The household at work: A field experiment in the Rohingya refugee camps

This study considers the effects of employment on household wellbeing at a Rohingya refugee camp in Bangladesh.

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THE HOUSEHOLD AT WORK:
A FIELD EXPERIMENT IN THE ROHINGYA REFUGEE CAMPS

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Abstract

We use a randomized control trial to assess how employment affects the wellbeing of the *household* – as distinct from effects on the individual supplying the labor. We work with 2513 households in the world's largest refugee camp, and randomly assign the husband or wife to an employment intervention. We also include cash and unpaid work treatment arms in order to disentangle underlying channels driving the employment effects we observe. While gainful employment delivers comparable psychosocial benefits to both men and women, spillovers are asymmetric: *households* in which men are treated fare significantly better as measured by psychosocial wellbeing and domestic violence *for both partners*. Our results are consistent with individuals preferring that their families inhabit traditional gender norms and motivate caution in the distribution and targeting of social protection programs.

Keywords: Employment, Psychosocial, Refugees
JEL Classification: D91, I31, J22

1 Introduction

How do employment opportunities impact not only oneself, but one's household? And do these net impacts differ by who - the wife or the husband - receives the opportunity? We often model labor supply decisions at an individual level, despite a large body of sociological evidence that employment is a deeply social phenomenon with potentially large spillovers to those in one's network, particularly within the household (Jahoda, 1982). And policymakers are often choosing - not whether to fund various social protection programs like cashfare or workfare, but rather - *who* to fund, or how to target.

We answer these questions in the largest refugee camp in the world, the Rohingya refugee camps in Bangladesh, where social protection programs are profuse and unemployment ubiquitous: only 7.6% of refugees in our sample found any wage labor in the previous month. We design a field experiment that involves 2513 married couples. Relative to a control arm, in which individuals receive a nominal fee for participating in a weekly survey, we design an employment arm, in which we offer gainful employment in the form of a surveying task for an average of four days per week. We also assign households to a cash arm, in which we offer no work but the equivalent sum of money in the form of weekly cash transfers, and an unpaid work arm, in which we offer an equivalent but unpaid work opportunity. All interventions last six weeks and all households receive the nominal fee for survey participation. The cash and unpaid work arms are designed to reflect the two key features of working: earning money and doing something productive. Their inclusion allows us to investigate the underlying channels that may explain why employment matters: are the psychosocial gains from work driven by alleviating a financial constraint, reducing idle time, or both? Similarly, are reductions in intimate partner violence from employment driven by alleviating a financial constraint, or reducing physical proximity?

While we offer a randomized treatment to only one member (male or female) of each enrolled couple, we survey *both* members, allowing us to document spillovers of each intervention on the spouses of the treated. Our primary object of interest is therefore the impact of an employment opportunity on oneself and one's partner.[1] We examine impacts on psychosocial health and intimate partner violence.

We present our results in six steps. First, we document a 'first stage': the treatments work as intended. Both the gainful employment and cash arms significantly increase savings and reduce debt, with no change in the unpaid arm and no detectable differences in the magnitude of effects between work and cash treatment arms, nor between men and women.

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[1] We do not directly survey children in the household so cannot speak to the impacts of these interventions on child wellbeing, though we discuss implications in Section 6

Both the gainful employment and unpaid arms significantly reduce leisure and idle time and raise time spent on productive activity, with no change in the cash arm and no detectable differences in the magnitude of effects between work and unpaid treatment arms, nor between men and women. In other words, the cash arm effectively alleviates financial constraints, the unpaid arm effectively reduces idle time, and the employment arm effectively does both.

