *** p < 0.01.

Table 2: Effects on Women's Labor Supply

	Applied (=1)		Earnings from Obeetee (Rs.)											Any Employment (=1)
			Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Endline 2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Treat	0.014	-0.019	-45.531	-64.281	-63.246	-49.214	-8.175	-44.440	-31.924	18.918	-22.741	-29.811	-0.035
	(0.025)	(0.030)	(90.270)	(66.892)	(62.736)	(60.596)	(20.202)	(37.047)	(36.691)	(29.103)	(31.731)	(35.375)	(0.035)
W More Interested		-0.033	-138.534	-73.453	-65.789	-40.863	33.171	3.182	83.931	46.995	-13.601	-35.349	-0.060
		(0.028)	(91.916)	(69.963)	(64.652)	(63.141)	(25.766)	(43.094)	(55.338)	(37.953)	(37.506)	(34.594)	(0.042)
Treat x W More Interested		0.074*	284.422**	245.853**	209.778**	174.208**	17.829	82.758	18.269	24.547	83.838*	118.366**	0.110**
		(0.040)	(121.583)	(96.958)	(87.541)	(86.956)	(36.369)	(55.247)	(64.631)	(46.254)	(45.223)	(49.817)	(0.054)
P-Val: Treat + Treat X W More Interested = 0		0.106	0.017**	0.026**	0.038**	0.075*	0.752	0.376	0.805	0.284	0.099*	0.029**	0.074*
Strata Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PDS Lasso Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Omitted Group Mean	0.192	0.205	427.494	304.424	279.595	253.316	46.443	107.944	115.710	62.461	94.482	104.614	0.430
N	1540	1523	1523	1523	1523	1523	1523	1523	1523	1523	1523	1523	1344

Notes: The outcome for columns (1)-(2) comes from the Obeetee program application form filled out by surveyors during the application day. Women are recorded as applied if they completed the application survey and confirmed their decision to apply. We verified women were in the age range targeted by Obeetee (18-40) using ID cards presented at the time of application or by asking village heads. Any women outside of this age range are not considered as having applied. 42 of the women who applied did not bring the application tickets distributed to them during the program information delivery survey. We linked 29 of them to the application survey through matching on phone number and/or other personal information. Outcomes for columns (3)-(12) come from digitized registers maintained by Obeetee loom centers. The earnings of weavers with missing earnings for a given month are imputed using the average earnings of weavers from that loom center in that month. The outcome for column (13) comes from women's 5 month surveys (EL2). Women were asked if they worked in one or more of the following sectors: 1) Agriculture on own household's lane, 2) Agriculture off own household's land, 3) husbandry of animals owned by own household, 4) husbandry of animals owned by others outside of household, 5) own household's microenterprise, 6) casual non-farm labor, 7) Obeetee's weaving training for women, 8) employed by a non-Obeetee firm, 9) Anganwadi work, 10) teaching, 11) NREGA, 12) other sector, or have done no work for income. Women were then marked as employed if they indicated working in one or more of options 2, 4, and/or 5-12. Standard errors are clustered by meeting group. * p <0.10, ** p < 0.05, *** p < 0.01.

41

Table 3: Subgroup Patterns, Controlling for Husband Opposition in Other Activities

	W More Interested (=1)	Applied (=1)	Earnings from Obeetee (Rs.)										Any Employment (=1)
			Dec.	Jan.	Feb.	Mar.	April	May	Jun.	Jul.	Aug.	Sep.	Endline 2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Treat x W More Interested		0.063	304.560**	261.745**	223.234**	180.649**	23.710	98.266	39.474	28.907	91.467*	132.621**	0.136**
		(0.041)	(130.197)	(102.194)	(91.964)	(90.140)	(37.659)	(60.235)	(69.348)	(50.201)	(50.136)	(55.794)	(0.057)
W More Interested in Other Activities Index	0.135***												
	(0.012)												
Strata Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PDS Lasso Controls	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Treat	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
W More Interested	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Other Activities Index	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Treat x Other Activities Index	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	1523	1523	1523	1523	1523	1523	1523	1523	1523	1523	1523	1523	1344

Notes: The 'W More Interested in Other Activities Index' is an index of indicators for a woman reporting at baseline that she is more interested in herself doing an activity than her husband. The component activities are: visiting her natal village, visiting the market, and getting a new saree. The outcome for column (1) is an indicator for a woman reporting at baseline that she is more interested in herself working outside of the home than her husband. The outcomes for columns (2)-(13) are the same as the outcomes in columns (2)-(13) of Table 2. The 'Other Activities Index' and 'Treat x Other Activities Index' variables in the table footer is the 'W More Interested in Other Activities Index' and its interaction with treatment, respectively. Standard errors are robust in column (1) and clustered by meeting group in the rest of the columns. * p <0.10, ** p < 0.05, *** p < 0.01.

Table 4: Subgroup Patterns, Controlling for Lasso-Selected Predictors of W More Interested

| | W More Interested (=1) | Applied (=1) | Earnings from Obeetee (Rs.) | | | | | | | | | | Any Employment (=1) |
| | | | Dec. | Jan. | Feb. | Mar. | Apr. | May | Jun. | Jul. | Aug. | Sep. | Endline 2 |
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Treat x W More Interested		0.067*	342.252**	304.640***	265.125***	218.640**	41.113	120.488*	74.239	60.795	117.730**	149.423**	0.148**
		(0.040)	(133.592)	(105.665)	(96.560)	(93.951)	(39.392)	(62.398)	(69.288)	(50.566)	(49.152)	(57.725)	(0.059)
Dif. in Interest (1-4) for Visit Natal Village	0.037*												
	(0.022)												
W More Interested in Visit Natal Village (=1)	0.074*												
	(0.045)												
Dif. in Interest (1-4) for Visit Market	0.020												
	(0.017)												
W More Interested in Visit Market (=1)	0.084**												
	(0.042)												
Husband's Interest (1-4) for Women Visit Natal Village, Sq.	-0.011***												
	(0.004)												
Husband's Interest (1-4) for Women Visit Market, Sq.	-0.004												
	(0.003)												
Strata Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PDS Lasso Controls	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Treat	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
W More Interested	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Predictors of W More Interested	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Treat X Predictors of W More Interested	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
N	1523	1523	1523	1523	1523	1523	1523	1523	1523	1523	1523	1523	1344

Notes: Outcomes for columns (1)-(13) are the same as the outcomes for columns (1)-(13) of Table 3. Column (1) displays the coefficients on the variables selected by Lasso as predictors of W More Interested. In the table footer, 'Predictors of W More Interested' and 'Treat X Predictors of W More Interested' refers to these predictors and their interaction with treatment. Standard errors are robust in column (1) and clustered by meeting group in the rest of the columns. * p <0.10, ** p < 0.05, *** p < 0.01.

