Cash Transfers and Role Models: Impacts on Women's Empowerment in Rural Kenya*

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Cash and asset transfer programs are widely used to improve household economic outcomes, but their impact on women's empowerment is mixed. In a four-arm field experiment with 3,000 rural Kenyan women, we examine the effects of augmenting unconditional lump-sum cash transfers with a workshop designed to raise women's aspirations through role model exposure and facilitated planning. We find that combining the cash transfer and workshop increases women's share of household resources and reduces intimate partner violence compared to the cash transfer alone. Our study highlights potential gains for women from combining poverty reduction strategies with psychological empowerment interventions.

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1 Introduction

Cash or asset transfer programs improve short- and, in some cases, long-term household welfare (Bandiera et al., 2017; Banerjee et al., 2015b; Egger et al., 2022; Haushofer and Shapiro, 2016, 2018). However, their impact on women's economic position in the household – women's ownership of household assets or say in household decisions – remains limited, even when interventions go to women directly.[1] Effects of transfers on women's experience of intimate partner violence (IPV) are also mixed, with studies reporting reductions, no impact, or, in some cases, increased violence for certain subgroups (Aggarwal et al., 2022; Baranov et al., 2021; Buller et al., 2018).

To try to enhance the effects of transfer programs on women's outcomes, researchers have tested adding complementary programming targeting gender norms or household dynamics. However, these complementary programs have had limited effects on IPV or women's outcomes relative to the economic intervention alone and are often expensive and time-consuming (Angelucci et al., 2023; Green et al., 2015; Ismayilova et al., 2018; Roy et al., 2019). Given the widespread adoption of cash and asset transfers as poverty alleviation tools and their proven benefits for many households, identifying scalable, cost-effective strategies to enhance their impact on women is a critical priority.

This paper studies a new type of complementary programming which could improve women's outcomes from transfer programs: targeting women's aspirations through exposure to role models and planning techniques. We run a four-arm village-level randomized controlled trial (RCT) with 3,000 married women in rural Kenya.[2] In one experimental arm, women are invited to a one-session workshop designed to raise their aspirations ("workshop"). They watch a video about the life stories of two local fictional female role models who work with their husbands to improve their economic position by setting higher aspirations; defining concrete, immediate steps to achieve them; and planning for obstacles. Women then participate in facilitated group exercises to practice these techniques. Men were not invited to the workshop due to logistical challenges and evidence suggesting their involvement may backfire (Cullen et al., 2024; Gazeaud et al., 2023). In a second arm, women are invited to a placebo workshop where they watch a video containing the same images and descriptions of economic opportunities but without inspiring life stories and psychological techniques, and complete exercises involving group interaction ("placebo"). In a third arm, they are offered a large unconditional lump sum cash transfer of US$2,237 PPP and the placebo workshop ("cash"). The transfer is labelled as being for the household.[3] Finally, the combined arm is offered

[1] For example, Roy et al. (2015) and Banerjee et al. (2015b) find graduation-type programs for households do not increase women's share of household assets or say in household decision-making, respectively. Egger et al. (2022) find no effects of cash transfers given to the household on IPV. Haushofer and Shapiro (2016) find short-term improvements in IPV when a cash transfer goes to the woman (but not when the transfer goes to the man), but this does not persist in the long term (Haushofer and Shapiro, 2018).

[2] The women belong to households that are randomly drawn from a pool of the poorest households in the villages, identified using the partner NGO's poverty targeting criteria.

[3] Households need to nominate one spouse's mobile money account to receive the transfer. Of married households, 82% nominated the woman's mobile money account. This is likely because women were home during the day when

both the cash transfer and aspirations workshop ("combined"). We measure women's empowerment via two key outcomes of intra-household bargaining – their control of household resources and their experience of IPV – with surveys conducted with women on average one year after the first cash transfer tranche.

This paper shows that combining the aspirations workshop with the cash transfer enhances the effects of the cash transfer *on women's outcomes*. The combined intervention reduces an index of the frequency of IPV and increases an index of women's control (ownership) of household assets, compared to the cash transfer arm. Neither the cash transfer nor the aspirations workshop on their own improve these outcomes, compared to the placebo intervention. A companion paper, Orkin et al. (2023), studies effects *on household-level outcomes*, finding that both the cash transfer and the workshop treatment on their own have substantial positive effects on household asset wealth, consumption, revenue, investment and labour supply. However, combining the workshop and the cash transfer does not improve the effects of the cash transfer on its own. These findings suggest that some complementary programming, such as an aspirations workshop, can enhance the benefits of cash transfers for women without affecting their benefits for households.

We have four main findings. First, we find there are benefits in terms of women's experience of violence from adding the aspirations workshop to the cash transfer. There is no significant change in a prespecified index of the frequency of physical and sexual violence in the last 12 months for any treatment arm. The cash intervention leads to an insignificant increase in the index, while the combined intervention leads to an insignificant decrease, such that the index is significantly lower, by 0.11 standard deviations, in the combined group compared to the cash group.[4] We also separately measure the prevalence of physical injuries as a result of IPV, to capture the severity of violence. Injuries significantly increase in the cash group. This effect is mitigated in the combined arm, where there is no effect on injuries.

Second, we show evidence that the combined intervention improves women's control of household resources, while the cash and workshop interventions on their own have little impact. While household durable assets increase substantially in both the cash and combined arms (Orkin et al., 2023), we show that only women in the combined arm are able to increase their control over these assets. Similarly, the likelihood of the woman owning a non-farm enterprise increases in both the cash and combined groups. However, only women in the combined group report a significant increase in their say in decisions related to household enterprises and a significant increase in input into how the money earned from these enterprises is spent. This suggests that the combined intervention increases women's control over household resources more than either intervention alone.

Third, we find stark heterogeneity in the treatment effects of the cash transfer on IPV,

the partner NGO registered households.

[4]The insignificant effect of the cash transfer on violence is consistent with other studies of similar transfers in the same region of Kenya (Egger et al., 2022; Haushofer et al., 2020).

highlighting that the initial conditions in the household shape how couples bargain over a large increase in resources and the resulting allocation of resources between them. We identify households with a high predicted frequency of violence given their baseline characteristics, following Abadie et al. (2018). In households at high risk of IPV, the cash transfer increases the violence index by 0.3 standard deviations and leads to a rise in reported injuries. However, high-risk households receiving the combined intervention do not experience this increase: IPV is significantly lower for high-risk households that receive the combined intervention compared to high-risk households that receive only the cash transfer, hinting that combining the workshop with the cash transfer mitigates the negative impact of the cash transfer for this high-risk group. In contrast, the low-risk group receiving the cash intervention sees an insignificant decline in IPV compared to the placebo group, while the low-risk group receiving the combined intervention sees a significant decline. We also confirm substantial heterogeneity in treatment effects on the IPV index in the cash arm using causal forests. This finding highlights the need to consider vulnerable groups in the design of cash transfers and social protection programs, for example through complementary interventions.

Fourth, we look at a range of potential mechanisms measured alongside violence and control of resources. We measure self-reported scales capturing women's agency, relationship quality with their husbands, women's well-being, and women's attitudes towards violence and exercise of power by the husband. We find that the combined intervention improves women's say in decision-making, women's relationships with their partners, and women's well-being relative to the placebo arm. The cash and the workshop interventions on their own do not significantly improve these measures. We also measure aspirations as an index of the levels of assets, income, and children's education women would like their household to reach a decade in the future. The cash and combined interventions both significantly increase aspirations, but the combined intervention has insignificantly larger effects, consistent with our other findings.

We interpret these results through a non-unitary household bargaining model, where intra-household resource allocation depends on the bargaining power of individuals (Browning et al., 1994; Browning and Chiappori, 1998; Chiappori, 1988, 1992). For both men and women, bargaining power is partly determined by the value of the "outside option": their utility from leaving the marriage or, in settings like ours where divorce is rare, settling on a noncooperative equilibrium.[5] The model suggests that the effects of cash transfers on IPV and women's control of resources are ambiguous and may be heterogeneous for different types of households, consistent with our findings (Angelucci and Heath, 2020; Baranov et al., 2021). An increase in income controlled by the woman increases her utility from a noncooperative equilibrium, and thereby her intra-household bargaining power. This may in turn decrease violence. It may also reduce violence by alleviating poverty-related stress. However, men may increase violence to extract resources or as a reaction to their relative status being threatened.

[5]In a census of nearly 400 villages in the region, the separation/divorce rate was just 3%.

The workshop has the potential to influence women's bargaining power through multiple channels, though, consistent with our findings, it may not be sufficient to change bargaining power on its own. Firstly, raising the woman's economic aspirations for her household and her children may encourage the woman to take up or take control of economic activities, increasing her ability to earn and hence her bargaining power. Secondly, the workshop may have changed conceptions of relationships by showing role models who live alternative family lives (La Ferrara et al., 2012). The role models in the videos achieve economic success in part through positive consultative relationships where they and their partners jointly develop aspirations and work towards them by supporting each other. Exposure to such examples of positive marriages may lead women to perceive their own relationships more negatively, reducing their utility from the marriage. This may increase women's intra-household bargaining power by lowering their utility from staying in a cooperative equilibrium. Finally, women may strive to communicate better with their partners after seeing role models who cooperate with their spouses. Importantly, as we find, the workshop may be more effective when combined with the cash transfer, as it enhances women's bargaining power and communication skills at a time when the household receives a large increase in resources.

We make three contributions to the literature. One, we contribute to the literature on how to design anti-poverty programs that target household welfare so they improve outcomes for women. Existing studies have added multiple weeks of complementary programming targeting gender norms or household interactions, or targeted intrahousehold dynamics by engaging men, but with mixed effects (Angelucci et al., 2023; Green et al., 2015; Ismayilova et al., 2018; Haushofer et al., 2020; Roy et al., 2019). Relative to these, we study an alternative complementary intervention: using role models and short exercises to boost women's aspirations. The intervention is short, at 80 minutes relative to the multi-week to year-long programs previously studied, and does not require men's involvement. This approach proves effective. Further, our use of a placebo intervention allows us to rule out that effects arise simply from women meeting in groups. By examining a comprehensive range of outcomes, we can shed light on the mechanisms through which the interventions operate.

Second, we contribute to the literature studying the effects of cash transfers on IPV. There are mixed findings in the literature on the average effects of transfers on IPV, consistent with our finding that the unconditional cash transfer alone has no effects on IPV on average (Baranov et al., 2021). A small but growing evidence base finds heterogeneity in effects for different subgroups, finding no change or even an increase in violence for certain sub-groups receiving cash transfers (Angelucci, 2008; Hidrobo and Fernald, 2013; Heath et al., 2020; Cullen et al., 2024) or employment (Kotsadam and Villanger, 2022). Our contribution is to provide evidence that adding the aspirations workshop simultaneously can mitigate this increase.

Third, we provide evidence that an aspirations and planning intervention does not change outcomes for women when given alone, even though it improves outcomes for the household (Orkin

et al., 2023).[6] Our work is the first paper to study the effects of experimental variation in exposure to strong female role models in the media on women's empowerment outcomes. Our findings contrast with non-experimental work, which suggests exposure to empowered women in soap operas or via cable TV may improve women's empowerment, reducing fertility (La Ferrara et al., 2012), increasing divorce rates (Chong and Ferrara, 2009), reducing acceptability of domestic violence and increasing female autonomy (Jensen and Oster, 2009). It also contrasts with findings on real-life role models: in India, reserving leadership roles for women raised aspirations for girls (Beaman et al., 2012), and in Nicaragua, exposure to female leaders boosted education and nutrition investments from a cash grant (Macours and Vakis, 2014). In our setting, among extremely poor households, we find an aspirations intervention does not affect married women's control of resources or IPV on its own, but does improve them when combined with a cash transfer, highlighting the importance of more bundled programming targeting economic and psychological constraints simultaneously.

The rest of the paper is organized as follows: we provide details of the experiment in section 2, a conceptual framework in Section 3, the data and measurement in Section 4 and the estimation strategy in Section 5. In Section 6, we report the main and heterogeneous treatment effects on women's economic position and experience of violence, with a discussion on mechanisms. Section 7 summarises the findings and concludes.

2 Experiment Details

2.1 Recruitment of the Sample

We draw the sample from a randomized control trial described in Orkin et al. (2023) (henceforth referred to as the 'Household Study') in Homa Bay and Siaya counties in western Kenya. A short census was conducted in all villages to collect data for a simple proxy means test used by the partner GiveDirectly to assess if households are eligible for cash transfers. Among households means-tested as poor, only households with an adult woman are included in the sample. This allowed the design of the workshops to be targeted at one gender by producing videos featuring female role models and hiring female staff to facilitate workshops. A random sample was drawn of roughly 20 households per village that contain an adult woman, are non-polygamous, and are means-tested as poor.[7]

This resulted in a Household Study sample of 8,309 primary female respondents in non-polygamous households from 415 villages. This paper uses a subset of the Household Study sample in one of the two study counties. We study 3,291 women in non-polygamous marriages

[6] Like Orkin et al. (2023), prior work on the household effects of similar interventions finds that even one-off exposure to role models through video can improve asset ownership, consumption or household investment in education and health (Banerjee et al., 2015a, 2019; Bernard et al., 2018; Ravallion et al., 2015; Riley, 2024).

[7] 4.5% of poor households without an adult woman and 11% of poor households which are polygamous are dropped. The Household Study only considered non-polygamous marriages as it would have been complicated to decide who to target for the workshop intervention in polygamous households.

below the age of 60 at baseline from all 176 villages in Siaya county.

2.2 Setting

The population in Siaya, a county on the border with Uganda, is primarily from the Luo ethnic group. The region is patrilineal (inheritance is through the male line) and patrilocal (couples settle in the man's village after marriage). Payment of a bride price is a common cultural practice. In the census of study villages, the separation/divorce rate was just 3% and 77% of those currently married reported being in non-polygamous marriages. There were only seven (0.3%) women who reported being separated/divorced over a one-year period in the study sample.[8] This low rate of separation/divorce is consistent with ethnographic evidence on the stability of marriages in this region (Potash, 1978).

Rates of intimate partner violence are high in Kenya in a nationally representative sample: one-third of women have experienced intimate partner violence in the last year; 50% of women have ever experienced it (United Nations, 2015). Acceptance of violence is also common, with 45% of men and 50% of women aged 15-49 agreeing that a husband is justified in hitting or beating his wife for at least one of five specified reasons. However, economic participation of women is also common, with almost 50% of rural women earning any cash income in the past 12 months. Women also participate in household decisions, with 70% of married women reporting input into the decision-making process for major purchases (United Nations, 2015). There are no major restrictions on women's movement outside the household. In Section 4.2 we discuss women's status in the study placebo group.

2.3 Interventions

The randomization was at the village level with all respondents in a village assigned to receive one of the four treatments: *Cash* (unconditional cash transfer, placebo video and exercise), *Workshop* (aspirations video and exercises), *Combined* (unconditional cash transfer, aspirations video and exercises) and *Placebo* (placebo video and exercises). Village assignment to the four treatment arms was stratified based on location, village size, and household asset ownership levels.

There was a common intervention structure for the aspirations and placebo workshops: two back-to-back ten-minute videos, viewed by participants on a tablet, a facilitated drawing exercise and discussion, and the distribution of a reminder calendar and stickers. All workshops in Siaya occurred in groups of three to four, which were randomly assigned (see Orkin et al. (2023) for details).

Cash transfers were administered in three tranches: a small transfer ("token") of approximately US$203 PPP and two large lump sum transfers of approximately US$1,017 PPP each. Workshops were administered in the month around the date when the households received the second tranche

[8] 6% of the women reported that their spouse has taken another wife. There is no statistically significant difference across the arms in either outcome.

of US$1,016 PPP, so all cash-eligible households knew they were receiving the cash transfer by the time they attended a workshop.