Second, we find that both husbands and wives exhibit significant psychosocial benefits from employment, gaining 0.11 SD ($p = 0.004$) and 0.08 SD ($p = 0.053$), respectively, in their psychosocial index, an inverse covariance-weighted index of depression severity, stress, life satisfaction, sociability, purposefulness, self-worth, locus of control, and stability. These effects are driven by large reductions in depression severity for both parties, with women additionally reporting greater stability while men report greater purposefulness, self-worth, and control. These effects are much larger than what we observe when participants receive cash or engage in unpaid work, suggesting that neither the income nor the productive activity alone is driving the benefits of work. Women gain half as much from receiving cash alone and 0.01 SD from engaging in unpaid work; we cannot reject a zero effect for either. Likewise, men gain 0.02 SD from both cash and unpaid work, and we cannot reject a zero effect for either. These results are consistent with Hussam et al. (2022), with the additional insight that volunteering has little psychosocial value and women benefit *as much as men* from employment in this context. Despite 95% of women in our sample never having been gainfully employed in their prior lives in Myanmar (in contrast to 22% of men), *both* parties derive meaningful improvements in their wellbeing from the part-time employment opportunity we offer, and these improvements cannot be explained by the income nor the activity alone.[2]

Taken in isolation, this result may suggest that targeting employment opportunities towards women will generate welfare improvements at least as large as directing them towards men. This directive is complicated, however, when we turn to the partners of treated individuals to examine spillovers in the household. Our third result is that the husbands of employed women exhibit no detectable change in their wellbeing (0.00 SD, $p = 0.958$). We find no evidence that men are happier because their wives are happier, nor do they appear to be upset by a wife who is working when they are not. We observe some evidence of a negative psychosocial response to a wife who receives cash (-0.04 SD) or unpaid work (-0.05 SD) but cannot reject a zero effect for either.[3]

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[2]While we cannot reject that the sum of the two point estimates on cash and unpaid work (0.47 SD) is equal to the point estimate on work (0.89 SD) when we pool men and women together (p-value = 0.278), the magnitude of the difference suggests that people need to be engaged in productive work where they are paid in order to reap the full benefits of employment – it is not sufficient to engage in a productivite activity and receive a separate cash transfer.

[3]We note that ours is a selected sample: in order to be eligible for participation in the experiment, both husband and wife had to agree that either would be comfortable with working if given the opportunity.

Our fourth result examines the wives of treated men. We find that the wives of men who receive an employment opportunity experience large and statistically significant psychosocial gains (0.10 SD, $p = 0.02$), driven by reductions in depression severity and improvements in purposefulness and self-worth. These gains are statistically equivalent both to those of their employed husbands and their employed female counterparts. The wives of men who receive cash or unpaid work also experience gains, exhibiting 0.09 SD ($p = 0.034$) and 0.07 SD ($p = 0.101$) improvements in their psychosocial wellbeing index respectively, driven largely by gains in self-worth.

Given this evidence of spillovers between partners, we next turn to impacts on intimate partner violence (IPV), a direct measure of relational health between partners. Our IPV outcome is an inverse covariance weighted index summarizing beliefs about and experience of verbal and physical abuse from one's partner. Our fifth result is that employed women experience moderate reductions in IPV, although estimates are noisy and we cannot reject a null effect for any of the treatment arms. Employed men, for whom we only collect data on verbal abuse from their partner, report a moderate increase in verbal IPV, but again we cannot reject a null effect.

We then again turn to their partners. Our sixth result is that we document very large and statistically significant reductions in IPV among the wives of employed men. This is in contrast to the husbands of employed women, who report moderate and statistically insignificant reductions in verbal abuse. As a benchmark, the 0.15 SD ($p = 0.043$) reduction in the IPV index experienced by the wives of employed men amounts to a 31% reduction in the likelihood of being physically threatened by their husband in the previous month. Importantly, we observe similar magnitude declines in IPV for the wives of men receiving cash or unpaid work as well.

In total, while own-treatment effects are approximately equal regardless of who receives the employment opportunity, spillovers are asymmetric: the husbands of employed women experience no meaningful changes, but the wives of employed husbands experience significant improvements in both psychosocial wellbeing and exposure to verbal and physical violence from their husbands. What might be driving this asymmetry? We posit three theories: (1) husbands and wives may possess different objective functions, with husbands drawing utility only from their own wellbeing while wives draw utility from both their and their husbands' wellbeing; (2) men may be more likely to externalize their depression via verbal or physical violence than women; and (3) individuals may derive utility from occupying traditional

In practice, this meant that only couples in which the husband granted the wife permission to work were eligible for this study, suggesting that we may be estimating a lower bound of a husband's potential negative reaction to their wife working.

gender norms and having their partners do so as well.