42

Table 5: Mechanisms in Household Decision-Making

	W Interest (1-4), EL1 (1)	Predicted H Interest (1-4), EL1 (2)	W More Interested (=1), EL1 (3)	W Final Say Index, EL1 (4)	Applied (=1) (5)	Earnings (Rs.), Dec. (6)	Applied (=1) (7)	Earnings (Rs.), Dec. (8)
Treat	0.062	-0.066	0.032	-0.186***	0.037	170.397	-0.016	-35.332
	(0.078)	(0.090)	(0.038)	(0.058)	(0.065)	(171.811)	(0.035)	(104.007)
W More Interested	0.003	-0.216	0.152***	-0.209***	0.148*	678.635**	-0.064**	-175.317*
	(0.078)	(0.133)	(0.038)	(0.063)	(0.088)	(273.804)	(0.032)	(93.022)
Treat x W More Interested	-0.041	0.269*	-0.116**	0.136	-0.117	-852.259***	0.091**	296.822**
	(0.109)	(0.146)	(0.054)	(0.087)	(0.115)	(321.875)	(0.046)	(125.743)
W EL1 Interest					0.037**	130.109***		
					(0.018)	(42.081)		
H EL1 Interest					0.083***	228.020***		
					(0.019)	(54.372)		
Treat x W EL1 Interest					-0.015	-57.052		
					(0.022)	(53.380)		
Treat x H EL1 Interest					-0.007	-11.955		
					(0.024)	(72.739)		
W More Interested x W EL1 Interest					-0.015	-165.818**		
					(0.029)	(79.242)		
W More Interested x H EL1 Interest					-0.052*	-97.423		
					(0.027)	(75.728)		
Treat x W More Interested x W EL1 Interest					0.019	206.162**		
					(0.036)	(94.477)		
Treat x W More Interested x H EL1 Interest					0.057	185.563*		
					(0.037)	(112.361)		
BL Employment							0.029	113.819
							(0.044)	(131.904)
Treat x BL Employment							-0.014	-69.192
							(0.060)	(175.585)
W More Interested x BL Employment							0.081	96.987
							(0.066)	(204.545)
Treat x W More Interested x BL Employment							-0.031	18.546
							(0.089)	(269.352)
P-Val: Treat + Treat X W More = 0	0.804	0.075*	0.045**	0.463			0.048**	0.013**
P-Val: Treat X W Interest + Treat X W More X W Interest = Treat X H Interest + Treat X W More X H Interest					0.345	0.848		
P-Val: Treat + Treat X W More + Treat X Employment + Treat X W More X Employment = 0							0.627	0.299
Strata Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PDS Lasso Controls	Yes	Yes	Yes	Yes	No	No	Yes	Yes
Omitted Group Mean	3.216	2.480	0.470	0.072			0.198	403.406
N	1393	1386	1386	1393	1386	1386	1511	1511

Notes: The outcome in column (1) is women's own interest in working outside the home at EL1, measured on a scale of 1 to 4 (1 = very uninterested, 2 = somewhat uninterested, 3 = somewhat interested, and 4 = very interested). Column (2)'s outcome is wives' predictions of their husbands' interest in the wives working outside the home at EL1. The outcome in column (3) is an indicator for women's EL1 interest being greater than their (predicted) husbands' EL1 interest, i.e. an indicator for column (1)'s outcome being larger than column (2)'s outcome. The outcome in column (4) is an index of indicators for women reporting having final say over a decision either alone or jointly with others for the following decisions at EL1: spending on food, spending on clothing, whether to purchase a large household item, and spending of the husband's earnings. The outcomes in columns (5)-(8) are the same as the outcomes from columns (2)-(3) of Table 2. Standard errors are clustered by meeting group. * p <0.10, ** p < 0.05, *** p < 0.01.

Appendix Figures and Tables

Figure A.1: Communication Strategies Recommended to Wives in Popular Culture

(a) Example 1, from Good Housekeeping

GOOD HOUSEKEEPING

How to Turn No into Yes!

With the right words and the right timing, you can change people's minds. Get your way with these smart success strategies.

Persuade Your Husband

What you want: His sign-off on a major expense.

Appeal to his self-interest.

Put the ball in his court.
"Ask him to explain why your suggestion is a bad idea," says Kerry Patterson, Ph.D., coauthor of *Crucial Conversations.* Generally, it's harder to prove a negative, why the improvement should not be made, than a positive.

Share the credit. Once he agrees to the idea, immediately begin talking about the project or purchase as if you'd both thought of it.

(b) Example 2, from Woman's Day

woman's day

The Power of Persuasion

Learn how to get what you want with these four helpful tips

Smile
But don't fake it! A genuinely positive attitude puts folks in a giving mood.

Explain Why
People need a reason. Give a detailed one and they'll be more likely to say yes.

Downplay the Negative
If others have said no, don't let on. This sends the message that no one else is doing it, so the person you're asking doesn't have to either.

Cue the Caffeine
Offer a cup of joe before you pull the favor card. Since caffeine boosts energy and alertness, people will be more receptive to your request.