2.3.1 Aspirations Workshop

The unique aspirations and planning workshop was designed to increase participants' aspirations, guide them in making concrete short- and long-term plans, and motivate them to take immediate action toward achieving their aspirations. The intervention is described in detail in Orkin et al. (2023).[9]

Aspirational Role Model Videos: The videos narrate the life stories of two fictional women from a similar area to the participants and from poor backgrounds. They succeeded in improving their socio-economic position by forming ambitious but attainable aspirations and working toward them over a number of years despite obstacles. The videos describe how they came to be successful, the obstacles they faced and some lessons they drew from their experiences. The characters also "model" the techniques for goal-setting and planning that the participants then learn in the exercises and link their use to achieving one's long-term goals or aspirations.

Role models are particularly powerful at raising people's aspirations. Social Learning Theory in psychology posits that people form aspirations with reference to what other people similar to them are able to attain. They can be influenced by others they know. Alternatively, exposure to media or stories depicting characters they identify with can generate resonant "vicarious experiences" (Bandura, 1977) of what a different life might be like.

The videos do not explicitly mention intimate partner violence or controlling behaviours by the spouse. However, through the role model channel, they may alter women's beliefs about what a good marriage looks like. The videos show women in positive, supportive and consultative relationships, who can change the household's economic circumstances with the help of their spouse. They work as a team, setting goals and making plans to overcome obstacles together. The men are shown supporting the women in setting up and running businesses. For example, at the end of the first story, the character is shown to be running a successful stitching business and she says "I came from humble beginnings. Like you. My husband and I worked together to get here. It wasn't easy. But now I have my own home, my own business and people working for me."

Exercises: After the videos, participants did a series of exercises. In the first exercise, participants are asked to think about and describe their lives in five years "after everything has gone as well as it possibly could" to inspire setting of aspirations (King, 2001). They are encouraged to think of "the realisation of their dreams" where they have "reached their full potential". Fieldworkers recorded the goals participants described. In the second exercise, fieldworkers relay participants' goals back to them. Participants select their most important and achievable goal and report how long it would take to achieve it (Morisano et al., 2010). In the third exercise,

[9]The video is available here.

participants decide on a step ("implementation intentions") that they would take in the next week towards their goal (Gollwitzer and Sheeran, 2006), potential obstacles and strategies to handle them (Duckworth et al., 2013) and how their lives would be better ("mental contrasting") if they achieve their aspirations and how it would make them feel (Oettingen and Gollwitzer, 2010).

At the end, participants were given a calendar depicting the two role models from the videos, and sayings that described the core spirit of each video. They also received a set of stickers from which they could choose ones that reminded them of the exercise and were encouraged to place these on the calendar. The video and exercise intervention took roughly 80 minutes to deliver.

The videos were filmed by a production company based on our scripts, with ordinary people who were paid to be amateur actors, near the study location. The stories are compilations of the life stories of real people we collected in qualitative work. The videos were extensively pilot-tested and adapted in two rounds of focus groups during which we received feedback that some women were struck by differences between the relationships modelled in the videos and their own experience.

2.3.2 Placebo Workshop

The placebo intervention includes a video about farming in rural Kenya and contains all potentially new information from the aspirations videos. It includes at least one shot of every scene and character from the aspirations videos, including introductory shots of scenery and couples working together. However, it excludes any elements likely to manipulate critical psychological variables, such as narratives, characters, emotions, or music.

The placebo group also participated in an exercise where they were reminded of the content of the video and they drew the scenes that were most memorable. However, they did not learn the Best Possible Selves, goal-setting, mental contrasting, implementation intentions or anticipation of obstacles techniques. They were also given a calendar (with a picture of a sunset and a tree) and stickers but were not told to think of these as representing their goals. The placebo intervention holds constant not only the information content of the role model video but also the exposure to a group, interaction with enumerators, exposure to media and time spent doing the exercises.

2.3.3 Unconditional Cash Transfer Intervention

The cash transfer is large and at US$ 2,237 PPP, it corresponds to roughly 75 percent of annual household expenditure for recipient households. Households were sent three mobile money[10] transfers: a small transfer ("token") of approximately US$203 PPP and two large lump sum transfers of approximately US$ 1,017 PPP each. The second and third transfers were made two and four months respectively after the first transfer.

[10]Households who did not have M-Pesa mobile money accounts were asked to register for M-Pesa at a network of agents in most small stores.

The partner NGO team offered the transfer to the household, explaining the size and timing of the transfer and that there were no conditions attached to the transfer. The household had to nominate one spouse's mobile money account to receive the transfer: 82% of the households in this study sample nominated the woman's account. The transfer was usually registered in the name of the household member who was at home at the time the partner NGO team visited, and this was usually the woman. For households where the transfer was not in the name of the woman, we asked the reason for this in the follow up survey. This was to understand if these households were systematically different from the rest of the sample. The primary reason given was practical considerations, such as the man already having an account or the woman having identification verification issues (Table C1). Only a small proportion of the households (6%) preferred it to be in the name of the primary male in the household.[11] Transfers were paused if there was conflict and couples were encouraged to resolve these conflicts. The NGO partner splits transfers equally between the partners if the conflict persists and cannot be resolved but transfers are never terminated because of spousal conflicts.

3 Conceptual Framework

In this section, we briefly sketch out how we expect the cash and the workshop interventions to impact women's bargaining power in the household and hence their outcomes. In the standard non-unitary household bargaining model, the intra-household resource allocation depends on the bargaining power of the individuals in the household (Browning et al., 1994; Browning and Chiappori, 1998; Chiappori, 1988, 1992). Individuals in the household, typically the man, may use violence to increase their bargaining power (Eswaran and Malhotra, 2011; Ramos, 2018). A key determinant of a women's bargaining power in the household is the value of her outside option, that is her utility from leaving the marriage or settling on a non-cooperative equilibrium. In the setting for this study, the divorce rate is very low (under 3%), so the relevant threat scenario in household bargaining over resources is non-cooperation, as in the 'separate spheres' bargaining model of Lundberg and Pollak (1993), instead of a divorce threat bargaining model.

Theoretically, it is not clear that a cash transfer will improve women's empowerment (Angelucci and Heath, 2020; Baranov et al., 2021). Transfers may reduce violence by reducing poverty-related stress, as found in some studies (Haushofer et al., 2019). To the extent that additional resources are controlled by the woman, transfers may increase women's bargaining power and decision-making power. In contrast, the increase in resources can also trigger intra-household bargaining over how

[11] We examine a range of potential demographic, economic and psychological predictors of the cash transfer recipient, and find that the woman's age is the only variable selected by Lasso as significantly predicting whether the woman was chosen as the recipient. Further, we interact each of the treatment arms that included the cash transfer with a dummy variable for the recipient being the woman, and find no differential effects of the treatments by recipient gender for our primary outcomes.

these are to be spent or who controls purchases. This can shift relative resource control across individuals within the household and lead to increases in IPV, as men use violence to assert control over resources.

The workshop may also affect women's bargaining power through multiple possible channels. Firstly, raising the woman's aspirations for her household and her children may encourage the women to take control of economic activities to try to achieve those aspirations. As a result, her ability to earn an income will increase, improving her outside option and hence raising her bargaining power. However, a backlash from raising women's aspirations is also a possibility (Anderson and Bidner, 2022). Secondly, the workshop may have changed women's conceptions of relationships. The role models we present are shown in positive consultative relationships where they achieve economic success with support from their partners. Seeing examples of positive, supportive marriages may worsen women's perceptions of their own marriage. This may reduce women's utility from the marriage, thereby increasing women's intra-household bargaining power by lowering their utility from staying in a co-operative equilibrium when their beliefs about what constitutes a good marriage have changed. Consistent with this idea, exposure to role models in soap operas with alternative and more modern family lives reduces fertility and domestic violence and increases divorce (Chong and Ferrara, 2009; Jensen and Oster, 2009; La Ferrara et al., 2012). Finally, seeing an example of role models communicating successfully with their spouses may cause women to adopt a strategy to better bargain with their partners through improving communication with their partners.

Finally, even if the interventions on their own do not improve bargaining power, there may be effects from receiving both interventions together. For example, it may not be possible for women receiving the workshop intervention on its own to bargain over existing household resources or to take control of existing assets. However, the workshop intervention may enable women to bargain better when there is an exogenous increase in resources available to bargain over from the cash transfer.

4 Data and Measurement

We collect endline data from 3,000 monogamously married women. Most of the outcomes reported on in this paper are collected in the 'Gender Study' survey from February to April 2018, an average of 12 months after the households received the first tranche of the cash transfer (US$203 PPP) and 8 months after the last tranche of US$ 1,107.[12] This survey measured various dimensions of women's empowerment. It included questions related to the control of household resources, including assets, consumption and small enterprises, the experience of sexual, physical, emotional, and controlling IPV and injuries resulting from IPV, say in economic and non-economic decision-making,

[12] 95% of the sample was surveyed during this period with the rest (5%; 140 respondents) being interviewed at different points during mop up activities between September 2018 and February 2019.

relationship with her partner, overall well-being, and own and perception of community attitudes towards women. All variable definitions are in Appendix C.1.

We also use data on a small number of variables – household consumption expenditure, women's aspirations, and some secondary psychological mechanisms for women – from the Household Study endline survey. This survey was conducted with the same primary female respondent three to six months after the Gender Study survey. Note that the Household Study endline was unable to survey 76 respondents (evenly distributed across all arms) who are part of this study sample, so the sample size falls to 2,863 for any analysis using Household Study data.

The baseline survey was carried out with the same female respondent an average of 5 months before the start of the cash transfers, before any interventions were announced. The baseline survey focused on demographics and household economic outcomes such as consumption expenditure, asset wealth and household economic activity. No measures of women's empowerment or experience of domestic violence were included in the baseline survey.

4.1 Measuring Violence

All surveys for this study were administered face-to-face and we followed Demographic and Health Surveys (DHS) protocols and ethical guidelines for conducting research on IPV. Questions related to physical and sexual violence and any injuries sustained due to violence were elicited using Audio Computer-Assisted Self-Interview Software (ACASI). ACASI was used to alleviate concerns that women would not want to directly report violence to the enumerator. ACASI allowed the respondent to listen through headphones to recorded questions in the local language, Luo, and answer directly on the tablet by selecting coloured shapes corresponding to each answer choice. ACASI was extensively piloted to ensure respondents understood it and respondents had several practice questions at the start of this module. Like other studies that have used ACASI, we find much higher rates of violence reported than with traditional face-to-face questioning (Park et al., 2021; Peterman et al., 2023).

We captured the experience of IPV over the past 12 months using the standard DHS questions asking about the frequency of 6 different forms of physical and 4 different forms of sexual violence. We also consider the severity of violence, in the form of the frequency of 3 different types of injury resulting from physical or sexual violence, something that has rarely been examined in the literature.

4.2 Study Descriptives

We report summary statistics at endline for the placebo group in Table 1.[13] We see that women are 33 years old on average, with 10 years of education. They have been married for 14 years, and their spouses are 6 years older with one additional year of education. They have 3.8 children on average.

[13]We use this sample as the baseline survey did not include any measures of women's empowerment.

The economic empowerment of women is moderately high. 86% of women own fully or jointly at least two small assets or one large asset in the household. Women own jointly or fully 53% of assets in the household. Enterprise ownership by women is common: 44% of women in the placebo group own a non-farm enterprise at endline. Women have input in 48% of the production decisions and 47% of the income decisions for household enterprises.

Intimate partner violence in the last 12 months is extremely prevalent and frequent in this sample. On average, 61% of women experienced any physical violence and 51% any sexual violence in the last 12 months in the placebo group. 21% of women experienced injuries resulting from this violence. Women were asked about the frequency of experiencing different types of violence on a scale of 0 (never), 1 (sometimes), and 2 (often). We constructed physical violence, sexual violence, and injuries from violence scores by aggregating responses to 6, 4, and 3 questions, respectively. On average, in the placebo group, women score 2.3 on a scale of 0-12 for how often they experience physical violence, 1.4 on a scale of 0-8 for how often they experience sexual violence and 0.4 on a scale of 0-6 for how often they experience injuries from violence.

Attitudes are also accepting of violence and male power. We ask women whether they agree with men exercising power in 6 different situations. For the same questions, we ask whether they think the majority of the village would agree with it. We construct an exercise of power score for women's own attitude and a score for the perception of village attitudes by aggregating indicator variables for each statement the woman *disagrees* with. Hence, higher values correspond to being *less* accepting of such behaviours. Women disagree to 4.25 and believe the majority of the others in their community disagree with 3.46 of the 6 statements on men's expression of power. We also ask whether the woman agrees it is justified for a man to use violence against his wife in 7 different situations. Once again, we also ask about the perception of village attitudes and construct a score aggregating indicator variables for disagreement with each statement. Women disagree on only 3.14 of the 7 reasons for men to use violence and think others disagree on 2.45 reasons on average.

5 Estimation

We estimate models of the form:

$$Y_{iv} = \beta_C \cdot \text{Cash}_v + \beta_P \cdot \text{Workshop}_v + \beta_{CP} \cdot \text{Combined}_v + \alpha_v + \epsilon_{iv}, \tag{1}$$

where i and v index individuals and villages, Y_{iv} denotes the outcome of interest. $Cash_v$, $Workshop_v$, $Combined_v$ are indicators for assignment to the treatment arms: equal to one for villages assigned to receive the cash transfer only, the aspirations workshop only or to receive the combined intervention respectively. α_v is a stratification fixed effect (the constant term is subsumed into the vector of fixed effects). We report heteroskedasticity robust standard errors clustered by

Table 1: Summary statistics

	Mean	Std dev.	Min	10th	90th	Max
Demographics						
Age	33.38	8.84	18.00	24.00	46.00	60.00
Education (yrs)	10.85	3.37	0.00	7.00	13.00	16.00
Years Married	13.94	9.19	1.00	4.00	28.00	43.00
Partner Age	39.74	11.51	18.00	28.00	57.00	87.00
Partner Education (yrs)	11.74	3.44	0.00	7.00	16.00	16.00
Number of Children	3.80	1.81	0.00	2.00	6.00	9.00
Economic						
Share of Asets Owned	0.53	0.26	0.00	0.20	0.88	1.00
Asset Ownership Indicator	0.86	0.35	0.00	0.00	1.00	1.00
Enterprise Ownership	0.46	0.50	0.00	0.00	1.00	1.00
Input in Production Decisions	0.48	0.50	0.00	0.00	1.00	1.00
Input in Income Spending Decisions	0.47	0.50	0.00	0.00	1.00	1.00
IPV						
Physical Violence	2.29	2.73	0.00	0.00	6.00	12.00
Sexual Violence	1.35	1.84	0.00	0.00	4.00	8.00
Injuries	0.43	1.05	0.00	0.00	2.00	6.00
Any Physical Violence	0.61	0.49	0.00	0.00	1.00	1.00
Any Sexual Violence	0.51	0.50	0.00	0.00	1.00	1.00
Any Injuries	0.21	0.41	0.00	0.00	1.00	1.00
Attitudes						
Exercise of Power (own attitude)	4.25	1.29	0.00	3.00	6.00	6.00
Justifiable Violence (own attitude)	3.14	2.22	0.00	0.00	7.00	7.00
Exercise of Power (village attitude)	3.46	1.54	0.00	1.00	5.00	6.00
Justifiable Violence (village attitude)	2.45	2.15	0.00	0.00	6.00	7.00
Observations	711					

Notes: This table shows summary statistics at endline for the Placebo group. All demographic information is for the respondent woman. Asset ownership indicator is a binary indicator for any two small or one large asset owned fully or jointly by the woman. Share of assets owned is is the proportion of household assets which are owned by the woman, or jointly by the woman and family members, Enterprise ownerships is an indicator variable for if the woman owns a non-farm enterprise, Input in production decisions is the proportion of activities the woman had input in making at some of the decisions. Input in income spending decisions is the proportion of activities for which the woman had input in making at least some of the decisions about how to spend the income is generated. Physical, sexual and injuries are the total scores for responses to a series of questions about the experience of violence from an intimate partner in the last 12 months that are answered on a 0 to 2 scale with 0 being never, 1 sometimes and 2 often. The physical score is based on a response to 7 questions, the sexual score is based on a response to 4 questions and the injuries score is based on a response to 3 questions. violence in the last 12 months. Any violence is indicator for any physical or sexual violence experienced. Exercise of power (own) ranges from 0 to 5 and is the sum of five indicator variables for if the woman disagrees with the man exercising power in specific situations. Exercise of power (village) is the response to the same set of questions on the perception of what an average person in the village thinks. Justifiable violence (own) ranges from 0 to 5 and is the sum of five indicator variables for if the woman disagrees with the man using violence in specific situations. Justifiable violence (village) is the response to the same set of questions on the perception of what an average person in the village thinks.

the village.