While no channel is mutually exclusive and we find some evidence for each, the third appears most consistent with our results. Namely, we observe that one's own sense of purposefulness and/or self-worth increase meaningfully *only* when individuals occupy their traditional roles (men who earn an income, and women who do not but have husbands who are treated). We also find that the large improvements in wellbeing among wives of treated men are concentrated among those women who rank financial stability and a strong work ethic - features reflective of traditional male roles - as the characteristics they most value in an ideal husband at baseline.[4]

Lastly, we turn to policy implications. Cash and employment programs targeting women are often touted as a means of empowering women. We therefore take seriously the distinction made by Sen (1999) between wellbeing and agency - two policy objectives that may not always move together. Our wellbeing measures of psychosocial health and intimate partner violence imply that the wives of treated husbands are at least as well off as treated women. Women whose husbands were assigned to any of our three treatments exhibit an increase in their psychosocial index of 0.09 SD ($p = 0.028$) and a relative decrease in self-reported IPV of -0.16 SD ($p = 0.017$). However, perhaps treated women experience greater agency in the household than their untreated counterparts in a way that does not immediately translate into improved wellbeing.

We examine a battery of intra-household bargaining power measures to test this. Using both revealed preference and self-reported measures, we find no systematic evidence that treated women (in employment, cash, or unpaid work) experience gains to their bargaining power. Nor do we find that treated men exhibit a retrenchment of their power in the household. We note that ours is a six week intervention that is not intended to improve skills or access to future opportunities, so these results cannot speak to longer or more enriching employment settings. However, our interventions are akin to many social protection programs that governments and NGOs regularly promote (ex. workfare programs like NREGA, cash transfers, etc.) and suggest that these programs may not necessarily be effective vehicles for the redistribution of power within households, should this be an objective of a policymaker.

We view this paper as providing a proof-of-concept around the social impacts of employment. Taken in sum, our results suggest that while employment delivers meaningful and comparable psychosocial value to both men and women above and beyond that of cash or productive activity alone, a consideration of spillovers onto one's partner paints a different

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[4]This is true for both the wives of unpaid work husbands and cash husbands, but not far women whose husbands were employed. This distinction is likely because employed men exhibit large improvements in their own psychosocial wellbeing (in contrast to men with cash or unpaid work), which in turn significantly increases the wellbeing of *all* wives, leaving little heterogeneity by their baseline preferences.

picture: *households* in which men receive an employment opportunity fare better on net, in both psychosocial wellbeing and prevalence of intimate partner violence, than households in which women receive the opportunity. This asymmetry is echoed for cash transfers and unpaid work as well, with women deriving the bulk of the household benefit *when their partners are treated*.

We qualify this work with a note on our field context. We conduct this study in the Rohingya refugee camps in Bangladesh, home to nearly one million Rohingya refugees who fled brutal attacks by the Myanmar government. These experiences are manifest in the camps: in our present sample, 38% qualify as moderately depressed. Conditions in the camps are difficult as well: it is illegal to work, and informal work is scarce; refugees live off of meager rations; communities practice conservative gender norms and 56.4% of the women in our sample believe that wifebeating is at least "sometimes" warranted. We operate in this setting intentionally, with the hope that volunteering, cash and employment interventions may have high marginal returns in such a context. However, the Rohingya camp environment is not dissimilar to other contexts of vulnerable populations: Syrian refugees in Jordan exhibit similar levels of depression (Poole et al., 2018) and unemployment. Nor are gendered impacts from employment likely to be unique to this setting: Bhalotra et al. (2021) and Amorim et al. (2023) find disproportionately higher physical and psychological costs to unemployment for males relative to females in Brazil.