(c) Example 3, from Ladies' Home Journal

LADIES' HOME JOURNAL | JULY 2005

THE POWER OF EYE CONTACT

Getting people to like you is as easy as looking into their eyes. Women who fix their gaze on the people they talk to are perceived as more likable than those who don't, found a new study from Dartmouth College, in Hanover, New Hampshire. "It tells you that you're more interesting than anything else to that person," explains Malia Mason, Ph.D. candidate and lead author of the study.
That's just the start: Making eye contact also boosts your powers of persuasion. If other people find you likable, says Mason, they're more likely to pay attention and be convinced by what you say. So if you're trying to get your husband to commit to helping with your garage sale, for example, it may be efficient to phone him at work, but Mason says he'll be more likely to lend a hand if you wait till you can talk to him face-to-face. —*Meredith Bodgas*

(d) Example 4, from Ladies' Home Journal

Ladies' Journal □ February, 1968

"HUSBANDESE"—THE NEW LANGUAGE OF INTIMATE PERSUASION BETWEEN HUSBAND AND WIFE □ BY DR. HAIM GINOTT

Figure A.2: Distribution of Things Women Would Do to Change Husbands' Minds
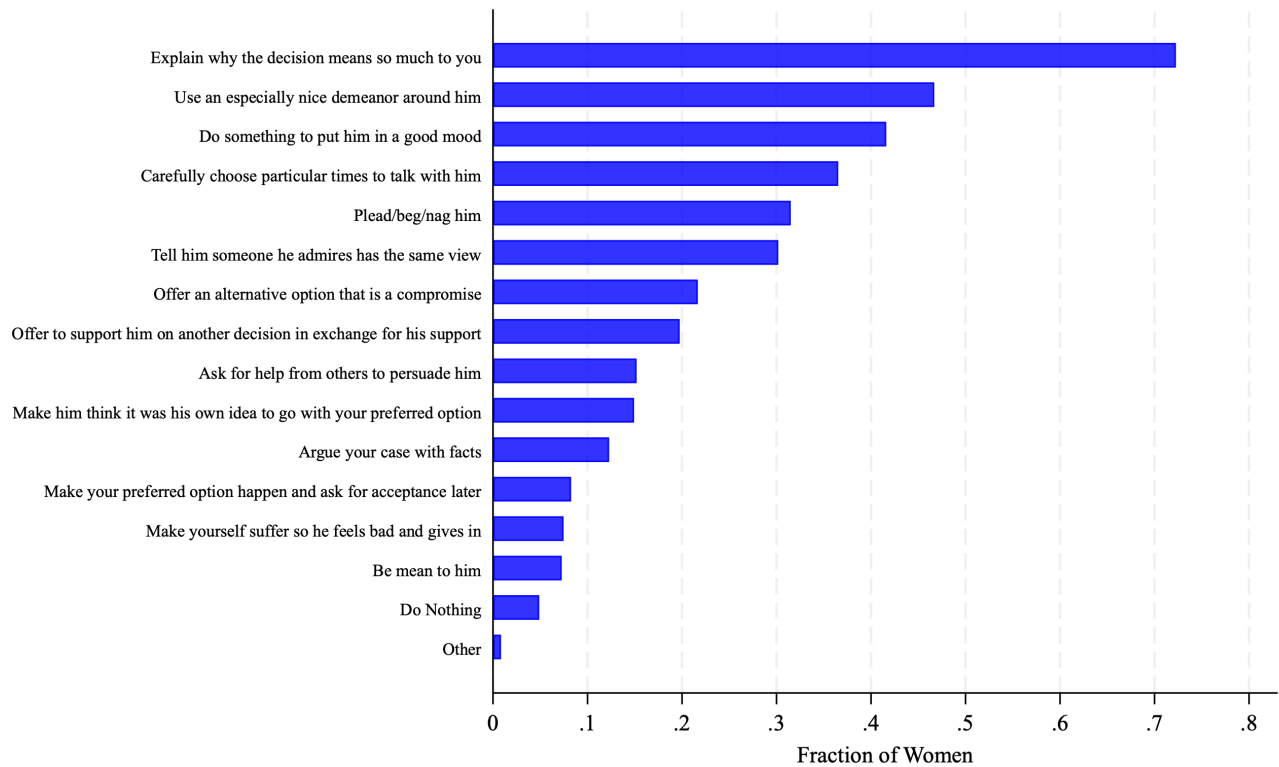
Notes: This figure visualizes women's responses at baseline to the following question: *Would you do any of the following things to try to change your husband's mind?*, asked in the context of one of five randomly selected vignettes about household decision making. The options given are presented in the figure and women can select multiple options. The sample size is 1514.

Figure A.3: See-Feel-Want Visual from Communication Curriculum
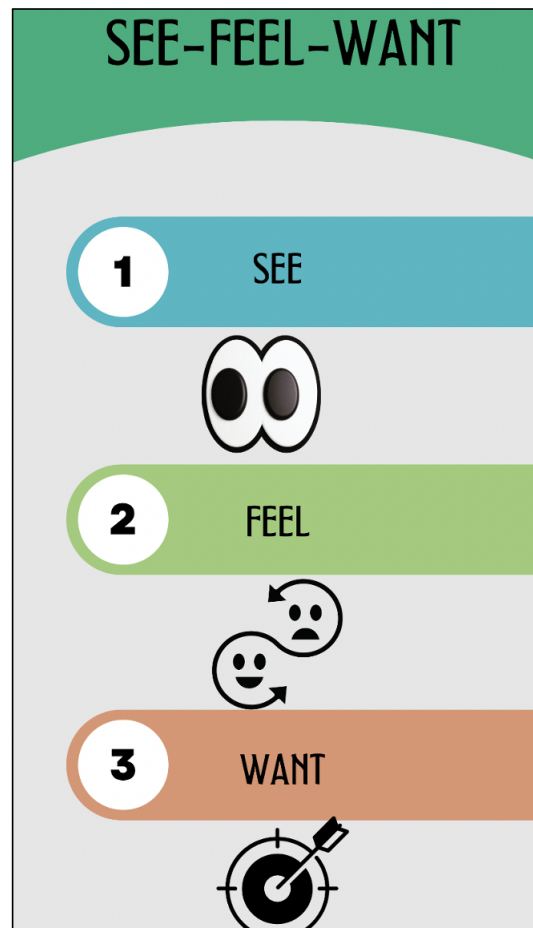
Table A.1: Baseline Characteristics and Balance