All outcomes are measured for the respondent or households that received one of the treatment or placebo interventions, so i indexes individuals or households. The parameters of interest are $(\beta_C, \beta_P, \beta_{CP})$, respectively the treatment effects of being assigned to only the cash transfer, to only the aspirations workshop, or to the combined intervention, versus the placebo intervention. All indices are created using the approach suggested by Anderson (2008).[14] The estimation and inference methods and outcome measures are prespecified. We make a few departures from the pre-analysis plan in the variable definitions. These are listed in appendix C.2.

We adjust the p-values of the coefficients of interest for multiple statistical inference by calculating sharpened q-values that control for the false discovery rate (FDR) for all variables within each primary class of outcomes. Rather than pre-specifying a single q, we report the minimum q-value at which each hypothesis is rejected, following Anderson (2008) and Benjamini et al. (2006). We adjust across the two pre-specified primary families of outcomes: IPV and control of assets. We also correct across all the intermediary outcomes.

5.1 Integrity of the Experiment

The randomisation results in an overall balanced sample of village and household characteristics (Orkin et al., 2023). We also have good balance for this study sample on a pre-specified set of relevant demographic and economic variables (Table C2). The endline sample, shown in Table C3, is also balanced.

The overall rate of attrition from the Gender Study endline, measuring women's economic position in the household and IPV, is 11%, mainly due to respondents having moved away to a different location (40% of attrited individuals) followed by respondents not giving consent (29% of attrited individuals). Attrition is uncorrelated with treatment (Table C4).[15]

Compliance with treatment was high, with 91% of the respondents receiving the assigned intervention.[16]

6 Effects on Women's Empowerment

Orkin et al. (2023) show that there is an improvement in the household's living standards – consumption, asset wealth and revenue – in all treatment arms and that the workshop has a high

[14] First, we re-code all outcomes such that higher values correspond with a similar direction of change within an index. Second, we standardise the outcomes to have a mean of zero and a standard deviation of one. Third, we calculate the average of the standardised constituent outcomes, weighted by the inverse covariance matrix.

[15] As noted in Section 4, we use a few outcomes from the the Household Study endline, in which an additional 76 respondents attrited. This attrition is also not correlated with treatment.

[16] There are some small differences in compliance rates between treatments, mainly due to cash compliance being slightly less than the placebo or aspirations workshop compliance. 92% of the placebo and 94% of the aspirations workshop intervention arms received the assigned intervention, while 89% and 90% of the cash and combined treatments respectively received the intervention as allocated.

benefit-cost ratio. These results hold for the sub-sample of married women being analyzed in this paper (Appendix Table C5). Not surprisingly, given the size of the cash transfer, the size of the economic improvement is much larger in the cash and combined treatment arms.

In this paper, we examine the intra-household impacts by measuring the impact on women's empowerment. We do not make any claims about the relative role of improvements in the household's absolute economic position and improvements in their empowerment in women's overall welfare. We merely seek to study what the effects are and do not make claims regarding women's preferences.

6.1 Intimate Partner Violence

An index of the frequency of physical and sexual intimate partner violence in the last 12 months is significantly lower in the combined group as compared to those who received just the cash transfer, by 0.111 standard deviations (Table 2 panel A column 1). The cash intervention leads to an insignificant increase of 0.068 standard deviations while the combined intervention leads to an insignificant decrease of 0.042 standard deviations in the index of IPV frequency. Hence, the difference between the combined and cash groups is statistically significant. This result survives the multiple test correction (Table C6). The difference between the cash and combined groups is driven by both the frequency of physical and sexual violence (Table 2 panel A columns 2-3). This suggests that there are benefits in terms of women's experience of violence from adding the workshop intervention to the cash transfer. We discuss the subgroups that drive this result in the cash and the combined groups in Section 6.1.1.

The treatment effect of the combined arm on the IPV index as compared to the placebo group is negative but insignificant. This becomes marginally significant when we add controls selected using PDS lasso (Table C7). We find a similar pattern of results when looking at the incidence of any physical or sexual violence (Table 2 panel B).[17]

To capture the severity of violence, we ask women about the incidence and frequency of injuries sustained as a result of violence in the last 12 months. There is no change in the combined arm in the frequency or incidence of injuries, but in the cash group, there is a significant increase compared to the placebo group. On the extensive margin, there is a 6 percentage point increase in the incidence of injuries sustained in the cash group as compared to the placebo group rate of injuries of 21% (Table 2 panel B column 4). The incidence of injuries is also significantly higher in the cash group than in both the placebo and combined groups. The 6 percentage points higher incidence of injuries translates into an additional 50 women (out of a total of 743 women) in the cash group who report being injured due to violence inflicted by their husbands in the last 12 months. We are not aware

[17]We also prespecified secondary analysis looking at a 'maximum' scale as used by Roy et al. (2019) where IPV is measured as the maximum frequency reported across physical and sexual violence. We find no significant treatment effect on this measure but the patterns are consistent with the result on other measures.

Table 2: Impact on the Frequency and Incidence of Intimate Partner Violence

Panel A: Frequency	(1) IPV Index	(2) Physical (0-14)	(3) Sexual (0-8)	(4) Injuries (0-6)
Workshop	0.040	0.069	0.080	0.020
	(0.057)	(0.154)	(0.095)	(0.059)
	[.]	[0.245]	[0.151]	[0.130]
Cash	0.068	0.106	0.142	0.130**
	(0.058)	(0.161)	(0.093)	(0.062)
	[.]	[0.245]	[0.151]	[0.130]
Combined	-0.043	-0.126	-0.052	0.044
	(0.056)	(0.154)	(0.094)	(0.055)
	[.]	[0.245]	[0.151]	[0.130]
p: Cash=Combined	0.077	0.178	0.061	0.161
q: Cash=Combined	[.]	[0.218]	[0.218]	[0.218]
p: Cash = Workshop	0.657	0.828	0.539	0.087
q: Cash = Workshop	[.]	[1.000]	[1.000]	[0.352]
p: Workshop = Combined	0.180	0.241	0.209	0.683
q: Workshop = Combined	[.]	[0.568]	[0.568]	[0.568]
Placebo mean	0.000	2.287	1.350	0.433
# obs	2936	2936	2926	2916
Panel B: Incidence	(1) Any Violence	(2) Any Physical	(3) Any Sexual	(4) Any Injury
Workshop	-0.006	0.028	0.011	0.020
	(0.026)	(0.027)	(0.026)	(0.024)
	[.]	[1.000]	[1.000]	[1.000]
Cash	-0.002	0.025	0.023	0.063***
	(0.027)	(0.028)	(0.027)	(0.023)
	[.]	[0.354]	[0.354]	[0.024]
Combined	-0.043	-0.015	-0.032	0.014
	(0.030)	(0.030)	(0.028)	(0.024)
	[.]	[1.000]	[1.000]	[1.000]
p: Cash = Combined	0.158	0.197	0.062	0.049
q: Cash = Combined	.	0.103	0.103	0.103
p: Cash = Workshop	0.881	0.922	0.649	0.088
q: Cash = Workshop	.	1.000	1.000	0.361
p: Workshop = Combined	0.182	0.148	0.130	0.818
q: Workshop = Combined	.	0.285	0.285	0.375
Placebo mean	0.744	0.613	0.508	0.211
# obs	2939	2939	2926	2916

Notes: This table reports ITT estimates from regression of each outcome on a vector of treatment dummies and randomisation block fixed effects. IPV index is constructed as a standardised index of the frequency of physical and sexual violence (in columns (2) and (3)). It does not include the frequency of injuries as a result of experiencing IPV reported in column (4). The min-max range of values for each outcome is in brackets next to the outcome name. Physical, sexual and injuries are the total scores for responses to a series of questions about the experience of violence from an intimate partner in the last 12 months that are answered on a 0 to 2 scale with 0 being never, 1 sometimes and 2 often. The physical score is based on a response to 7 questions, the sexual score is based on a response to 4 questions and the injuries score is based on a response to 3 questions (questions are in Appendix C.1). The incidence variables are indicators that take a value of 1 if the respondent reported experiencing that type of violence in the last 12 months. Any violence is indicator for any physical or sexual violence experienced. Heteroskedasticiy-robust standard errors clustered by the village are in parentheses. Sharpened q-values are in square brackets. $***p < 0.01, **p < 0.05, *p < 0.1$.

of any other study that directly estimates the effect of cash transfers on injuries.[18] Thus, it appears that an important dimension of violence, which captures the severity of it, has so far been overlooked in the literature.

Since we measure violence using self-reported data, there may be concerns about social desirability bias resulting in the under-reporting of violence. To reduce the risk of under-reporting, we used Audio Computer-Assisted Self-Interview (ACASI) to measure violence so the women did not have to respond directly to the enumerator.

There may also be concerns about treatment-induced bias in reporting. In the cash arm, people might worry that if they report violence, the cash transfer may be taken away, resulting in underreporting of violence. We think this is unlikely, as the NGO partner asked recipients to report conflicts to a toll-free call centre and never stopped the transfer due to household conflict, but rather split it in half in case of separation. In the combined arm, there are two additional potential concerns. One, the difference in reported violence between the cash and combined arms could be due to perceived labelling by the partner NGO through the video. Again, we think this is unlikely as the video made no reference to conflict or violence in the household. Two, the videos showed women leading businesses and in positive consultative relationships with their partners, which may lead women to report lower violence. However, if this were true, we would also expect the workshop intervention group to report lower violence, which we do not see.

6.1.1 Do the Treatment Effects on IPV Differ by Respondent Type?

The predicted impact of economic empowerment on IPV is theoretically ambiguous (Buller et al., 2018; Baranov et al., 2021). We find an insignificant change in the index of the frequency of violence on average versus the placebo group in all the treatment arms. However, there might be heterogeneity that averages out to produce a null effect (Angelucci, 2008; Hidrobo and Fernald, 2013). We estimate heterogeneous treatment effects for a number of pre-specified individual respondent characteristics, but this does not show any consistent patterns (Tables C8 and C9).

We carry out two pieces of analysis which are not pre-specified but help unpack the average ITT effects on the IPV index. These suggest that there is significant heterogeneity in the treatment effects of the cash transfer. Women in a sub-group of households at risk of violence experience worsened IPV from the cash transfer, an effect that is mitigated in the combined treatment.

First, we conduct sub-group analysis by using respondent and household baseline characteristics to predict the frequency of violence. In order to obtain the sub-groups, we run the 'endogenous stratification' exercise, following Abadie et al. (2018) (see Appendix B for details). We split into three groups instead of dichotomising, since it preserves more information and recovers about half the efficiency loss (Gelman and Park, 2009). We get similar results if we split into two groups

[18] Hidrobo and Fernald (2013) attempt to capture injuries by asking women about going to a health centre due to an accident or injury. However, they find so few reports that they cannot analyze this.

instead. Households and respondents in each of the three sub-groups produced from this exercise were different in a meaningful way at baseline (Table B1), with those in the high-risk of violence sub-group poorer, younger and less educated than those in the medium-risk and low-risk sub-groups.

Table 3: Impact on the high and low predicted group

	(1) IPV Index	(2) Injuries (0-6)	(3) Asset Ownership Index
Panel A: High risk			
Workshop	0.012	-0.009	0.069
	(0.111)	(0.130)	(0.093)
Cash	0.302***	0.305**	-0.010
	(0.109)	(0.154)	(0.109)
Combined	-0.026	0.051	0.137
	(0.094)	(0.122)	(0.085)
p: Cash = Combined	0.00	0.07	0.13
p: Cash = Workshop	0.01	0.02	0.42
p: Workshop = Combined	0.74	0.67	0.45
Placebo Mean	0.14	0.58	-0.02
# obs	976	968	976
Panel B: Low risk			
Workshop	-0.047	-0.070	0.085
	(0.073)	(0.070)	(0.095)
Cash	-0.104	-0.036	0.125
	(0.077)	(0.070)	(0.098)
Combined	-0.184**	-0.085	0.243**
	(0.089)	(0.075)	(0.101)
p: Cash = Combined	0.39	0.50	0.20
p: Cash = Workshop	0.44	0.62	0.69
p: Workshop = Combined	0.10	0.82	0.08
Placebo Mean	-0.07	0.39	0.02
# obs	973	969	976

This table reports ITT estimates from regression of outcome on a vector of treatment assignments and randomization block fixed effects by the sub-groups. Panel A shows is the highest predicted IPV index sub-group obtained by splitting the sample by predicted IPV Index (frequency of physical and sexual violence) using a range of baseline covariates, as outlined in section 6.1.1. Panel B shows the low predicted IPV index sub-group obtained by splitting the sample by predicted IPV Index (frequency of physical and sexual violence) using a range of baseline covariates, as outlined in section 6.1.1. Standard errors are derived using bootstrap methods and reported in parentheses. $***p < 0.01, **p < 0.05, *p < 0.1$.

There is substantial heterogeneity in the impact of the interventions on the IPV by these sub-groups (Table 3 columns 1 and 2 and Figure B1).[19] In the cash transfer group, there is a large significant increase of 0.30 standard deviations in the frequency of violence and a significant increase of 0.31 standard deviations in the frequency of injuries for the high-risk sub-group. In

[19]We confirm that positive effects of all three treatments are still seen on household economic outcomes for both the high and low-risk groups.

line with Angelucci (2008) and Hidrobo and Fernald (2013), this suggests caution that in some vulnerable households, violence may actually increase as a result of a transfer.

In the combined arm, we do not find any such increase in violence or injuries in the high-risk predicted group, with the coefficients small and negative for violence. Both violence and injuries are significantly lower in the combined arm compared to the cash arm in the high-risk group. This suggests, promisingly, that combining the workshop intervention with the cash transfer mitigates the negative impact of the cash transfer on IPV for high-risk households. There is also a significant decline in the IPV index in the low-risk predicted sub-group assigned to the combined intervention as compared to placebo.

As a second approach to validate the existence of substantial heterogeneity, we use causal forests to compare the extent of treatment effect heterogeneity on the IPV index in the cash and combined arms. The high variance in the distribution of effect sizes (from -0.2 to 0.4) and the heavy right-skew indicate that a subset of households who receive the cash transfer alone are put at higher risk of IPV (Figure C1). We consider two tests for treatment effect heterogeneity and, in the cash treatment group, we see evidence of significant heterogeneity under both tests (see Appendix B for details). We see no evidence of heterogeneous treatment effects in the combined arm using this method.

6.2 Control of Resources

6.2.1 Asset Ownership

We find evidence that adding the workshop intervention to the cash transfer improves women's ability to control assets at a time when the household's assets increase. We find a statistically significant 0.17 standard deviation increase in an index capturing women's ownership of assets in the combined arm compared to placebo (Table 4 column 1).[20] The combined arm also significantly increases the asset ownership index compared to the cash transfers alone. Neither the cash transfer nor the workshop interventions on their own increase women's control of assets.

When examining heterogeneity by the high and low-risk predicted sub-groups (Table 3 column 3), we see that the overall increase in asset ownership in the combined arm versus the placebo seems to be driven by the low-risk group. In both sub-groups, the effects of the combined arm on the asset index are greater than for cash alone, though the difference is not significant for either sub-group.

The asset ownership index is composed of two sub-measures, shown in Table 4 columns (2) and (3), that capture the share of household assets owned by the woman alone or jointly with other family members and an indicator for if the woman owns at least two small or one large asset.[21]

[20] These results are robust to the inclusion of controls in Table C7 and to a multiple test correction in Table C6.