We view this paper as making three contributions. First, while recent work has established that employment is a source of substantial psychosocial value (Hussam et al., 2022; Kasy and Lehner, 2022), there are no papers to our knowledge that document how these returns to employment - both from pecuniary and non-pecuniary mechanisms - are likely to differ by one's role in their social context, a position inseparable from gender identity in much of the world (Agte and Bernhardt, 2023). Ours is the first study to our knowledge (alongside ongoing work by Christian et al. (2021)) that investigates the effects of employment on the workers themselves as well as the spillover effects on other household members.[5]

Second, we contribute to an active literature that investigates the relationship between male unemployment and intimate partner violence. Existing empirical literature remains inconclusive, with studies documenting both positive (Bhalotra et al., 2021; Tur-Prats, 2021) and negative (Anderberg et al., 2016; Boyer et al., 2022) relationships between the two. Our experiment allows us first to causally estimate this effect and then to tease apart whether this is due to greater control of resources (cash), less time in physical proximity to one's partner

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[5]Christian et al. (2021) investigates the impacts of cash-for-work programs implemented by the WFP across four different countries. They also gather data on the outcomes of husbands and wives participating in gender-specific cash-for-work programs and preliminary findings suggest that which gender receives the work opportunity impacts women's well-being and empowerment.

(unpaid work), or the ability to regain the role of the breadwinner (employment): the three primary channels proposed, but not yet tested against one another, in the literature. Our findings paint a complex picture. Intimate partner violence upon wives, both verbal and physical, is significantly reduced whether a man is receiving cash, unpaid work, or gainful employment. The fact that IPV is not meaningfully reduced for women who are employed or in unpaid work suggests that these effects are *not* driven by reduced physical proximity (as working women are outside the house as much as working men are). The fact that men involved in unpaid work significantly reduce their IPV suggests that men need not assume the breadwinner role either. And the fact that unpaid work is as impactful as cash in reducing IPV suggests that financial constraints are not the driving force. Rather, the channel seems to be a relational one: women who, at baseline, value financial stability and a strong work ethic in a partner exhibit the largest psychosocial gains to their husbands being treated. Perhaps their happiness translates into their husbands, in turn, being kinder to them. While speculative, our results suggest that the framing of channels around instrumental motives and proximity, as is standard in existing literature, is too simplistic.

Third, our design also allows us to establish the causal relationship between female employment and household bargaining power and disentangle the channels therein. Existing literature maps increased female labor force participation to greater household bargaining power (Acharya et al., 2010; Cunningham, 2007; Anderson and Eswaran, 2009), while the relationship between female employment and domestic violence remains mixed (Aizer, 2010; Sanin, 2023; Baumberg, 2016; Blair and Mvukiyehe, 2023; Erten and Keskin, 2021). Cash transfers have also been found to have gendered impacts (Giaccobasso, 2023). Insofar as our employment and cash interventions are comparable to typical social protection programs however, our experiment allows us to disentangle the degree to which gains in empowerment are due to greater control over resources (cash), exposure to productive activity beyond the household domain (unpaid work), or the act of assuming the breadwinner position (employment), an exercise not yet performed in the existing literature despite its direct policy relevance. We find that our employment intervention significantly increases psychosocial wellbeing for women while cash alone yields only half this improvement and unpaid work has no effect. However, this improved psychosocial state appears to neither be driving nor be a consequence of improved agency in the household: employment does not meaningfully shift a woman's power within the home.

Finally, our results underscore the importance of measuring the impact of social protection programs on margins beyond material consumption (extending to psychosocial wellbeing, violence, and bargaining power) and at levels beyond the individual (extending to one's partner, children, and beyond): labor supply is not motivated by purely monetary considera-

tions, nor are its consequences limited to the self. Moreover, they underscore the importance of measuring such impacts relative to the policy-relevant counterfactual: policy-makers are often not deciding whether or not to spend funds (i.e. treatment v. control), but rather *how* (workfare v. cashfare) and to *whom* (women v. men) existing funds should be allocated. Notably, social protection policies such as cash transfer programs, job training programs, or cash-for-work programs commonly determine the allocation of funding and the targeting of beneficiaries with a motivation of 'gender inclusion,' despite scarce evidence of the means through which male and female beneficiaries may derive value from the intervention: the WFP, for example, mandates a 60% female participation in their cash-for-work programs (WFP, 2020). We hope the findings of this study can offer clarity to the design of such programs as we probe their underlying value to individual and household wellbeing among vulnerable and low-resource populations.