Variable	(1) Control Mean (Std Dev)	(2) Treat Mean (Std Dev)	(3) Reg Coeff (SE)	(4) N
Age	29.717	29.918	0.285	1,540
	(5.834)	(5.876)	(0.295)	
No Education (=1)	0.407	0.377	-0.030	1,539
	(0.492)	(0.485)	(0.027)	
From Scheduled Caste or Tribe (=1)	0.368	0.386	-0.026	1,540
	(0.483)	(0.487)	(0.038)	
Lives in In-Laws' Village (=1)	0.980	0.986	0.007	1,540
	(0.139)	(0.118)	(0.007)	
Mother(-in-law) in HH (=1)	0.420	0.433	0.016	1,540
	(0.494)	(0.496)	(0.029)	
Father(-in-law) in HH (=1)	0.376	0.381	0.019	1,540
	(0.485)	(0.486)	(0.028)	
Number of Adults in HH	4.030	4.050	0.064	1,540
	(2.500)	(2.384)	(0.158)	
Number of Children	2.826	2.840	-0.001	1,526
	(1.444)	(1.408)	(0.077)	
Pregnant (=1)	0.071	0.076	0.000	1,540
	(0.257)	(0.265)	(0.014)	
Percent Assertive Responses in BL Vignette	52.030	52.384	-0.407	1,494
	(35.631)	(35.415)	(2.027)	
W Input in Decision-Making Index	0.000	0.003	0.031	1,540
	(1.000)	(1.028)	(0.054)	
W Final Say in Decision-Making Index	-0.000	0.037	0.036	1,540
	(1.000)	(1.004)	(0.054)	
W's Interest (1-4) in Employment	3.282	3.216	-0.087	1,535
	(1.050)	(1.109)	(0.064)	
H's Interest (1-4) in W employment (W Predicted)	2.656	2.538	-0.106	1,526
	(1.259)	(1.260)	(0.072)	
W More Interested in Employment (=1)	0.419	0.443	0.016	1,523
	(0.494)	(0.497)	(0.027)	
Any Employment (=1)	0.334	0.316	-0.018	1,527
	(0.472)	(0.465)	(0.026)	
Visited Natal Village (=1)	2.056	3.320	0.774	1,514
	(36.479)	(50.810)	(2.389)	
Visited Market (=1)	4.622	4.555	-0.044	1,540
	(62.474)	(61.749)	(3.655)	
Got New Saree (=1)	1.714	2.973	1.275	1,540
	(36.130)	(50.466)	(2.573)	
Women's Activities Index	-0.000	0.023	0.002	1,538
	(1.000)	(0.975)	(0.054)	

Notes: Data in this table comes from women's baseline surveys. Columns (1) and (2) present the means of given baseline variables in the control and treatment groups. Standard deviations are below the means in parentheses. Column (3) presents the coefficients from regressions of given baseline variables on a treatment indicator. The regressions include strata fixed effects and cluster standard errors by meeting group.* p <0.10, ** p < 0.05, *** p < 0.01.

Table A.2: Baseline Characteristics and Balance, W Less or Equally Interested Subgroup

Variable	(1) Control Mean (Std Dev)	(2) Treat Mean (Std Dev)	(3) Reg Coeff (SE)	(4) N
Age	29.961	30.161	0.056	866
	(6.007)	(5.821)	(0.370)	
No Education (=1)	0.428	0.383	-0.056	865
	(0.495)	(0.487)	(0.036)	
From Scheduled Caste or Tribe (=1)	0.304	0.364	0.002	866
	(0.460)	(0.482)	(0.041)	
Lives in In-Laws' Village (=1)	0.986	0.984	-0.008	866
	(0.116)	(0.127)	(0.010)	
Mother(-in-law) in HH (=1)	0.422	0.442	0.042	866
	(0.495)	(0.497)	(0.038)	
Father(-in-law) in HH (=1)	0.372	0.402	0.059	866
	(0.484)	(0.491)	(0.037)	
Number of Adults in HH	4.169	4.126	0.067	866
	(2.598)	(2.431)	(0.201)	
Number of Children	2.778	2.823	0.003	860
	(1.459)	(1.427)	(0.101)	
Pregnant (=1)	0.064	0.089	0.021	866
	(0.245)	(0.285)	(0.019)	
Percent Assertive Responses in BL Vignette	49.645	52.785	2.166	836
	(36.182)	(34.462)	(2.730)	
W Input in Decision-Making Index	0.038	0.021	0.011	866
	(0.967)	(1.011)	(0.067)	
W Final Say in Decision-Making Index	-0.055	0.033	0.057	866
	(0.987)	(1.008)	(0.073)	
W's Interest (1-4) in Employment	2.993	2.848	-0.161	866
	(1.213)	(1.280)	(0.099)	
H's Interest (1-4) in W employment (W Predicted)	3.281	3.138	-0.164*	866
	(1.106)	(1.188)	(0.091)	
W More Interested in Employment (=1)	0.000	0.000	0.000	866
	(0.000)	(0.000)	(0.000)	
Any Employment (=1)	0.345	0.339	-0.004	857
	(0.476)	(0.474)	(0.039)	
Visited Natal Village (=1)	0.711	5.425	4.223	853
	(0.454)	(68.590)	(2.983)	
Visited Market (=1)	5.215	3.035	-2.900	866
	(67.251)	(48.160)	(4.421)	
Got New Saree (=1)	0.406	5.089	4.985	866
	(0.492)	(68.046)	(3.505)	
Women's Activities Index	-0.025	0.019	0.031	865
	(1.040)	(1.005)	(0.074)	

Notes: This table presents the same analyses as Table A.1a but restricts to the subgroup of women who are less or equally interested in themselves working than their husband at baseline.* p <0.10, ** p < 0.05, *** p < 0.01.