[21] We follow the Women's Empowerment in Agriculture Index survey instrument and ask about the following list of assets: agricultural land, large livestock, small livestock, birds (chicken, ducks, turkeys or pigeons), fish pond or fishing equipment, farm equipment (non-mechanised), farm equipment (mechanised), non-farm business equipment, house (and other structures), large consumer durables (e.g. refrigerator), small consumer durables (e.g. radio), other land not used for agriculture, means of transportation (e.g. car, bicycle, motorcycle), gold and silver jewellery.

We find a statistically significant 4.8 percentage point increase in the share of assets owned by the woman in the combined arm (Table 4 column 2). This is almost a 10% increase compared to a placebo mean of 53%. This increase is driven by increases across a range of assets: land, small and large livestock, consumer durables, gold and silver jewellery and a marginally insignificant increase in non-farm business equipment (Table C10). The increase is smaller and insignificant in the cash arm compared to the placebo group, though not significantly different from the combined arm (p-value=0.153). We also see an increase of 3.9 percentage points in an alternative measure, the probability that the woman owns fully or jointly any two small or one large asset, in the combined arm (Table 4 column 3). While significantly greater compared to the placebo group, this is not significantly different from the cash arm (p-value=0.102).[22]

Table 4: Impact on Control of Resources

	(1) Asset Ownership Index	(2) Share of Assets Owned	(3) Asset Ownership
Workshop	0.049	0.004	0.025
	(0.066)	(0.019)	(0.020)
	[.]	[0.764]	[0.764]
Cash	0.066	0.022	0.010
	(0.068)	(0.019)	(0.021)
	[.]	[0.989]	[0.989]
Combined	0.171***	0.048**	0.039**
	(0.064)	(0.019)	(0.019)
	[.]	[0.029]	[0.029]
p: Cash = Combined	0.079	0.153	0.102
q: Cash = Combined	[.]	[0.182]	[0.182]
p: Cash = Workshop	0.780	0.277	0.412
q: Cash = Workshop	[.]	[0.701]	[0.701]
p: Workshop = Combined	0.033	0.012	0.405
q: Workshop = Combined	[.]	[0.024]	[0.254]
Placebo mean	-0.000	0.531	0.859
# obs	2939	2939	2939

Notes: This table reports ITT estimates from a regression of each outcome on a vector of treatment dummies and randomisation block fixed effects. We follow the Women's Empowerment in Agriculture index (WEAI) for the list of assets. In Panel A, the Asset Ownership Index is a standardised index of the Share of Assets Owned (2) and Asset Ownership (3). Share of Assets Owned is the proportion of household assets which are owned by the woman, or jointly by the woman and family members. The Asset Ownership indicator is based on the WEAI measure and is a binary indicator for any two small or one large asset owned fully or jointly by the woman (column (3)). Heteroskedasticiy-robust standard errors clustered by the village are in parentheses. Sharpened q-values are in square brackets. $***p < 0.01, **p < 0.05, *p < 0.1$.

Savings is another important dimension of control of resources, although we did not prespecify analysis of this variable. There is a significant increase in household savings for all three treatment arms but we do not find a significant increase in savings held by the respondent in any arm (results

[22]We also pre-specified a second secondary measure: the value of the share of assets owned by the woman. This increases in all treatment arms. We do not think this is a good measure of women's empowerment as it mechanically increases due to increases in the value of household assets in the cash transfer arms (Table C5).

not shown). In the combined group only, we find an increase in women's savings held in Rotating Savings and Credit Associations (ROSCAs), a common method of saving in this area (Gugerty, 2007).

6.2.2 Consumption Shares

We see a significant increase in the share of spending on education from total non-food consumption in the combined arm (Table 5 column 7). An increase in spending on children is also often interpreted as a sign of an increase in women's bargaining power (Angelucci and Garlick, 2015; Duflo and Udry, 2004; Hidrobo et al., 2016). This finding is consistent with evidence of a positive impact on women's control of resources in the combined arm.

Table 5: Impact on Consumption Shares

	Food Share	Clothes Share Male	Clothes Share Child	Clothes Share Female	HH Goods Share	Health Share	Educ Share
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Workshop	-0.004	-0.001	-0.001	-0.000	-0.001	-0.009*	0.008
	(0.006)	(0.001)	(0.001)	(0.001)	(0.002)	(0.005)	(0.008)
	[1.000]	[1.000]	[1.000]	[1.000]	[1.000]	[0.886]	[1.000]
Cash	0.006	-0.001	-0.002	-0.000	0.001	-0.004	0.004
	(0.006)	(0.001)	(0.002)	(0.001)	(0.002)	(0.005)	(0.008)
	[1.000]	[1.000]	[1.000]	[1.000]	[1.000]	[1.000]	[1.000]
Combined	-0.004	0.001	-0.001	-0.001	-0.004*	-0.013***	0.019**
	(0.006)	(0.001)	(0.001)	(0.001)	(0.002)	(0.005)	(0.009)
	[0.585]	[0.585]	[0.409]	[0.600]	[0.195]	[0.066]	[0.091]
p: Cash = Combined	0.977	0.229	0.460	0.957	0.143	0.377	0.170
q: Cash = Combined	[1.000]	[1.000]	[1.000]	[1.000]	[1.000]	[1.000]	[1.000]
p: Cash = Workshop	0.040	0.512	0.450	0.710	0.547	0.318	0.588
q: Cash = Workshop	[0.386]	[1.000]	[1.000]	[1.000]	[1.000]	[1.000]	[1.000]
p: Workshop = Combined	0.071	0.114	0.838	0.681	0.031	0.056	0.068
q: Workshop = Combined	[0.142]	[0.142]	[0.315]	[0.294]	[0.142]	[0.142]	[0.142]
Placebo mean	0.651	0.014	0.029	0.019	0.076	0.077	0.184
# Obs	2888	2876	2886	2887	2873	2860	2883

Note: This table reports ITT estimates from a regression of each outcome on a vector of treatment dummies, randomisation block fixed effects, total consumption and demographic controls (household size, number of children aged 0 to 5 and 6 to 14, and age of the respondent). All shares except food share are calculated as a proportion of non-food spending. Food Share is calculated as a share of total household consumption. Food includes the value of purchased and home-produced food, HH Goods include spending on household goods such as soaps and detergents, household cleaning equipment, and kitchen equipment, Health includes spending on medicines and health services, and Educ includes spending on schooling and school inputs services for all household members aged 6 to 20. Sharpened q-values are in square brackets. $***p < 0.01, **p < 0.05, *p < 0.1$.

We do not find any major changes for any treatment arm in the share of spending on other items like food, men's, women's, and children's clothing and footwear, miscellaneous household goods such

as soaps, detergents etc., and health.[23] Prior studies have shown that cash transfers, particularly conditional cash transfers given to women, raise the share of food consumption or spending on children's goods despite income increasing (Angelucci and Attanasio, 2013; Attanasio and Lechene, 2010; Armand et al., 2020; Bobonis, 2009). This is interpreted as being due to an increase in the woman's bargaining power, which shifts consumption to be more aligned with her preferences. Speculatively, the large nature of the transfer we study might mean that the crucial bargaining is over larger purchases or big expenditures like spending on children's education and not the smaller expenditures like food or clothing that have been typically looked at in the literature. Most studies have looked at consumption shares in the context of small, regular conditional cash transfers so it is difficult to draw comparisons with our setting, where there was a one-time large unconditional transfer. In line with this interpretation, Almås et al. (2019) find little difference in estimated elasticity for food between female and male recipients when analyzing a similar unconditional transfer to this study in nearby villages.

6.3 Mechanisms

We examine five pre-specified intermediate outcome families: decision-making, controlling behaviours, respondent well-being, relationship quality, and attitudes in Table 6. We see statistically significant improvements in the combined group in women's decision-making in the household (0.1 standard deviations), relationship quality (0.13 standard deviations) and sense of well-being (0.1 standard deviations), compared to the placebo group.[24] Decision-making is the likeliest mechanism for differences between the cash and combined arms: cash transfers have no effect on decision-making, while the combined intervention improves women's decision-making, and the difference between the two is statistically significant. There is also suggestive evidence that relationship quality might account for some differences: relationship quality improves by nearly twice as much in the combined arm as compared to the cash arm, although the difference is not statistically significant. Respondent well-being improves to a similar extent in the cash and combined arms and the difference between the two is not statistically significant, so this is unlikely to explain differences between the cash and combined arms. We see no effects of any arm on controlling behaviours or on attitudes.

The decision-making index measures women's say in a range of decisions about the household, such as children, contraceptive use and food expenses, decisions about productive activities, such as farming and small enterprises, and decisions about the use of income from productive activities. Improvements in this index in the combined arm relative to cash are primarily due to improvements in women's say in general household decisions (Table A1). There is also an improvement in women's

[23] Spending on food is analyzed as a share of total household consumption and the rest as a share of total non-food spending.

[24] Since we measured mechanisms alongside the main outcomes, we cannot say if these improvements are leading to changes in violence and control over assets or are improving as a result of changes in violence and control over assets.

say in production decisions about non-farm enterprises in the combined arm, but there is no change in their say in other household productive activities.[25]

Controlling behaviours capture the degree to which the woman's spouse controls the woman's access to financial resources, cooperative behaviour in an incentivised hiding money game, and controlling from of IPV. We see no significant effect of any intervention on any component of controlling behaviours by spouses regarding women's finances and behaviour (Table A2).

Table 6: Impact on Intermediary Outcomes

	Decision Making Index	Controlling Index	Relationship Quality Index	Respondent Well-being Index	Attitudes Index
	(1)	(2)	(3)	(4)	(5)
Workshop	-0.011	0.010	0.021	-0.176**	-0.005
	(0.062)	(0.061)	(0.052)	(0.071)	(0.061)
	[1.000]	[1.000]	[1.000]	[0.074]	[1.000]
Cash	-0.009	-0.027	0.074	0.094	-0.029
	(0.056)	(0.060)	(0.053)	(0.066)	(0.069)
	[1.000]	[1.000]	[0.699]	[0.699]	[1.000]
Combined	0.095*	-0.050	0.134**	0.106*	-0.003
	(0.052)	(0.067)	(0.053)	(0.060)	(0.064)
	[0.120]	[0.296]	[0.069]	[0.120]	[0.631]
p: Cash = Combined	0.051	0.726	0.268	0.853	0.707
q: Cash = Combined	0.346	1.000	1.000	1.000	1.000
p: Cash = Workshop	0.974	0.513	0.308	0.000	0.711
q: Cash = Workshop	1.000	1.000	1.000	0.002	1.000
p: Workshop = Combined	0.072	0.348	0.036	0.000	0.970
q: Workshop = Combined	0.101	0.211	0.079	0.001	0.635
Placebo mean	0.000	0.000	0.000	-0.000	0.000
# obs	2939	2939	2939	2939	2939

Notes: This table reports ITT estimates from regression of each outcome on a vector of treatment dummies and randomisation block fixed effects. All variables are defined in Appendix C.1. Higher values for all indices except the controlling index indicate an improvement. The components of the controlling index are reverse-coded so that higher values of the intermediary outcomes index correspond with better outcomes. Heteroskedasticiy-robust standard errors clustered by the village are in parentheses. Sharpened q-values are in square brackets. $***p < 0.01, **p < 0.05, *p < 0.1$.

Relationship quality is an index of three measures capturing spousal harmony (the frequency of major arguments), negotiation in case of dispute and emotional IPV or abuse by the spouse. There is suggestive evidence that relationship quality improves more in the combined arm relative to the cash arm, as the combined group see slightly higher improvements in all three components of the index, though the difference is never statistically significant (Table A3).[26]

[25] We see that women in both the combined and cash arms are between 6 and 8 percentage points more likely to operate non-farm enterprises (results not shown). Only in the combined arm do we see an increase in reported input into decisions about non-farm enterprises and an increase in input into decisions about the income from non-farm enterprise activities.

[26] Note that emotional IPV or abuse is reverse coded, so emotional IPV decreases insignificantly in the combined

Respondent well-being is an index of the degree to which the respondent is happy, satisfied with life, and not stressed. While all these improve significantly in the combined arm relative to the placebo, the largest significant increase is in the happiness score (Table A4). Well-being improvements are similar in the cash and combined arms. We also see a significant decline in respondent well-being in the workshop arm. This is despite not seeing any negative effects of the treatment on the women's economic or experience of violence-related outcomes, and improvement in household economic outcomes (Table C5). We provide a possible explanation for this in Appendix B section B.1.1.

We rule out that the interventions operated through a change in attitudes towards violence. Women's own attitudes determine their disutility from violence. While these don't directly impact her outside option, they have an impact on household bargaining by lowering her utility from staying in the marriage. In addition, village-level attitudes may determine both the men's and women's disutility from violence. While neither intervention was designed to target attitudes, cash transfers may shift village-level norms due to changes in violence in cash transfer recipient households (Haushofer et al., 2019). The workshop intervention could shift women's own attitudes since the video shows women similar to the respondents in positive consultative relationships. We find no significant change, from any treatment, in women's own or their perception of village attitudes towards a series of scenarios in which violence by the husband is justified (Table A5).[27] This lack of change in attitudes is also consistent with other studies even when they sought to change attitudes, such as Green et al. (2020).

The workshop was designed to raise women's aspirations, and, through doing so, may have encouraged them to take control of household resources in order to achieve those aspirations.[28] Women's aspirations for their household increased significantly in the combined and cash arms for the sub-sample under study in this paper (Table A6 column 1). The increase in aspirations is larger in the combined arm compared to the cash arm, though not significantly so. We also rule out alternative mechanisms such as a change in self-belief, beliefs about returns to investments activities, and time and risk preferences through which the interventions could have affected women's outcomes (Table A6).

arm and increases insignificantly in the other two arms. The results mirror those for physical and sexual IPV, where the cash intervention marginally worsens IPV and the combined intervention marginally improves it (p=0.12).

[27]We also measured implicit attitudes toward IPV using an Implicit Association Test (IAT). Unfortunately, the response rate was too slow for 33% of the sample, making the data unusable for that subgroup (Greenwald et al., 2003). For the remaining sample (n = 1,975), we estimated treatment effects on the prespecified implicit attitude score (d-score), following Greenwald et al. (1998). Consistent with the findings for directly elicited attitudes, we find no significant impact of any treatment arm on this measure.

[28]We see a positive but insignificant increase in the aspirations index for the workshop arm. This is because of the much larger impact on aspirations for future assets and income in the cash and combined arms compared to the workshop arm. Education aspirations increase significantly for women in the workshop arm (Table C11).

6.3.1 Do the treatment effects on the mechanisms differ by respondent type?

We look at heterogeneity in the mechanisms by the predicted risk of IPV index, as described in Section 6.1.1. We see that the relationship quality index is significantly higher in the combined high-risk group as compared to the cash high-risk group (Figure B1; Table C12). This is driven by a decline in arguments in the high-risk combined group. This supports the idea that combining the workshop intervention with the cash transfer enables vulnerable women to better manage the large cash inflow in a way that doesn't lead to arguments and violence. We also see that the aspirations index is significantly higher in the combined intervention versus the placebo high-risk group by 0.30 standard deviations, though not significantly higher than cash (p-value = 0.12) (Figure B1; Table C14). This suggests that raising women's aspirations is also an important mechanism through which the combined intervention affects high-risk women when they receive a cash transfer.

We also see that there are improvements in the combined arm compared to the cash arm (and placebo arm) for the low-risk group, driven by improvements in decision-making, relationship quality and respondent well-being, and reductions in controlling behaviour (Figure B1; Table C13). This suggests that for low-risk women, combining the aspirations intervention with the cash transfer is leading to broader improvements in their ability to enact their preferences within the household, control their finances and negotiate and communicate well with their spouse, leading to improvements in their well-being. The aspirations index is not significantly different between the combined and cash low-risk groups, suggesting aspirations is not a mechanism through which the combined intervention improves outcomes for low-risk women (Figure B1; Table C15).

Overall, the heterogeneity in mechanisms suggests that different channels may be operating for the high and low-risk groups: the combined intervention improves relationship quality for both low and high-risk women, but improves respondent well-being for low-risk women, while it raises aspirations for high-risk women, relative to the cash transfer alone. As a result, the combined intervention simultaneously enables those women at high risk of violence to mitigate an increase in violence, and those at low risk of violence to improve their overall status and well-being in the household, when they receive a cash transfer.

7 Conclusion

We study a new approach to boosting the effects of economic interventions on women's bargaining power using a clustered randomized control trial in rural Kenya. Rather than targeting gender norms or IPV directly, we aim to boost women's aspirations through a one-session 80-minute workshop using role model videos and a facilitated planning exercise. We show that adding a workshop to raise women's aspirations to a large unconditional cash transfer program improves the outcomes for women of the cash transfer. While role model interventions have become widespread, no papers have studied their effects on women's outcomes, nor how they work in combination with economic

interventions, such as the cash transfer we study.

We find that the combined intervention significantly reduces the frequency of violence as compared to cash alone. While the cash transfer on average does not change the frequency of IPV, there is a heterogeneous response where households at a high predicted risk of violence see a significant worsening in the frequency of violence while those at low predicted risk of violence see no significant effect. This is consistent with theoretical predictions that the impact of cash transfers on violence is ambiguous. The light-touch aspirations intervention mitigates the negative effects of cash for some subgroups of women, such that there is no longer a significant increase in violence amongst high-risk households who receive the combined intervention, and there is a reduction in violence amongst low-risk households.

Further, we see that the combined intervention increases an index of women's control of household assets as compared to the cash (and placebo) groups. The cash and the workshop interventions on their own have a limited impact on women's control of household resources.

These effects occur partly via improving women's aspirations for their household's and children's future economic position, which are (insignificantly) higher in the combined group than other groups. Women in the combined group have a greater say in household decision-making than women in the cash or placebo arms. Women in the combined group also see improvements in relationship quality with partners and improved self-reported well-being relative to the placebo arm. We see these as intertwined mechanisms: raising the woman's aspirations for her household and her children via exposure to role models who have succeeded may encourage women to take control of economic activities, increasing her ability to earn and so her bargaining power. Simultaneously, exposure to role models in positive consultative relationships may change women's conceptions of a good marriage and increase bargaining power by lowering their willingness to stay in a co-operative equilibrium. Mirroring our findings for IPV, we see heterogeneity in mechanisms, with relationship quality and aspirations explaining differences between the combined and cash arms for high-risk households while broader improvements in intermediate outcomes are seen in the low-risk group.

Overall, these results suggest two important policy implications. First, we confirm previous findings that there are vulnerable sub-groups for whom a cash transfer may worsen violence. Given the widespread use of cash transfers as a poverty alleviation tool, this suggests care must be taken to not worsen outcomes for the most vulnerable women. Secondly, we show that combining an intervention designed to raise women's aspirations with the cash transfer mitigates any increase in violence from the cash transfer. This is important for policy because cash transfers have strong positive effects on household consumption, assets and income and for children's outcomes, so light-touch add-ons which mitigate potential downsides enhance the potential of cash as a policy intervention. A key avenue for future research would be to accurately identify households at high risk of being impacted negatively before a program is rolled out.

A Additional Results Appendix

Table A1: Impact on Decision Making

	Decision Making Index (1)	Household Decision Making (2)	Production Decision Making (3)	Income Decision Making (4)
Workshop	-0.011	0.088	-0.016	-0.017
	(0.062)	(0.093)	(0.017)	(0.026)
	[.]	[1.000]	[1.000]	[1.000]
Cash	-0.009	0.004	-0.012	0.008
	(0.056)	(0.085)	(0.018)	(0.025)
	[.]	[1.000]	[1.000]	[1.000]
Combined	0.095*	0.118	0.016	0.026
	(0.052)	(0.081)	(0.014)	(0.026)
	[.]	[0.457]	[0.457]	[0.457]
p: Cash = Combined	0.051	0.166	0.090	0.461
q: Cash = Combined	.	0.331	0.331	0.331
p: Cash = Workshop	0.974	0.367	0.836	0.312
q: Cash = Workshop	.	1.000	1.000	1.000
p: Workshop = Combined	0.072	0.737	0.039	0.092
q: Workshop = Combined	.	0.326	0.132	0.132
Placebo mean	0.000	5.547	0.847	0.689
# obs	2939	2939	2939	2939

Note: This table reports ITT estimates from regression of each outcome on a vector of treatment assignments, randomisation block and sub-location fixed effects. Decision making index is a summary index of the measures in columns (2) - (4). Household decision making ranges from 0 to 7 and is the sum of seven indicator variables for if the woman has at least 50% say in the decision. Production decision making is the proportion of activities the woman had input in making at some of the decisions and income decision making is the proportion of activities for which the woman had input in making at least some of the decisions about how to spend the income is generated. Heteroskedasticiy-robust standard errors clustered by village in parenthesis. Sharpened q-values are in square brackets. $***p < 0.01, **p < 0.05, *p < 0.1$.

Table A2: Impact on Controlling Behaviours

	Controlling Index	Spousal Financial Control	Never Cooperates	Controlling IPV
	(1)	(2)	(3)	(4)
Workshop	0.010	0.078	0.007	-0.035
	(0.061)	(0.186)	(0.034)	(0.184)
	[.]	[1.000]	[1.000]	[1.000]
Cash	-0.027	-0.204	-0.021	0.095
	(0.060)	(0.198)	(0.032)	(0.167)
	[.]	[1.000]	[1.000]	[1.000]
Combined	-0.050	-0.301	-0.009	-0.042
	(0.067)	(0.193)	(0.033)	(0.209)
	[.]	[0.561]	[1.000]	[1.000]
p: Cash = Combined	0.726	0.632	0.715	0.464
q: Cash = Combined	.	1.000	1.000	1.000
p: Cash = Workshop	0.513	0.140	0.406	0.418
q: Cash = Workshop	.	0.719	0.719	0.719
p: Workshop = Combined	0.348	0.045	0.648	0.974
q: Workshop = Combined	.	0.158	1.000	1.000
Placebo mean	0.000	3.778	0.513	2.444
# obs	2939	2939	2587	2938

Note: This table reports ITT estimates from regression of each outcome on a vector of treatment assignments, randomisation block and sub-location fixed effects. Controlling index is a summary index of the measures in columns (2) - (4). Spousal financial control ranges from 0 to 15 and is the sum of five categorical variables on how much the husband tries to control the woman's finances. Never cooperates is an indicator for the woman never wanting to cooperate with her spouse in an income hiding game. Controlling IPV ranges from 0 to 12 and is the sum of four categorical variables capturing various dimensions (non-financial) of controlling behaviour by the spouse. Higher values for all variables correspond with higher controlling behaviours. Heteroskedasticiy-robust standard errors clustered by village in parenthesis. Sharpened q-values are in square brackets. $***p < 0.01, **p < 0.05, *p < 0.1$.

Table A3: Impact on Relationship Quality

	Relationship Quality Index	Spousal Harmony	Negotiation	Emotional IPV (Reverse coded)
	(1)	(2)	(3)	(4)
Workshop	0.021	0.160	0.063	-0.054
	(0.052)	(0.249)	(0.233)	(0.116)
	[.]	[1.000]	[1.000]	[1.000]
Cash	0.074	0.513**	0.151	-0.077
	(0.053)	(0.240)	(0.213)	(0.110)
	[.]	[0.113]	[0.479]	[0.479]
Combined	0.134**	0.619**	0.261	0.102
	(0.053)	(0.242)	(0.221)	(0.114)
	[.]	[0.036]	[0.315]	[0.327]
p: Cash = Combined	0.268	0.645	0.639	0.118
q: Cash = Combined	.	0.756	0.756	0.550
p: Cash = Workshop	0.308	0.136	0.711	0.849
q: Cash = Workshop	.	0.687	1.000	1.000
p: Workshop = Combined	0.036	0.054	0.429	0.193
q: Workshop = Combined	.	0.195	0.401	0.240
Placebo mean	0.000	13.897	12.247	7.661
# obs	2939	2939	2939	2939

Note: This table reports ITT estimates from regression of each outcome on a vector of treatment assignments, randomisation block and sub-location fixed effects. Relationship quality is a summary index of the measures in columns (2) - (4). Spousal harmony ranges from 0 to 18 and is the sum of response questions on the frequency of major arguments about a range of issues. Negotiation also ranges from 0 to 18 and is sum of responses to the frequency of behaviours displayed by the respondent and her spouse during a dispute. Emotional IPV ranges from 0 to 9 and is response to three questions on the frequency of three types of emotional abuse by the husband. Higher values correspond with lower frequency of emotional abuse. Heteroskedasticiy-robust standard errors clustered by village in parentheses. Sharpened q-values are in square brackets. $***p < 0.01, **p < 0.05, *p < 0.1$.

Table A4: Impact on Respondent Well-being

	Respondent Well-being Index	Happiness Score	Life Satisfaction Score	Stress Score
	(1)	(2)	(3)	(4)
Workshop	-0.176**	-0.119**	-0.417**	-0.172
	(0.071)	(0.054)	(0.164)	(0.137)
	[.]	[0.037]	[0.037]	[0.076]
Cash	0.094	0.065	0.137	0.141
	(0.066)	(0.052)	(0.172)	(0.110)
	[.]	[0.469]	[0.469]	[0.469]
Combined	0.106*	0.127***	0.044	0.144
	(0.060)	(0.046)	(0.159)	(0.119)
	[.]	[0.020]	[0.528]	[0.300]
p: Cash = Combined	0.853	0.165	0.565	0.979
q: Cash = Combined	.	0.978	1.000	1.000
p: Cash = Workshop	0.000	0.001	0.001	0.021
q: Cash = Workshop	.	0.002	0.002	0.007
p: Workshop = Combined	0.000	0.000	0.003	0.032
q: Workshop = Combined	.	0.001	0.003	0.011
Placebo mean	0.000	3.677	4.684	9.343
# obs	2939	2939	2937	2939

Note: This table reports ITT estimates from regression of each outcome on a vector of treatment assignments, randomisation block and sub-location fixed effects. Respondent well-being is a summary index of the measures in columns (2) - (4). Happiness is measured on a scale of 1 to 5 and life satisfaction on a scale from 1 to 10. Stress is the sum of response to four questions and ranges from 4 to 16. Higher values correspond with higher stress so this is reverse coded before being included in the respondent well being index. Heteroskedasticiy-robust standard errors clustered by village in parenthesis. Sharpened q-values are in square brackets. $***p < 0.01, **p < 0.05, *p < 0.1$.

Table A5: Impact on Own and Perception of Village Attitudes

	Attitudes Index	Exercise of Power (own)	Justifiable Violence (own)	Exercise of Power (village)	Justifiable Violence (village)
	(1)	(2)	(3)	(4)	(5)
Workshop	-0.005	0.003	-0.040	-0.004	0.038
	(0.061)	(0.080)	(0.129)	(0.091)	(0.140)
	[.]	[1.000]	[1.000]	[1.000]	[1.000]
Cash	-0.029	-0.029	-0.019	-0.053	-0.022
	(0.069)	(0.082)	(0.141)	(0.101)	(0.153)
	[.]	[1.000]	[1.000]	[1.000]	[1.000]
Combined	-0.003	-0.068	0.042	-0.004	0.071
	(0.064)	(0.076)	(0.129)	(0.101)	(0.143)
	[.]	[1.000]	[1.000]	[1.000]	[1.000]
p: Cash = Combined	0.707	0.637	0.647	0.605	0.478
q: Cash = Combined	.	1.000	1.000	1.000	1.000
p: Cash = Workshop	0.711	0.686	0.874	0.556	0.633
q: Cash = Workshop	.	1.000	1.000	1.000	1.000
p: Workshop = Combined	0.970	0.371	0.486	0.995	0.769
q: Workshop = Combined	.	1.000	1.000	1.000	1.000
Placebo mean	0.000	4.247	3.136	3.460	2.447
# obs	2939	2939	2939	2936	2938

Note: This table reports ITT estimates from regression of each outcome on a vector of treatment assignments, randomisation block and sub-location fixed effects. Attitudes index is a summary index of the measures in columns (2) - (5). Exercise of power (own) ranges from 0 to 6 and is the sum of six indicator variables for if the woman disagrees with the man exercising power in specific situations. Exercise of power (village) is the response to the same set of questions on the perception of what an average person in the village thinks. Justifiable violence (own) ranges from 0 to 7 and is the sum of seven indicator variables for if the woman disagrees with the man using violence in specific situations. Justifiable violence (village) is the response to the same set of questions on the perception of what an average person in the village thinks. Heteroskedasticiy-robust standard errors clustered by village in parenthesis. Sharpened q-values are in square brackets. $***p < 0.01, **p < 0.05, *p < 0.1$.

Table A6: Impact on Psychological Mechanisms

	(1) Aspirations Index	(2) Self-belief Index	(3) Returns Index	(4) No Present Bias	(5) Risk Taking
Workshop	0.065	0.068	0.039	0.002	0.034
	(0.046)	(0.061)	(0.051)	(0.025)	(0.103)
Cash	0.183***	-0.053	0.058	0.029	-0.108
	(0.052)	(0.054)	(0.053)	(0.024)	(0.104)
Combined	0.240***	0.049	0.040	-0.009	-0.103
	(0.058)	(0.059)	(0.052)	(0.025)	(0.092)
p: Cash = Combined	0.38	0.04	0.66	0.11	0.97
p: Cash = Workshop	0.03	0.04	0.68	0.32	0.23
p: Workshop = Combined	0.00	0.76	1.00	0.71	0.21
Placebo Mean	0.19	0.08	-0.18	0.72	3.60
# obs	2883	2883	2877	2884	2874

Notes: This table shows the household-level treatment effects on selected Psychological Mechanisms reported in Orkin et al. (2023) for this study sample. The aspirations index is an inverse covariance-weighted average of aspirations for future income and wealth and for children's education. Self-belief index is an inverse covariance-weighted average of generalized self-efficacy, locus of control and growth mindset scales. Reurns index is respondents' beliefs about the returns to three common investment activities: using more labour on farm, using more fertiliser on farm, and a university degree (vs secondary education) for their child. No present bias is an indicator for if the respondent doesn't switch to the (higher) future amount later in the near time frame (tomorrow vs. 15 days), than in the future time frame (15 vs. 29 days). Risk preferences are an ordinal measure of risk-taking from an incentivised Eckel and Grossman (2002) 6 lottery task.The measures are descibed in detail in the appendix to Orkin et al. (2023). For each outcome variable, we report the coefficients of interest and heteroskedasticity-robust standard errors, clustered at village level, in parentheses.*; **; and *** denote significance at the 10; 5; and 1 percent levels respectively. The number of observations varies slightly across columns because some respondents don't answer all questions, which also drops one small village.

B Details of the Heterogeneity Analysis

B.1 Endogenous Stratification

We use a large number of women's own and household characteristics in the comprehensive Household Study baseline survey to predict the IPV index in the study placebo group. We use the leave-one-out estimator to estimate treatment heterogeneity between high, medium and low predicted frequency of violence. The average values for selected characteristics are in Table B1. Older, more educated women from households with higher non-land assets and spouses who are also more educated are in the low predicted subgroup. These women also have a better psychological state as captured by a significantly lower depression severity score. Figure B1 summarises treatment effects across a range of outcomes for these high and low predicted groups.

B.1.1 Impact of the Workshop Treatment on Intermediary Outcomes

The negative average effect on well-being in the Aspirations treatment group (Table 6 column 4) is driven by the high group where there is a 0.28 standard deviation decline (Figure B1; Table C12 column 4). The workshop has no significant effect on well-being for the low-risk group, though the coefficient remains negative. For high-risk women, exposure to successful peers without alleviating household financial constraints appears to worsen well-being.