Table A.3: Baseline Characteristics and Balance, W More Interested Subgroup

Variable	(1) Control Mean (Std Dev)	(2) Treat Mean (Std Dev)	(3) Reg Coeff (SE)	(4) N
Age	29.364	29.534	0.426	657
	(5.531)	(5.888)	(0.473)	
No Education (=1)	0.373	0.370	-0.002	657
	(0.484)	(0.483)	(0.040)	
From Scheduled Caste or Tribe (=1)	0.453	0.413	-0.077*	657
	(0.499)	(0.493)	(0.046)	
Lives in In-Laws' Village (=1)	0.972	0.991	0.029**	657
	(0.167)	(0.094)	(0.012)	
Mother(-in-law) in HH (=1)	0.418	0.419	-0.013	657
	(0.494)	(0.494)	(0.040)	
Father(-in-law) in HH (=1)	0.380	0.352	-0.034	657
	(0.486)	(0.478)	(0.039)	
Number of Adults in HH	3.839	3.938	0.057	657
	(2.367)	(2.294)	(0.175)	
Number of Children	2.892	2.857	-0.021	650
	(1.426)	(1.344)	(0.115)	
Pregnant (=1)	0.079	0.059	-0.024	657
	(0.270)	(0.235)	(0.019)	
Percent Assertive Responses in BL Vignette	55.323	52.102	-3.053	643
	(34.777)	(36.550)	(2.824)	
W Input in Decision-Making Index	-0.036	-0.016	0.021	657
	(1.031)	(1.050)	(0.076)	
W Final Say in Decision-Making Index	0.074	0.058	0.016	657
	(1.015)	(0.998)	(0.076)	
W's Interest (1-4) in Employment	3.690	3.683	-0.015	657
	(0.557)	(0.568)	(0.049)	
H's Interest (1-4) in W employment (W Predicted)	1.791	1.786	0.034	657
	(0.895)	(0.893)	(0.070)	
W More Interested in Employment (=1)	1.000	1.000	0.000	657
	(0.000)	(0.000)	(0.000)	
Any Employment (=1)	0.325	0.288	-0.042	654
	(0.469)	(0.454)	(0.039)	
Visited Natal Village (=1)	0.730	0.766	0.017	645
	(0.445)	(0.424)	(0.038)	
Visited Market (=1)	0.731	6.572	6.568	657
	(0.444)	(76.187)	(4.556)	
Got New Saree (=1)	0.396	0.399	0.007	657
	(0.490)	(0.490)	(0.042)	
Women's Activities Index	0.029	0.030	-0.015	657
	(0.946)	(0.945)	(0.076)	

Notes: This table presents the same analyses as Table A.1a but restricts to the subgroup of women who are more interested in themselves working than their husband at baseline.* p <0.10, ** p < 0.05, *** p < 0.01.

Table A.4: Compliance and Attrition

	Attended Any Intervention Session (=1)		Num. Intervention Sessions Attended (0-6)		Program Info. Delivered (=1)		W Surveyed at EL1 (=1)		W Surveyed at EL2 (=1)		H Surveyed at EL2 (=1)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Treat	-0.001	-0.004	0.019	0.015	0.035**	0.029	0.007	0.003	-0.014	0.009	-0.019	-0.013
	(0.017)	(0.022)	(0.108)	(0.142)	(0.015)	(0.020)	(0.016)	(0.021)	(0.019)	(0.024)	(0.026)	(0.030)
W More Interested		0.005		0.054		0.008		0.003		0.023		-0.038
		(0.021)		(0.141)		(0.020)		(0.023)		(0.021)		(0.032)
Treat x W More Interested		0.003		0.015		0.019		0.012		-0.052*		-0.004
		(0.031)		(0.206)		(0.029)		(0.029)		(0.031)		(0.045)
P-Val: Treat + Treat X W More Interested = 0		0.981		0.851		0.029**		0.489		0.100		0.662
Strata Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Omitted Group Mean	0.901	0.902	4.607	4.596	0.882	0.879	0.909	0.909	0.882	0.870	0.745	0.753
N	1540	1523	1540	1523	1540	1523	1540	1523	1540	1523	1540	1523

Notes: The outcome for columns (1) and (2) is an indicator for a woman attending at least one of their six assigned treatment/control sessions. The outcome for columns (3) and (4) is the number of assigned sessions attended, out of a total of six sessions. The outcome for columns (5) and (6) is an indicator for a woman completing the Obeetee program information delivery survey. The outcomes for columns (7)-(10) are indicators for a woman being surveyed at five weeks and six months, respectively. The outcome for columns (11) and (12) is an indicator for the husband being surveyed at six months. Standard errors are clustered by meeting group. * p <0.10, ** p < 0.05, *** p < 0.01.

Table A.5: Effects on Obeetee Earnings, Alternative Imputation of Missing Earnings

	Earnings from Obeetee (Rs.)									
	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Treat	-48.140	-64.281	-63.246	-43.580	-8.395	-31.382	-11.818	17.613	-22.216	-29.811
	(87.029)	(66.892)	(62.736)	(60.509)	(20.255)	(35.852)	(28.238)	(27.049)	(22.086)	(35.375)
W More Interested	-105.989	-73.453	-65.789	-33.503	32.862	2.443	42.499	40.760	-3.903	-35.349
	(89.381)	(69.963)	(64.652)	(62.948)	(25.758)	(40.206)	(45.159)	(36.219)	(34.089)	(34.594)
Treat x W More Interested	279.673**	245.853**	209.778**	167.863*	14.770	74.632	22.532	28.439	56.496	118.366**
	(120.224)	(96.958)	(87.541)	(86.836)	(36.267)	(52.596)	(50.360)	(44.138)	(40.294)	(49.817)
P-Val: Treat + Treat X W More Interested = 0	0.020**	0.026**	0.038**	0.076*	0.834	0.285	0.807	0.248	0.301	0.029**
Strata Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PDS Lasso Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Omitted Group Mean	399.929	304.424	279.595	247.061	46.443	94.282	61.820	52.599	58.244	104.614
N	1523	1523	1523	1523	1523	1523	1523	1523	1523	1523

Notes: This table replicates analysis done in Columns (3)-(12) of Table 2, except the earnings of weavers with missing earnings are imputed with 0. * p <0.10, ** p < 0.05, *** p < 0.01.