B.2 Causal Forests

We use causal forests, a machine learning approach used to estimate individual-level conditional average treatment effects in a principled way (Wager and Athey, 2018). The distribution of the estimated treatment effects of the cash treatment on the IPV index is in Figure C1.

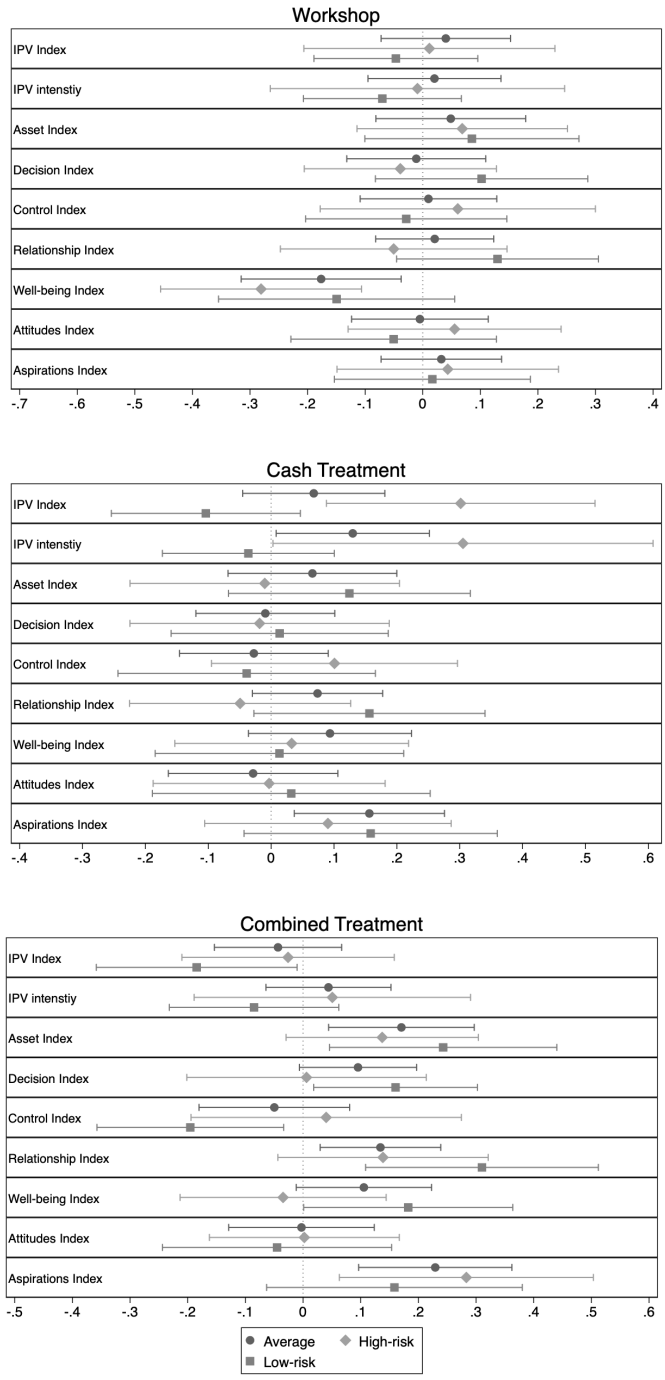
The first test proposed in Chernozhukov et al. (2018), tests the extent of variation in treatment effects and how well the model captures it by projecting the target estimand onto the forest prediction and the mean forest prediction, where a positive, significant coefficient indicates the presence of heterogeneity. The second, proposed by Yadlowsky et al. (2021), supposes that only the X percent of units with the largest treatment effects are treated, then aggregates the difference between the average effect in that subset of units and the average treatment effect across all X percentiles. A "large enough" aggregate indicates heterogeneity and has the interpretation of the possible returns to targeting. Under the test proposed in Yadlowsky et al. (2021), we get an aggregate value of 0.72 (0.23 std. dev), which is well-separated from zero under any reasonable critical value, and under the test proposed in Chernozhukov et al. (2018), we get a marginally significant p-value (p=0.05). We see no evidence of heterogeneous treatment effects in the Combined arm. Under the test in Yadlowsky et al. (2021), we observe an aggregate value of 0.39 (0.15 std. dev.), while under the test in Chernozhukov et al. (2018), we get an insignificant p-value of 0.25.

Table B1: Characteristics of Subgroups

	Low	Medium	High	T-test Difference		
	(1)	(2)	(3)	(1)-(2)	(1)-(3)	(2)-(3)
Household Characteristics						
Assets	1883.509	1174.578	1080.342	708.931***	803.167***	94.236
	(82.788)	(52.072)	(48.153)			
Consumption	5633.547	4801.019	5141.687	832.528***	491.861***	-340.667**
	(122.048)	(94.480)	(130.767)			
Labour supply	603.160	587.508	602.041	15.652	1.119	-14.533
	(14.207)	(16.580)	(17.308)			
Education expend.	829.382	282.207	220.703	547.175***	608.679***	61.504**
	(44.834)	(17.369)	(16.879)			
Household size	7.142	5.872	5.531	1.270***	1.612***	0.341***
	(0.072)	(0.060)	(0.059)			
Respondent Characteristics						
Age	36.118	29.383	27.002	6.735***	9.116***	2.381***
	(0.273)	(0.284)	(0.230)			
Education (yrs)	12.149	11.140	8.935	1.008***	3.213***	2.205***
	(0.094)	(0.107)	(0.117)			
Years married	17.370	12.781	12.676	4.589***	4.694***	0.105
	(0.293)	(0.309)	(0.308)			
Partner education (yrs)	12.980	11.920	9.966	1.059***	3.013***	1.954***
	(0.093)	(0.108)	(0.116)			
N children	4.634	3.525	3.170	1.110***	1.464***	0.355***
	(0.071)	(0.056)	(0.057)			
Aspirations index	0.137	0.146	0.168	-0.010	-0.032	-0.022
	(0.033)	(0.033)	(0.040)			
Self-beliefs index	-0.215	-0.028	0.122	-0.187***	-0.337***	-0.150***
	(0.046)	(0.034)	(0.036)			
Depression score	10.787	11.364	13.094	-0.577**	-2.307***	-1.731***
	(0.212)	(0.197)	(0.205)			
Obs	976	976	976			

Notes: The value displayed for t-tests are the differences in the means across the groups. The groups are obtained by splitting the sample into 3 equal groups by the predicted IPV Index (frequency of physical and sexual violence). The predicted IPV Index is obtained using a range of baseline covariates, as outlined in section 6.1.1. Standard errors are clustered at the village level. ***, **, and * indicate significance at the 1, 5, and 10 percent critical level.

Figure B1: Impact on Outcomes on Average and by Low and High-risk Subgroups



Notes: The figure reports point estimates and 95% confidence intervals for treatment effects on average and by IPV-risk groups. Risk-groups for predicted frequency of IPV are obtained using the 'endogenous stratification' technique of Abadie et al. (2018) (see Appendix B for details). Treatment effects are shown as standardised indices against the placebo group at endline. IPV index is constructed as a standardised index of the frequency of physical and sexual violence. IPV Intensity is the frequency of injuries as a result of experiencing IPV. The Asset Index is based on the proportion of household assets that are owned by the woman, or jointly by the woman and family members and a binary indicator for any two small or one large asset owned fully or jointly by the woman. The aspirations index is composed of measures of aspirations about assets and income in ten years and children's educational attainment. Remaining variables are defined in Appendix C.1.

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C Supplemental Appendix

C.1 Variable Definitions

All indices are created using the approach suggested by Anderson (2008). First, we will re-code all outcomes such that higher values correspond with similar direction of change within an index. Second, we will standardise the outcomes to have mean zero and standard deviation one. Third, we will calculate the average of the standardized constituent outcomes, weighted by the inverse covariance matrix.

* denotes outcomes measured by the household study survey. Where relevant, questions in the gender study survey were asked for a 12-month recall period.

Variable name	Definitions and source (questionnaire variable name)
A.0.1 Consumption Shares	
Clothing share*	Spending on women's, men's and children's clothing and footwear as a proportion of non-food spending.
Household goods share*	Spending on household goods, including soaps and detergents, household cleaning equipment, kitchen equipment, as a proportion of total non-food spending.
Health share*	Spending on medicines and health services, as a proportion of total non-food spending.
Education share*	Spending on schooling and school inputs services, as a proportion of total non-food spending.
Food share*	Monthly food consumption (as defined in the main study) as a proportion of total consumption expenditure (as defined in the main study), also includes the following sub-groups: cereal, tubers, meats & fish, dairy, fruits & vegetables.
Woman's remittance share	Total remittances reported by the woman that were sent to her family (variable remittance_sentamontfam) as a proportion of total remittances sent in the last 12 months (sum of variables remittance_sentamontfam and remittance_sentamont).
A.0.2 Share of Assets	
Indicator for asset ownership (main variable)	In line with WEAI guidelines, this indicator variable takes a value of one if at least two of the small assets (chicken, farming equipment non-mechanized, and small consumer durables) or one large asset (all others) is owned by the woman (fully or jointly),(variables asset_owns_1-14).
Share of assets (alternative variable)	The proportion of household assets which are owned by the woman, jointly by the woman and spouse or jointly by woman and other family members.
Value of the share (alternative variable)	Respondents report the estimated value of the asset if they were to sell them today in their current condition to value the share of assets owned by the woman.
A.0.3 Experience of IPV	
IPV index	
Physical violence	In the pre-analysis plan, we included the threat of attacking with a knife, gun or any other weapon in the experience of physical violence. This has been excluded from the measure of physical violence used in this paper so that we capture actual experience of physical violence only. This does not change the results qualitatively.
Sum of the following two scores:	
	Sum of three categorical variables which equal 2 if often, 1 if sometimes, and 0 if never for the husband doing the following:
a) moderate physical violence	i. Pushing or throwing: "Push you, shake you or throw something at you" (variable acasi_1_physical) ii. Slapping: "Slap you" (variable acasi_2_physical) iii. Twisting or pulling: "Twist your arm or pull your hair" (variable acasi_3_physical).

	Sum of three categorical variables which equal 2 if often, 1 if sometimes, and 0 if never for the husband doing the following:
b) severe physical violence	i. Punching: "Punch you with his fist or something that could hurt you" (variable acasi__4_physical) ii. Kicking or dragging: "Kick you, drag you or beat you up" (variable acasi__5\physical) iii. Choking or burning: "Choke you or burn you on purpose" (variable acasi__6_physical)
Sexual violence	Sum of the following four categorical variables which equal 2 if often, 1 if sometimes, and 0 if never for the husband doing the following:
a) forced intercourse	"Physically force you to have sexual intercourse with him even when you did not want to" (variable acasi_8_physical)
b) unwanted sexual acts	"Force you to perform any sexual acts you did not want to" (variable acasi_9_physical)
c) degrading sexual acts	"Force you to do something sexual that you found degrading or humiliating' (variable acasi_10_physical)"
d) consent from intimidation	"You had sexual intercourse you did not want because you were afraid of what your husband might do' (variable acasi_11_physical)"
Indicator for violence (alternative measure)	An extensive margin capturing the incidence rather than the frequency of violence. This will be an indicator variable taking a value of one if the respondent experienced any physical and/or sexual violence.
Maximum score (alternative measure)	A 'maximum' scale as used by **?** where IPV is measured as the maximum frequency reported over all physical and sexual violence.
Severity of violence (secondary analysis)	We use the incidence of physical and/or sexual violence as the primary measure but will also look at the severity of the violence as a secondary measure. This is the sum of the following three categorical variables which equal 2 if often, 1 if sometimes, and 0 if never:
a) cuts or bruises	"Cuts or bruises or aches" (variable acasi_12_physical)
b) eye injuries or sprains	"Eye injuries, sprains, dislocations or burns" (variable acasi_13_physical)
c) deep wounds	"Deep wounds, broken bones, broken teeth or any other serious injury" (variable acasi_14_physical)
A.1 Agency I: Decision making index	
Household decision making	Sum of the following seven dummy variables which equal 1 if the decision is made by the woman herself, almost the woman herself, jointly by woman and spouse, or jointly by woman and other family members; and 0 otherwise:
a) Contraceptives	"Whether or not to use a method to avoid having children' (variable decision_1)"
b) Children schooling	"Any decisions about children's schooling'"(variable decision_2)
c) Children clothes	"Whether or not to buy children's clothes, shoes?" (variable decision_3)
d) Child illness	"What to do if a child falls sick" (variable decision_4)
e) Children discipline	"How should children be disciplined" (variable decision_5)

f) Food expenses	"How much is spent on food?" (variable decision_6)
g) Income share saved	"How much of the household's income to save?" (variable decision_7)
Production decision making	The proportion of activities the woman had input in making at least some of the decisions about the activity (variables production_input_1-6)
Income decision making	The proportion of activities for which woman had input in making at least some of the decisions about how to spend the income generated from the activity (variables production_income_1-6)
A.2 Agency II: Spousal control index	
Spouse financial control	Sum of the following categorical variables which equal 3 if often, 2 if sometimes, 1 if once or twice, and 0 if never:
a) Money taken away	"Take your earnings or savings from you against your will?" (variable husband_ever_3f)
b) Not enough money	"Tell you he does not have enough money to give you for household expenses? (variable husband_ever_4f)
c) Money denied	"Refuse to give you money for household expenses, even when he had money for other things?" (variable husband_ever_5f)
d) Refuse job	"Require that you give up or refuse a job for money outside the home because he did not want you to work?" (variable husband_ever_6f)
e) Money threat	"Threaten not to give you money or take it away from you?" (variable husband_ever_7f)
No cooperation	A dummy equal to 1 if the respondent never switches to giving money to the spouse, and 0 otherwise.
Switching point (secondary outcome)	An outcome equal to a number ranging from 1 to 8, where 1 means that the woman switched to giving the money to her spouse on the first question and 8 means that she never switched to giving the money to her spouse (variables emp1-8)
Controlling IPV	Sum of the following four categorical variables which equals 3 if often, 2 if sometimes, 1 if once or twice, and 0 if never:
a) Jealousy	"He was jealous or angry if you talked to other men" (variable dv_control_1f)
b) Unfaithfulness	"He accused you of being unfaithful" (variable dv_control_2f)
c) Limited contacts	"He tried to limit your contact with your family" (variable dv_control_4f)
d) Location control	"He insists/insisted on knowing where you are/were at all times" (variable dv_control_5f)
A.3 Relationship quality index	
Spousal harmony	Sum of six categorical variables which equal 3 if never, 2 if once or twice, 1 if sometimes, and 0 if often for respondent and husband having a major argument on the following:
a) Spending	"Spending on major household items or assets" (variable discord_1f).
b) Saving	"Saving decisions" (variable discord_2f).
c) Children discipline	"Behaviour and disciplining of children" (variable discord_3f).

d) Relatives	"Interactions with relatives" (variable discord_4f).
e) Alcohol	"Alcohol consumption" (variable discord_5f).
f) Other	"Any other issues" (variable discord_6f).
Negotiation	Sum of six categorical variables which equal 3 if often, 2 if sometimes, 1 if once or twice, and 0 if never for how often the respondent did the following in case of a dispute with the husband:
a) Dialogue	"Explain your side of the argument" (variable neg_1f).
b) Compromise	"Suggest compromise to an argument" (variable neg_2f).
c) Caring	"Show that he cared?" (variable neg_3f).
d) Working things out	"Said could work out problem?" (variable neg_4f).
e) Husband's solution	"Agree to try husband's solution?" (variable neg_5f).
f) Respect feelings	"Respect partner's feelings?" (variable neg_6f).
Emotional IPV	Sum of three categorical variables which equal 3 if never, 2 if once or twice, 1 if sometimes, and 0 if often for husband doing the following:
a) Humiliation attempts	"Say something to humiliate you in front of others" (variable dv_emotional_1f).
b) Threats	"Threaten to hurt or harm you or someone close to you" (variable dv_emotional_2f).
c) Insults	"Insult you or make you feel bad about yourself' (variable dv_emotional_3f).
A.4 Well-being index	
Happiness score	A score ranging from 1 to 5, with 1 corresponding to unhappy and 5 corresponding very happy (variable happiness).
Life satisfaction score	A score ranging from 1 to 10, with 1 corresponding to 'least satisfied (variable life_satisfaction).
Stress score	The score ranges from 4 to 16, with a higher value corresponding to lower stress. It is the sum of the following categorical variables which equal 4 if rarely, 3 if sometimes, 2 if often and 1 if very often:
a) Control	"Unable to control the important things in your life" (variables stress_1).
b) Personal problems	"Confident about your ability to handle your personal problems" (variables stress_2; reverse coded).
c) Going well	"Things were going your way" (variables stress_3; reverse coded).
d) Difficulties	"Difficulties were piling up so high that you could not overcome them" (variables stress_4).
A.5 Attitudes index	
Exercise of power	Sum of the following dummies, which equal 0 if the woman agrees and 1 if she disagrees:
a) Important decisions	"The important decisions in the family should be made only by the men of the family" (variable norms_r1 (own) — norms_c1 (village attitude).
b) Wife can express disagreement	"The wife has the right to express her opinion even when she disagrees with what her husband is saying." (variable norms_r2 — norms_c2 *reverse coded*).

c) Son to school	"It is more important to send a son to school than it is to send a daughter" (variable norms_r3 — norms_c3).
d) Woman earns more	"If a woman earns more money than her husband it is almost certain to cause problems" (variable norms_r4 — norms_c4).
e) Tolerate beatings	"A wife should tolerate being beaten by her husband in order to keep the family together" (variable norms_r5 — norms_c5).
f) Right to beat wife	"A husband has the right to beat his wife" (variable norms_r6 — norms_c6).
Justifiable violence	Sum of the following dummies, which equal 0 if the woman agrees and 1 if she disagrees:
a) Neglects children	"If she neglects the children" (variable norms_r7 — norms_c7).
b) Argues	"If she argues with him" (variable norms_r8 — norms_c8).
c) Suspects unfaithfulness	"If he suspects she is unfaithful" (variable norms_r9 — norms_c9).
d) Public insults	"If she insults him in public" (variable norms_r10 — norms_c10).
e) Discipline interference	"If she interferes when he is disciplining their child(ren)" (variable norms_r11 — norms_c11).
f) Food not ready	"If she does not have food prepared on time" (variable norms_r12 — norms_c12).
g) Taking conflicts out of household	"If she discusses conflicts in the household with friends, neighbours, or family" (variable norms_r13 - norms_c13).

C.2 Departures from Preanalysis Plan

The preanalysis plan (PAP) is posted at https://www.socialscienceregistry.org/trials/2923. The estimation and inference methods follow the PAP. This appendix outlines deviations from the variable definitions and robustness analysis specified in the PAP, providing the rationale behind these adjustments.

C.2.1 Variable Definitions

1. Physical violence: We don't include the following in physical violence as this is just a threat and not actual experience of physical violence: Threats with weapon: 'Threaten to attack you with a knife, gun or any other weapon' (variable acasi 7 physical).
2. Exercise of power: We asked 6 questions in the survey but missed mentioning the following question in the pre-analysis plan: "The wife has the right to express her opinion even when she disagrees with what her husband is saying." (variable norms_r2 and norms_c2). We include this question, after reverse coding, into the variable's construction.
3. We generate a non prespecified asset ownership index as a summary measure. This is comprised of two pre-specified measures of asset ownership. The indicator variable for asset ownership has a very high mean in the control group. Therefore, we do not think this is a very good measure. Hence, we combine this with a secondary measure "Share of assets" to generate an index to report as a primary outcome.
4. Value of the share: We do not think this is a good measure of women's empowerment as it mechanically increases due to increases in the value of household assets in the cash transfer arms. It also assumes an equal value for the assets owned by different members of the household, which is a strong assumption and relies on the value of assets reported in the household survey at a different point in time.

C.2.2 Analysis

1. We do not report the share of remittances sent by women ("Woman's remittance share"), as the total remittances sent by families were relatively small. This limited the relevance of analyzing changes in the proportion and their potential impact.
2. We had planned to predict households in the non-cash receiving groups that would have selected a male cash transfer recipient and exclude them from the analysis to test the robustness of our results (Section 5.3 of the PAP). However, due to the inability to accurately predict male cash transfer recipients using the baseline data, we were unable to perform this robustness check.
3. We had planned to estimate compliance-adjusted treatment effects. However, given that compliance with all treatments is so high ($\approx 90\%$), this is not informative.

C.3 Additional Results

Table C1: Reason for Not Selecting the Primary Female's Mobile Money Account for the Cash Transfer

Reason	#	Percent
ID issue	46	18.7
Man already had account	74	30.08
Respondent decided should be man	37	15.04
Household decided should be man	36	14.63
Spouse decided should be man	19	7.72
Organization said should be man	2	0.81
Other	32	13.01

Note: This table reports a summary of the response to a question from the female respondent on why the household did not provide her mobile money account details to receive the cash transfer. This question was only asked from the respondents in the cash and combined treatment arms.

Table C2: Baseline Summary Statistics and Test of Balance

		Assigned-Cash		**Assigned-Workshop**		**Assigned-Combined**		
	Sample Mean	Coeff	p-value	Coeff	p-value	Coeff	p-value	Overall p-value
Age	30.773	-0.642	0.203	0.989	0.064	-0.375	0.432	0.982
Own Education:								
Primary or Below	0.417	0.023	0.434	0.041	0.108	-0.004	0.866	0.356
Lower Secondary	0.511	-0.022	0.413	-0.031	0.183	0.011	0.636	0.484
Higher Secondary or Above	0.071	-0.001	0.947	-0.010	0.477	-0.007	0.612	0.617
Spouse's Education:								
Primary or Below	0.328	0.016	0.560	0.049	0.074	-0.003	0.922	0.339
Lower Secondary	0.504	-0.012	0.673	-0.019	0.523	-0.004	0.900	0.627
Higher Secondary or Above	0.169	-0.004	0.862	-0.030	0.207	0.006	0.796	0.657
Value of Non-land, Non-loan Assets	1361.018	61.078	0.608	168.705	0.135	88.846	0.474	0.275
Number of Children (0-5)	0.960	0.041	0.405	-0.010	0.825	0.037	0.399	0.524
Number of Children (inc. stepchildren)	3.692	-0.173	0.149	0.073	0.508	-0.070	0.591	0.572
Household Size	6.102	-0.168	0.128	0.131	0.223	-0.046	0.717	0.767
Self-efficacy Score	22.177	0.123	0.664	0.018	0.949	-0.225	0.432	0.903
Years Married	14.694	-0.563	0.298	1.807	0.001	0.086	0.879	0.332
Supplied Labour Outside of Household	0.322	-0.047	0.172	-0.020	0.580	-0.049	0.228	0.209

Note: Baseline Sample size is 3291. Own and Spouse's education: Primary or below signifies grade 7 primary education or below; Lower Secondary includes primary grade 8 and lower secondary education (secondary grades 1-2); Higher Secondary or above is secondary grades 3 or above. HH Non-land assets include household durables, livestock, cash savings and net financial liabilities for the household. Self-efficacy is measured using the Schwarzer and Jerusalem (1995) 10-item scale. Years married is the number of years the respondent has been married to her current spouse. is a dummy for whether the respondent supplied any labour outside the household (salaried or casual) in the last 12 months. Coefficients and p-values are obtained from the regression of the covariate on each treatment indicator and the corresponding test of the null that the coefficient equals zero. The F-test null hypothesis is that the sum of the coefficients of the treatment indicators equals zero. Standard errors are clustered by village.

Table C3: Endline Summary Statistics and Test of Balance

		Assigned-Cash		**Assigned-Workshop**		**Assigned-Combined**		
	Sample Mean	Coeff	p-value	Coeff	p-value	Coeff	p-value	Overall p-value
Age	33.561	-0.614	0.188	1.489	0.002	-0.077	0.873	0.475
Own Education:								
Primary or Below	0.418	0.027	0.383	0.045	0.096	0.002	0.935	0.287
Lower Secondary	0.510	-0.029	0.307	-0.034	0.177	0.001	0.965	0.340
Higher Secondary or Above	0.072	0.002	0.904	-0.011	0.421	-0.004	0.816	0.733
Spouse's Education:								
Primary or Below	0.323	0.015	0.600	0.053	0.068	-0.007	0.810	0.377
Lower Secondary	0.506	0.003	0.907	-0.012	0.706	-0.002	0.947	0.886
Higher Secondary or Above	0.170	-0.018	0.468	-0.041	0.104	0.009	0.734	0.453
Value of Non-land, Non-loan Assets	1377.436	65.566	0.617	158.724	0.203	84.329	0.519	0.331
Number of Children (0-5)	0.971	0.064	0.206	-0.004	0.926	0.041	0.392	0.385
Number of Children (inc. stepchildren)	3.776	-0.156	0.197	0.097	0.408	-0.036	0.776	0.754
Household Size	6.183	-0.187	0.112	0.135	0.236	-0.021	0.861	0.800
Self-efficacy Score	22.170	0.127	0.654	0.068	0.816	-0.289	0.322	0.892
Years Married	14.296	-0.407	0.421	1.845	0.000	0.063	0.903	0.227
Supplied Labour Outside of Household	0.327	-0.041	0.262	-0.005	0.905	-0.039	0.365	0.389

Note: Endline Sample size is 2939. Own and Spouse's education: Primary or below signifies grade 7 primary education or below; Lower Secondary includes primary grade 8 and lower secondary education (secondary grades 1-2); Higher Secondary or above is secondary grades 3 or above. HH Non-land assets include household durables, livestock, cash savings and net financial liabilities for the household. Self-efficacy is measured using the Schwarzer and Jerusalem (1995) 10-item scale. Years married is the number of years the respondent has been married to her current spouse. is a dummy for whether the respondent supplied any labour outside the household (salaried or casual) in the last 12 months. Coefficients and p-values are obtained from the regression of the covariate on each treatment indicator and the corresponding test of the null that the coefficient equals zero. The F-test null hypothesis is that the sum of the coefficients of the treatment indicators equals zero. Standard errors are clustered by village.

Table C4: Attrition

	(1) Attrition
Workshop	0.026
	(0.019)
Cash	0.014
	(0.017)
Combined	0.023
	(0.021)
Placebo Mean	0.09
N	3291

Notes: This table reports ITT estimates from a regression of attrition on a vector of treatment dummies and randomisation block fixed effects. Attrition is a binary variable equal to 1 if the woman was not surveyed at endline. Heteroskedasticity-robust standard errors clustered at the village level are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table C5: Impact on Household Economic Behaviour

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
		Index Components					
	Economic Index	Labour Supplied (Days)	Inputs & Hired Labour	Education Expenditure	Revenue	Non-Land Assets	Consumption Expenditure
Workshop	0.166**	34.6*	453**	60	590**	114	129
	(0.064)	(18.6)	(210)	(41)	(284)	(85)	(127)
	[.]	[0.134]	[0.134]	[0.149]	[0.134]	[0.149]	[0.183]
Cash	0.342***	57.4***	586***	112***	746***	511***	305**
	(0.069)	(18.9)	(194)	(41)	(281)	(91)	(121)
	[.]	[0.005]	[0.005]	[0.006]	[0.006]	[0.001]	[0.007]
Combined	0.363***	13.1	1,016**	173***	1,083*	478***	162
	(0.121)	(18.1)	(441)	(47)	(631)	(92)	(151)
	[.]	[0.186]	[0.031]	[0.001]	[0.071]	[0.001]	[0.152]
P: Cash	0.863	0.021	0.323	0.233	0.604	0.716	0.329
= Combined	[.]	[0.144]	[0.698]	[0.698]	[0.974]	[0.974]	[0.698]
P: Cash	0.013	0.273	0.523	0.274	0.610	0.000	0.189
= Workshop	[.]	[0.522]	[0.699]	[0.522]	[0.699]	[0.001]	[0.522]
P: Workshop	0.038	0.258	0.071	0.022	0.304	0.000	0.826
= Combined	[.]	[0.224]	[0.106]	[0.060]	[0.224]	[0.001]	[0.575]
Placebo mean	0.294	636	1,138	642	2,545	1,850	4,223
# obs	2,890	2,890	2,890	2,672	2,890	2,890	2,889

Notes: This table shows the household-level treatment effects reported in Orkin et al. (2023) for this study sample. All currency values are measured in 2018 USD PPP. All outcomes except education expenditure are in annual terms. Labour supply is days of work on farm and non-farm household enterprises or supplied to the market, for all household members older than 15. Input expenditure includes purchase of inputs and stocks and inventory, rental, maintenance, and expenditure on hired labour, for household activities in crop agriculture and livestock rearing, and for non-farm enterprises owned or operated by household members. Education expenditure is all fee and non-fee expenditure in the current and preceding school years summed over all household members aged 6-20. It is set to missing for households with no members aged 6-20. Revenue captures the value of production sold or consumed at home from these activities, valued at farm-gate prices. Non-land assets are the estimated value, if sold, of durable assets, livestock, and stocks of dried maize, as well as cash savings. Consumption expenditure captures the value of purchased and home-produced food, non-durable and durable household goods, and social expenditure. The outcome in column (1) is an inverse covariance-weighted average of the outcomes in columns (2)-(7), following Anderson (2008). Heteroskedasticity-robust standard errors, clustered at village level are in parentheses. Sharpened q-values controlling for the false discovery rate across all outcomes except the summary index are shown in brackets. *; **; and *** denote significance at the 10; 5; and 1 percent levels respectively. The number of observations varies slightly across columns because some respondents don't answer all questions.

Table C6: Impact on the Main Outcomes (Multiple Test Correction)

	(1) IPV Index	(2) Asset Ownership Index
Workshop	0.040	0.049
	(0.057)	(0.066)
	[0.945]	[0.945]
Cash	0.068	0.066
	(0.058)	(0.068)
	[0.513]	[0.513]
Combined	-0.043	0.171***
	(0.056)	(0.064)
	[0.284]	[0.018]
p: Cash = Combined	0.077	0.079
q: Cash = Combined	0.086	0.086
p: Cash = Workshop	0.657	0.780
q: Cash = Workshop	1.000	1.000
p: Workshop = Combined	0.180	0.033
q: Workshop = Combined	0.099	0.071
Placebo mean	0.000	-0.000
# obs	2936	2939

All regressions include randomization block fixed effects. Heteroskedasticity-robust standard errors clustered by village shown in parentheses. Q-values for coefficients shown in brackets. Lower rows of the tables show p- and q-values for linear combinations of coefficients. The q-values adjust for multiple testing over all outcomes in the same family following Benjamini et al. (2006). *; **; and *** denote significance at the 10; 5; and 1 percent levels respectively

Table C7: Impact on the Main Outcomes (with Controls)

	(1) IPV Index	(2) Asset Ownership Index
Workshop	0.030	0.025
	(0.056)	(0.060)
Cash	0.033	0.068
	(0.056)	(0.063)
Combined	-0.089*	0.159**
	(0.053)	(0.062)
p: Cash = Combined	0.04	0.09
p: Cash = Workshop	0.97	0.44
p: Workshop = Combined	0.04	0.01
Placebo Mean	0.00	-0.00
# obs	2934	2937

This table reports ITT estimates from regression of outcome on a vector of treatment assignments, randomization block fixed effects and PDS lasso selected controls from the baseline: household size, number of children, number of children between 0 and 5, household assets, respondent and spouse education, respondent's self belief index, sublocation dummies. For the definition of the variable in column (1) see Table 2 and for the variable in column (2) see Table 4. Heteroskedasticiy-robust standard errors clustered by village are in parentheses.. $***p < 0.01, **p < 0.05, *p < 0.1$.