Table A.6: Effects on Women's Communication, by Subgroup

	See-Feel-Want Statement	Initiate Conversation, Vignette	Total Assertive Communication, Vignette	Components of Assertive Communication, Vignette				Other Communication Styles, Vignette		
	% of Parts Known	(=1)	% of Components Used	Summarize Situation (=1)	Describe Emotions (=1)	Tell Him What (=1)	Tell Him Why (=1)	Aggressive (=1)	Passive (=1)	Negotiation (=1)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Treat	29.835***	0.026	3.657*	0.046	0.044	0.006	0.058	-0.003	-0.049	0.038*
	(2.436)	(0.023)	(2.024)	(0.037)	(0.032)	(0.037)	(0.038)	(0.013)	(0.032)	(0.022)
W More Interested	0.528	-0.020	1.679	0.010	0.021	0.033	0.018	0.009	-0.027	0.018
	(1.217)	(0.024)	(2.156)	(0.041)	(0.031)	(0.042)	(0.042)	(0.012)	(0.032)	(0.022)
Treat x W More Interested	-0.309	-0.000	2.023	0.055	-0.015	-0.019	0.067	-0.005	0.007	-0.035
	(3.317)	(0.033)	(2.946)	(0.054)	(0.050)	(0.054)	(0.057)	(0.017)	(0.045)	(0.033)
P-Val: Treat + Treat X W More Interested = 0	0.000***	0.334	0.012**	0.011**	0.444	0.752	0.005***	0.569	0.212	0.906
Strata Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PDS Lasso Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Omitted Group Mean	3.434	0.879	48.038	0.580	0.241	0.570	0.532	0.025	0.281	0.099
N	1392	1388	1386	1386	1386	1386	1386	1386	1386	1386

Notes: This table uses the same outcomes as Table 1, but presents effects by subgroup. Standard errors are clustered by meeting group. * p <0.10, ** p < 0.05, *** p < 0.01.

Table A.7: Additional Analyses of Effects on Communication

	Other Category Selected (=1), Vignette	W Input Index
	(1)	(2)
Treat	0.027*	-0.048
	(0.015)	(0.054)
Strata Controls	Yes	Yes
PDS Lasso Controls	Yes	Yes
Omitted Group Mean	0.068	-0.000
N	1400	1407

Notes: Both outcomes are from EL1. The outcome in column (1) is from the vignette question asking women what they would say to their husbands (see Section 6.1 for details on the vignette). Data are pooled across vignette topic. The outcome is an indicator for providing a response which was recorded in the "other" category. The outcome in column (2) is the women's input index, an index of indicators for women reporting they give input in the following household decisions: spending of the husband's earnings, whether to purchase large household items, spending on clothing, and spending on food. Standard errors are clustered by meeting group. * p <0.10, ** p < 0.05, *** p < 0.01.

Table A.8: Effects on Women's Communication at Endline 2

	See-Feel-Want Statement	Initiate Conversation, Vignette	Total Assertive Communication, Vignette	Components of Assertive Communication, Vignette				Other Communication Styles, Vignette		
	% of Parts Known	(=1)	% of Components Used	Summarize Situation (=1)	Describe Emotions (=1)	Tell Him What (=1)	Tell Him Why (=1)	Aggressive (=1)	Passive (=1)	Negotiation (=1)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Treat	12.358***	0.008	2.645*	0.014	0.046*	0.016	0.030	0.013	-0.017	0.014
	(1.773)	(0.013)	(1.479)	(0.027)	(0.026)	(0.025)	(0.022)	(0.010)	(0.025)	(0.014)
Strata Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PDS Lasso Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Omitted Group Mean	5.856	0.924	61.186	0.712	0.260	0.737	0.739	0.023	0.242	0.044
N	1352	1346	1345	1345	1345	1345	1345	1345	1345	1345

Notes: The outcomes are the same as in Table 1 except they come from EL2 rather than EL1. Standard errors are clustered by meeting group. * p <0.10, ** p < 0.05, *** p < 0.01.

Table A.9: Effects on Husbands' Reports of Women's Communication at Endline 2

	Initiate Conversation, Vignette	Total Assertive Communication, Vignette	Components of Assertive Communication, Vignette				Other Communication Styles, Vignette		
	(=1)	% of Components Used	Summarize Situation (=1)	Describe Emotions (=1)	Tell Him What (=1)	Tell Him Why (=1)	Aggressive (=1)	Passive (=1)	Negotiation (=1)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Treat	-0.002	0.827	0.026	0.004	-0.011	0.014	-0.005	0.023	-0.030**
	(0.016)	(1.527)	(0.028)	(0.026)	(0.024)	(0.027)	(0.008)	(0.021)	(0.012)
Strata Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PDS Lasso Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Omitted Group Mean	0.923	59.712	0.649	0.216	0.784	0.739	0.018	0.137	0.059
N	1119	1115	1115	1115	1115	1115	1115	1115	1115

Notes: This table uses the same outcomes as columns (2)-(10) of Table A.8, but instead of using women's responses, uses husbands' predictions of their wives' communication styles. Standard errors are clustered by meeting group. * p <0.10, ** p < 0.05, *** p < 0.01.