Table C8: Heterogeneous Impacts by Baseline Characteristics I

	Schooling Gap 1			Schooling Gap 2			Age difference		
	IPV Index	Asset Share Index	Intermediary Index	IPV Index		Intermediary Index	IPV Index	Asset Share Index	Intermediary Index
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Workshop	0.0371	0.0497	-0.101	0.0299	0.0563	-0.0841	-0.0676	0.0398	-0.0417
	(0.64)	(0.74)	(-1.38)	(0.47)	(0.78)	(-1.05)	(-0.99)	(0.51)	(-0.49)
Cash	0.0612	0.0642	0.0561	0.0584	0.0616	0.0773	0.0122	0.0817	0.123
	(1.03)	(0.94)	(0.79)	(0.87)	(0.83)	(1.02)	(0.15)	(1.05)	(1.42)
Combined	-0.0515	0.180**	0.143*	-0.0749	0.194**	0.172*	-0.137*	0.171*	0.187*
	(-0.90)	(2.81)	(2.25)	(-1.18)	(2.91)	(2.50)	(-1.98)	(2.43)	(2.50)
HTE	0.0178	0.0459	-0.166*	0.0397	0.109	-0.113	-0.00931	0.00254	0.00608
	(0.30)	(0.80)	(-2.52)	(0.42)	(1.52)	(-1.27)	(-1.62)	(0.49)	(1.17)
HTE*Asp	0.0274	-0.00866	0.117	0.0412	-0.0389	-0.0153	0.0222**	0.00279	-0.00691
	(0.31)	(-0.11)	(1.40)	(0.31)	(-0.39)	(-0.13)	(2.79)	(0.36)	(-0.88)
HTE*Cash	0.0505	0.00554	-0.00950	0.0373	0.0118	-0.104	0.0130	-0.00215	-0.0136
	(0.56)	(0.06)	(-0.10)	(0.27)	(0.11)	(-0.86)	(1.33)	(-0.29)	(-1.56)
HTE*Combined	0.0648	-0.0820	0.0540	0.140	-0.106	-0.114	0.0198*	0.00224	-0.00790
	(0.67)	(-1.09)	(0.61)	(1.07)	(-1.03)	(-0.98)	(2.51)	(0.31)	(-1.06)
# obs	2936	2939	2939	2936	2939	2939	2771	2774	2774

Note: Schooling gap 1 is years of education of spouse minus years of education of the woman, schooling gap 2 is an indicator variable equal to one if the woman has less years of education than her spouse and age difference is the difference in age of the respondent from her spouse. HTE refers to the baseline characteristic being used for analysis i.e. schooling gap 1, schooling gap 2 or age difference. $***p < 0.01, **p < 0.05, *p < 0.1$.

Table C9: Heterogeneous Impacts by Baseline Characteristics II

	Above median education			Has child aged 0 to 5			Above median self-efficacy		
	IPV Index	Econ Index	Intermediary Index	IPV Index	Econ Index	Intermediary Index	IPV Index	Econ Index	Intermediary Index
	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
Workshop	-0.0154	0.103	0.0252	-0.0853	0.163*	-0.0932	0.00756	-0.000427	-0.122
	(-0.17)	(1.27)	(0.30)	(-0.95)	(2.02)	(-0.92)	(0.10)	(-0.00)	(-1.26)
Cash	0.133	0.0680	0.00247	-0.0222	0.0987	0.150	0.0348	-0.00364	-0.0683
	(1.32)	(0.78)	(0.03)	(-0.22)	(1.01)	(1.48)	(0.43)	(-0.04)	(-0.71)
Combined	0.0189	0.180*	0.110	-0.0377	0.230*	0.225**	-0.0714	0.181*	0.113
	(0.20)	(2.20)	(1.31)	(-0.40)	(2.56)	(2.74)	(-0.90)	(2.20)	(1.24)
HTE	-0.161	-0.0539	0.314***	0.0122	-0.0312	0.0966	0.0147	0.0129	-0.103
	(-1.85)	(-0.81)	(3.75)	(0.17)	(-0.52)	(1.17)	(0.20)	(0.19)	(-1.23)
HTE*Asp	0.0834	-0.102	-0.176	0.199	-0.183	0.00928	0.0651	0.0985	0.0637
	(0.73)	(-1.10)	(-1.61)	(1.86)	(-1.91)	(0.08)	(0.62)	(0.94)	(0.54)
HTE*Cash	-0.123	-0.00630	0.102	0.135	-0.0489	-0.149	0.0612	0.129	0.229*
	(-0.95)	(-0.07)	(0.92)	(1.17)	(-0.48)	(-1.18)	(0.54)	(1.27)	(2.11)
HTE*Combined	-0.106	-0.0153	0.0639	-0.00908	-0.0900	-0.119	0.0605	-0.0222	0.0621
	(-0.90)	(-0.16)	(0.57)	(-0.09)	(-0.92)	(-1.25)	(0.56)	(-0.23)	(0.58)
# obs	2936	2939	2939	2936	2939	2939	2936	2939	2939

Note: HTE refers to the baseline characteristic being used for analysis i.e. indicator for woman having above median education, having a child aged 0 to 5 and above median self-efficacy. $***p < 0.01, **p < 0.05, *p < 0.1$.

Table C10: Impact on Asset Ownership by Category of Asset

	(1) Land	(2) Large Livestock	(3) Small Livestock	(4) Birds	(5) Fishing Equip	(6) Farm Equip (non-mech)	(7) Farm Equip (mech)	(8) Non farm	(9) House	(10) Large Durables	(11) Small Durables	(12) Transport	(13) Jewellery
Workshop	0.025	0.036*	0.036	0.075***	0.003	-0.025	0.000	0.009	0.032	0.027	0.047	0.007	0.005
	(0.034)	(0.020)	(0.023)	(0.027)	(0.006)	(0.033)	(0.009)	(0.022)	(0.038)	(0.024)	(0.036)	(0.006)	(0.013)
	[1.000]	[0.690]	[0.839]	[0.102]	[1.000]	[1.000]	[1.000]	[1.000]	[1.000]	[0.940]	[0.940]	[0.940]	[1.000]
Cash	0.039	0.077***	0.073***	0.037	0.006	-0.047	-0.003	-0.002	0.072**	0.072***	0.023	-0.001	0.034**
	(0.033)	(0.022)	(0.026)	(0.030)	(0.005)	(0.031)	(0.008)	(0.023)	(0.034)	(0.027)	(0.040)	(0.005)	(0.015)
	[0.263]	[0.008]	[0.037]	[0.263]	[0.263]	[0.211]	[0.511]	[0.511]	[0.081]	[0.037]	[0.511]	[0.511]	[0.062]
Combined	0.073**	0.072***	0.088***	0.049*	0.017*	-0.032	-0.001	0.032	0.106***	0.090***	0.039	0.011	0.036***
	(0.031)	(0.019)	(0.022)	(0.029)	(0.010)	(0.032)	(0.008)	(0.023)	(0.040)	(0.030)	(0.034)	(0.007)	(0.014)
	[0.026]	[0.002]	[0.002]	[0.086]	[0.077]	[0.171]	[0.264]	[0.127]	[0.019]	[0.013]	[0.160]	[0.097]	[0.019]
p: Cash = Combined	0.274	0.835	0.556	0.678	0.239	0.614	0.855	0.137	0.312	0.590	0.647	0.062	0.896
q: Cash = Combined	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
p: Cash = Workshop	0.660	0.080	0.154	0.150	0.488	0.460	0.742	0.630	0.217	0.090	0.510	0.171	0.080
q: Cash = Workshop	0.626	0.591	0.591	0.591	0.591	0.591	0.667	0.626	0.591	0.591	0.591	0.591	0.591
p: Workshop = Combined	0.130	0.089	0.018	0.323	0.139	0.824	0.867	0.281	0.050	0.038	0.799	0.626	0.042
q: Workshop = Combined	0.218	0.193	0.193	0.348	0.218	0.668	0.668	0.348	0.193	0.193	0.668	0.603	0.193
Placebo mean	0.260	0.097	0.155	0.733	0.007	0.502	0.020	0.117	0.373	0.183	0.719	0.010	0.046
Obs	2939	2939	2939	2939	2939	2939	2939	2939	2939	2939	2939	2939	2939

Each column shows the treatment effects on a binary indicator for if the woman owns or jointly owns with a family members each asset category. 'Farm Equip (non mech)' is farm equipment which is non mechanized and 'Farm equip (mech)' is farm equipment which is mechanized. All regressions include randomization block fixed effects. Heteroskedasticity-robust standard errors clustered by village shown in parentheses. Q-values for coefficients shown in brackets. Lower rows of the tables show p- and q-values for linear combinations of coefficients. The q-values adjust for multiple testing over all outcomes in the same family following Benjamini et al. (2006). *; **; and *** denote significance at the 10; 5; and 1 percent levels respectively

Table C11: Impact on Aspirations

	(1) Aspirations Index	(2) Assets	(3) Income	(4) Education
Workshop	0.065	18.426	102.862	0.182*
	(0.046)	(900.564)	(352.874)	(0.093)
Cash	0.183***	2682.706***	701.833**	0.181*
	(0.052)	(901.825)	(344.793)	(0.107)
Combined	0.240***	4308.992***	722.020	0.140
	(0.058)	(954.944)	(446.184)	(0.089)
p: Cash = Combined	0.38	0.09	0.97	0.66
p: Cash = Workshop	0.03	0.01	0.11	0.99
p: Workshop = Combined	0.00	0.00	0.14	0.61
Placebo Mean	0.19	10045.96	6388.44	15.59
# obs	2883	2870	2870	2272

Notes: This table shows the household-level treatment effects on the Aspirations Index reported in Orkin et al. (2023) for this study sample. Column (1) is an Anderson (2008)index consisting of variables in columns (2), (3) and (4). The index definition includes all observations that have non-missing values for at least one component, using only the non-missing components in the averaging. Income aspirations are the level of annual income that a household would like to reach at the end of the next ten years. Income is defined as all sources of cash income for the household, including earnings from production and transfers from any NGO or government programmes. Asset aspirations are the level of assets that the household would like to reach at the end of the next ten years, including their house, furniture, consumer goods and a transport vehicles. Income and assets are measured in constant 2018 USD PPP. Education aspirations are the aspirations for years of education attained by a randomly selected child, set to missing for households without children. Income aspirations are the level of annual income that a household would like to reach at the end of the next ten years. Income is defined as all sources of cash income for the household, including earnings from production and transfers from any NGO or government programmes. Asset aspirations are the level of assets that the household would like to reach at the end of the next ten years, including their house, furniture, consumer goods and a transport vehicles. Income and assets are measured in constant 2018 USD PPP. Education aspirations are the aspirations for years of education attained by a randomly selected child, set to missing for households without children. For each outcome variable, we report the coefficients of interest and heteroskedasticity-robust standard errors, clustered at village level, in parentheses. Sharpened q-values controlling for the false discovery rate across outcomes within each family are shown in brackets. *; **; and *** denote significance at the 10; 5; and 1 percent levels respectively.

Table C12: Impact on Intermediary Outcomes, High Predicted Group

	(1) Decision Making Index	(2) Controlling Index	(3) Relationship Index	(4) Respondent Wellbeing Index	(5) Attitudes Index
Workshop	-0.039	0.061	-0.050	-0.281***	0.055
	(0.085)	(0.122)	(0.100)	(0.089)	(0.094)
Cash	-0.018	0.101	-0.049	0.033	-0.003
	(0.105)	(0.100)	(0.090)	(0.095)	(0.094)
Combined	0.006	0.040	0.139	-0.035	0.002
	(0.106)	(0.120)	(0.093)	(0.091)	(0.084)
p: Cash = Combined	0.83	0.54	0.05	0.53	0.95
p: Cash = Workshop	0.85	0.70	0.99	0.00	0.47
p: Workshop = Combined	0.62	0.84	0.06	0.02	0.58
Placebo Mean	-0.06	0.01	-0.09	0.11	-0.26
# obs	976	976	976	976	976

Notes: This table reports ITT estimates from regression of outcome on a vector of treatment assignments and randomization block fixed effects by the sub-groups. This is the highest predicted IPV index sub-group obtained by splitting the sample by predicted IPV Index (frequency of physical and sexual violence) using a range of baseline covariates, as outlined in section 6.1.1. Standard errors are derived using bootstrap methods and reported in parentheses. $***p < 0.01, **p < 0.05, *p < 0.1$.

Table C13: Impact on Intermediary Outcomes, Low Predicted Group

	(1) Decision Making Index	(2) Controlling Index	(3) Relationship Index	(4) Respondent Wellbeing Index	(5) Attitudes Index
Workshop	0.102	-0.029	0.130	-0.150	-0.051
	(0.094)	(0.089)	(0.089)	(0.105)	(0.091)
Cash	0.014	-0.039	0.156*	0.013	0.032
	(0.088)	(0.104)	(0.094)	(0.101)	(0.113)
Combined	0.160**	-0.195**	0.310***	0.182**	-0.045
	(0.072)	(0.083)	(0.103)	(0.093)	(0.101)
p: Cash = Combined	0.11	0.13	0.04	0.09	0.45
p: Cash = Workshop	0.40	0.92	0.69	0.09	0.38
p: Workshop = Combined	0.46	0.06	0.01	0.00	0.95
Placebo Mean	0.08	-0.03	0.03	-0.05	0.21
# obs	976	976	976	976	976

Notes: This table reports ITT estimates from regression of outcome on a vector of treatment assignments and randomization block fixed effects by the sub-groups. This is the low predicted IPV index sub-group obtained by splitting the sample by predicted IPV Index (frequency of physical and sexual violence) using a range of baseline covariates, as outlined in section 6.1.1. Standard errors are derived using bootstrap methods and reported in parentheses. $***p < 0.01, **p < 0.05, *p < 0.1$.

Table C14: Impact on Aspirations, High Predicted Group

	(1) Aspirations Index	(2) Assets	(3) Income	(4) Education
Workshop	0.095	591.437	321.848	0.242***
	(0.106)	(1258.425)	(605.111)	(0.093)
Cash	0.117	3281.639***	-43.347	0.144
	(0.091)	(946.878)	(781.743)	(0.132)
Combined	0.296***	5137.832***	957.141	0.210*
	(0.098)	(1128.214)	(739.422)	(0.114)
p: Cash = Combined	0.12	0.19	0.15	0.65
p: Cash = Workshop	0.81	0.01	0.63	0.52
p: Workshop = Combined	0.08	0.00	0.46	0.80
Placebo Mean	0.04	7017.58	5967.41	15.50
# obs	963	955	959	687

Notes: This table reports ITT estimates from regression of outcome on a vector of treatment assignments and randomization block fixed effects by the sub-groups. This is the highest predicted IPV index sub-group obtained by splitting the sample by predicted IPV Index (frequency of physical and sexual violence) using a range of baseline covariates, as outlined in section 6.1.1. Standard errors are derived using bootstrap methods and reported in parentheses. $***p < 0.01, **p < 0.05, *p < 0.1$.

Table C15: Impact on Aspirations, Low Predicted Group

	(1) Aspirations Index	(2) Assets	(3) Income	(4) Education
Workshop	0.023	-1114.074	84.698	0.116
	(0.108)	(2391.331)	(635.140)	(0.120)
Cash	0.182*	520.356	661.512	0.396***
	(0.099)	(1827.667)	(731.450)	(0.121)
Combined	0.149	2604.378	251.222	0.116
	(0.103)	(2043.017)	(684.745)	(0.160)
p: Cash = Combined	0.76	0.41	0.64	0.02
p: Cash = Workshop	0.19	0.48	0.47	0.01
p: Workshop = Combined	0.20	0.17	0.85	1.00
Placebo Mean	0.39	14317.05	7284.97	15.58
# obs	955	952	952	829

Notes: This table reports ITT estimates from regression of outcome on a vector of treatment assignments and randomization block fixed effects by the sub-groups. This is the low predicted IPV index sub-group obtained by splitting the sample by predicted IPV Index (frequency of physical and sexual violence) using a range of baseline covariates, as outlined in section 6.1.1. Standard errors are derived using bootstrap methods and reported in parentheses. $***p < 0.01, **p < 0.05, *p < 0.1$.

Figure C1: Conditional Average Treatment Effects of Cash Treatment on the IPV index