Table A.10: Effects on Women's Psychology and Gender Attitudes

	GSE Index	Happiness (1-4)	Progressive Gender Attitudes Index	Components of Gender Attitudes Index			
				W Work OK	W Different Opinion OK	H Know Better	H Should Earn More
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Treat	0.013	-0.036	-0.008	0.005	-0.015	-0.020	0.010
	(0.059)	(0.039)	(0.049)	(0.015)	(0.015)	(0.026)	(0.018)
Strata Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PDS Lasso Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Omitted Group Mean	0.000	3.439	-0.000	0.912	0.102	0.555	0.855
N	1406	1405	1407	1407	1403	1398	1405

Notes: All outcomes are from EL1. The outcome in column (1) is an index of items from the General Self-Efficacy Scale, where each component is a response from 1-4 to an item (1 - No, completely; 2 - No, somewhat; 3 - Yes, somewhat; 4 - Yes, completely). Each women randomly received either items 1, 2, 4, 7, 8 or 3, 5, 6, 9, 10 from the following list : 1) *Can you always manage to solve difficult problems if you try hard enough?*, 2) *If someone opposes you, Can you find some way to get what you want?*, 3) *Is it easy for you to stick to and accomplish your goals?*, 4) *Are you confident that you could deal efficiently with unexpected events?*, 5) *Do you know how to handle unforeseen situations by using your resourcefulness?*, 6) *Can you solve most problems if you invest the necessary effort?*, 7) *Can you remain calm when facing difficulties by relying on your coping abilities?*, 8) *When you are confronted with a problem, can you usually find several solutions?*, 9) *If you are in trouble, can you usually think of a solution?*, and 10) *Can you usually handle whatever comes your way?*. The outcome in column (2) is women's responses to the question: *Overall in life, would you say you are: 1 - Not at all happy, 2 - Not very happy, 3 - Rather happy, 4 - Very happy.* The outcome in column (3) is an index of responses to the following questions concerning gender attitudes: *Is it alright if women go out for work to earn money?*, *Is it alright for women to have different opinions than their husbands?*, *Husbands generally know better than wives about what is best for the family?*, and *A husband should earn more than his wife?*. For each question, an indicator is created for respondents responding 'Yes'. For the last two questions, this indicator is multiplied by -1 before indexing, as a response of 'Yes' indicates a less progressive attitude. The outcomes in columns (4)-(7) are the indicators for responding 'Yes'. Standard errors are clustered by meeting group. * p <0.10, ** p < 0.05, *** p < 0.01.

Table A.11: Effects on Obeetee Program Participation

	Ever Attend Obeetee Program (=1)									
	Dec. (1)	Jan. (2)	Feb. (3)	Mar. (4)	Apr. (5)	May (6)	Jun. (7)	Jul. (8)	Aug. (9)	Sep. (10)
Treat	-0.006	-0.017	-0.020	-0.018	-0.012	-0.017	-0.008	0.002	-0.009	-0.014
	(0.020)	(0.019)	(0.019)	(0.018)	(0.015)	(0.016)	(0.015)	(0.013)	(0.014)	(0.014)
W More Interested	-0.017	-0.021	-0.022	-0.012	0.021	0.011	0.012	0.007	-0.006	-0.013
	(0.022)	(0.021)	(0.021)	(0.019)	(0.018)	(0.018)	(0.017)	(0.014)	(0.015)	(0.015)
Treat x W More Interested	0.052*	0.066**	0.064**	0.054**	0.006	0.014	0.020	0.023	0.032*	0.040**
	(0.028)	(0.028)	(0.027)	(0.026)	(0.021)	(0.021)	(0.021)	(0.018)	(0.019)	(0.018)
P-Val: Treat + Treat X W More Interested = 0	0.054*	0.036**	0.062*	0.090*	0.735	0.863	0.467	0.097*	0.119	0.070*
Strata Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PDS Lasso Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Omitted Group Mean	0.091	0.089	0.089	0.078	0.043	0.048	0.041	0.030	0.041	0.046
N	1523	1523	1523	1523	1523	1523	1523	1523	1523	1523

Notes: The outcomes for columns (1)-(10) are indicators for a woman ever appearing as working in a loom center register at least once in the given month. Standard errors are clustered by meeting group. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.12: Differences in Obeetee Earnings Among Participants

	Earnings from Obeetee (Rs.)									
	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Treat	-206.850	-181.902	97.673	321.295	-229.659**	-605.385*	-193.648	64.102	67.193	155.154
	(199.510)	(186.861)	(218.353)	(269.955)	(101.777)	(307.256)	(203.213)	(126.711)	(287.924)	(281.169)
W More Interested	-498.508*	-142.659	27.927	465.925*	10.134	-212.822	10.513	47.007	136.152	190.798
	(283.645)	(146.553)	(226.455)	(246.315)	(123.994)	(309.812)	(226.036)	(148.548)	(304.543)	(317.911)
Treat x W More Interested	761.287**	480.577	-0.154	-538.851	203.842	1022.218**	673.208*	-51.598	9.462	293.498
	(347.809)	(292.380)	(367.458)	(412.445)	(239.028)	(478.154)	(339.077)	(213.840)	(303.251)	(367.425)
P-Val: Treat + Treat X W More Interested = 0	0.051*	0.200	0.725	0.445	0.912	0.311	0.153	0.952	0.751	0.104
Strata Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Table 2 Lasso Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Omitted Group Mean	4354.469	3418.910	3140.064	2919.803	847.583	2149.060	2303.675	1302.765	2178.070	2291.050
N	143	126	121	117	83	72	75	84	57	57

Notes: This table replicates analysis done in Columns (3)-(12) of Table 2, except the sample is restricted to women who attended a loom center at least once in the given month. Controls are the ones selected by PDS Lasso in the corresponding column of Table 2. For example, the controls in column (1) are the same as the controls selected by PDS Lasso in column (3) of Table 2, and so on. Standard errors are clustered by meeting group. * p <0.10, ** p < 0.05, *** p < 0.01.

Table A.13: Effects on Women Doing Various Activities

	Women's Activities Index		Any Employment, Last 3 Months (=1)		Visited Natal Village, Last 3 Months (=1)		Visited Market, Last 3 Months (=1)		Got New Saree, Last 3 Months (=1)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Panel A: Endline 1										
Treat	-0.113**	-0.120**	0.007	-0.012	-0.063*	-0.063	-0.035	-0.042	-0.053**	-0.076**
	(0.053)	(0.053)	(0.026)	(0.035)	(0.036)	(0.046)	(0.022)	(0.026)	(0.026)	(0.030)
W More Interested in Activities Index		-0.025								
		(0.035)								
Treat x W More Interested in Activities Index		0.046								
		(0.047)								
W More Interested in Activity				-0.018		0.043		-0.071*		-0.089**
				(0.035)		(0.046)		(0.037)		(0.044)
Treat x W More Interested in Activity				0.044		0.002		0.029		0.091
				(0.047)		(0.065)		(0.048)		(0.060)
P-Val: Treat + Treat X W More Interested in Activity = 0				0.364		0.229		0.760		0.767
Strata Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PDS Lasso Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Omitted Group Mean	-0.000	-0.000	0.367	0.379	0.575	0.562	0.821	0.825	0.417	0.438
N	1407	1403	1407	1393	878	874	1407	1391	1404	1394
Panel B: Endline 2										
Treat	-0.036	-0.037	0.015	-0.035	-0.016	-0.026	0.006	0.002	-0.036	-0.027
	(0.057)	(0.057)	(0.027)	(0.035)	(0.028)	(0.038)	(0.019)	(0.020)	(0.029)	(0.034)
W More Interested in Activities Index		-0.066*								
		(0.038)								
Treat x W More Interested in Activities Index		0.026								
		(0.051)								
W More Interested in Activity				-0.060		-0.013		-0.061**		-0.034
				(0.042)		(0.039)		(0.030)		(0.045)
Treat x W More Interested in Activity				0.110**		0.020		0.027		-0.029
				(0.054)		(0.050)		(0.039)		(0.060)
P-Val: Treat + Treat X W More Interested in Activity = 0				0.074*		0.872		0.433		0.294
Strata Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PDS Lasso Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Omitted Group Mean	-0.000	-0.000	0.408	0.430	0.635	0.638	0.881	0.893	0.579	0.586
N	1360	1356	1360	1344	1340	1331	1359	1345	1359	1349

Notes: The outcome in columns (1) and (2) is an index of indicators for women responding that they have performed the following activities in the last 3 months: any employment, as defined in Table 2, visiting their natal (place of birth) village/city, visiting the local market, and getting a new saree. These activities were selected as activities that husbands and wives in this setting often disagree about, with wives generally being more interested than their husbands in the wives doing the activities. The 'W More Interested in Activities Index' is an index of indicators for a women reporting being more interested in herself performing these activities than her husband at baseline. The outcomes for columns (3)-(10) are the indicators that compose the activity index. The 'W More Interested in Activity' variable is an indicator for a woman reporting being more interested in herself performing the given outcome activity than her husband at baseline. Panel A uses women's responses from EL1 and Panel B uses women's responses from EL2. Standard errors are clustered by meeting group. * p <0.10, ** p < 0.05, *** p < 0.01.

Table A.14: Effects in Lab-in-the-Field Games

	N Tokens W Ended With (1)
Treat	-0.023
	(0.187)
Pre-Play Communication	0.280*
	(0.160)
Doubling	1.526***
	(0.239)
Treat x Pre-Play Communication	0.010
	(0.243)
Treat x Doubling	0.406
	(0.355)
Pre-Play Communication x Doubling	0.112
	(0.346)
Treat x Pre-Play Communication x Doubling	-0.385
	(0.506)
P-Val: Treat + Treat X Communication = 0	0.942
P-Val: Treat + Treat X Doubling = 0	0.200
P-Val: Treat + Treat X Communication +	
Treat X Doubling + Treat X Communication X Doubling	0.978
Strata Controls	Yes
PDS Lasso Controls	Yes
Omitted Group Mean	5.170
N	2164

Notes: See Section 8 for details on the lab-in-the-field games. The data in this table are at the game × couple level. The outcome is the number of tokens the woman ended the game with. Pre-play communication is an indicator for the couple being able to communicate before the husband made his decision in the game. Doubling is an indicator for the game being the trust game, in which any tokens sent to the wife were doubled and she could then send back tokens to her husband. Standard errors are clustered by meeting group. * p <0.10, ** p < 0.05, *** p < 0.01.

Table A.15: Women's Interest in Work at Endline 2

	Change in W Interest (1-4), EL1 to EL2 (1)	H Knows W Interest (=1), EL2 (2)
Control, W Less or Equally Interested	-0.138**	
	(0.069)	
Control, W More Interested	-0.201***	
	(0.069)	
Treat, W Less or Equally Interested	-0.109*	
	(0.062)	
Treat, W More Interested	-0.132*	
	(0.072)	
Treat		-0.114***
		(0.038)
W More Interested		-0.099**
		(0.041)
Treat x W More Interested		0.166***
		(0.058)
P-Val: Treat + Treat X W More Interested = 0		0.252
Strata Controls	No	Yes
PDS Lasso Controls	No	Yes
Omitted Group Mean		0.420
N	1277	1053

Notes: The outcome in column (1) is the change in women's interest in working outside the home from EL1 to EL2, on a scale of 1 to 4 (1 = very uninterested, 2 = somewhat uninterested, 3 = somewhat interested, 4 = very interested). The regressors in column (1) are indicators for each of the four possible combinations of Treat and W More Interested. This regression does not include an intercept. The outcome in column (2) is an indicator for husbands correctly predicting their wives' interest in work at EL2. Standard errors are robust in column (1) and clustered by meeting group in column (2). * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Appendix B: Survey Measurement

B.1   Classification of Survey Responses into Communication Types

Answer options (NOT read aloud)

- Summarize the situation / decision [**Assertive**]

- Describe the emotions you are feeling about the situation [**Assertive**]

- Tell him what you want to do [**Assertive**]

- Tell him why you want to do it [**Assertive**]

- Ask him for permission to do what you want

- Ask him what he thinks should be done

- Tell him you will do whatever he wants [**Passive**]

- Tell him he's wrong / unreasonable / stupid / never lets you get what you want [**Aggressive**]

- Describe the emotions he is making you feel

- Offer a compromise (e.g. something in between, another decision) [**Negotiation**]

- Plead / beg

- Other