2 Research Context

2.1 Recent Events

In August of 2017, the Myanmar military executed a series of "Clearance Operations" in Rakhine State, Myanmar. The operations were targeted at the Rohingya ethnic minority, who have been denied citizenship in Myanmar since 1982 and are now the world's largest stateless population. Over the course of four months, gang rapes and sexual violence were perpetrated against an estimated 18,000 women and girls, an estimated 36,000 Rohingya were thrown into fires, and at least 25,000 Rohingya were killed. Among those who survived, over 750,000 entered Bangladesh, building and settling into what is now the largest refugee camp in the world (Habib et al., 2018). They joined several hundred thousand Rohingya refugees from earlier episodes of ethnic violence, with the current population in the camps exceeding 900,000 individuals.

2.2 Camp Life: Descriptive Statistics

There are currently 34 camps in Bangladesh, with each camp divided into blocks containing 60 to 130 households. These camps span from Teknaf in the South to Ukhiya in the North. Within each block a local Rohingya leader known as a "majhi" acts as a liaison between humanitarian groups and the refugee population, and coordinates humanitarian aid distributions. Because of legal restrictions on refugee employment (Bhatia et al., 2018), many refugees find themselves without work opportunities. Some seek employment in the informal

sector outside the camps. Movement outside the camps comes with risk, but this has decreased somewhat since the initial influx. Several checkpoints have been removed, and those remaining are now manned by police, instead of military forces. Among the limited job prospects are roles as agriculture or construction day labor, street stall operations, tutoring, or assisting in NGOs initiatives like child-friendly spaces and health clinics. The primary source of employment are through NGOs, who have organized cash-for-work programs (Mree, 2019). In areas outside the camps, a similar demographic of Bangladeshis are involved in agriculture, fisheries, transportation, or small street businesses.

Female refugees in our study are 28 years old on average, and 15% of women in our sample had no formal education while in Myanmar. Approximately 21% of females qualify as at least moderately depressed according to the PHQ-9 screening tool. A typical day for a woman, as captured by asking time spent on various activities the previous day, involves 8.4 hours sleeping, 0.4 hours engaged in wage work, 2.8 hours doing chores outside the house, 3.0 hours doing chores inside the house, 2.8 hours actively taking care of elders, children, and the sick, 2.0 hours actively taking care of oneself, and 3.6 hours resting, relaxing, or in religious activities. The average male refugee in our study is 21.9 years old, and 23% had no formal education when in Myanmar. 55% qualify as at least moderately depressed. A typical day for a male participant consists of 8.7 hours sleeping, 0.8 hours engaged in wage work, 2.7 hours doing chores outside the house, 1.7 hours doing chores inside the house, 2.3 hours actively taking care of elders, children, and the sick, 2.0 hours actively taking care of oneself, and 5.0 hours resting, relaxing, or in religious activities.

3 Experimental Design

3.1 Sampling Strategy

The research team recruited 2520 households from 10 camps. Each camp was divided into 4 to 7 blocks, and within each block, there were 14 to 42 sub-blocks, which served as our unit of randomization. We selected nine households per sub-block. Households were recruited using a random walk procedure. The field team started near the center of a sub-block, randomly chose a direction, and then approached households door-to-door to ask about their interest in participating in the study. Each household was informed that we may have an opportunity for them to work for up to four hours per day for four days a week over six weeks. We clarified that we had not yet secured our funds for this activity, and we would not have enough work opportunities for everyone, but we wished to know whether both members of the married couple would be able and interested in working for us, and whether they would be willing

to meet with us for ten minutes every week for six weeks to answer survey questions (with compensation of 50 taka weekly) in the case that we could not offer them paid work. If households voiced interest, the field team confirmed that there existed a married couple in the household who satisfied the following eligibility criteria: both members were between the ages of 18 and 45, able and willing to work, and had not worked for more than 10 hours in the past two weeks. We also verified that they were recent arrivals and not relatives of the *majhi*. Prior to all field work, the research team secured permission from government authorities to operate in the camps and offer the interventions through our NGO partner, RTM International.

3.2 Experimental Design

We conducted the study in 280 sub-blocks, each randomly assigned to one of three experimental arms (80 blocks each) and a control group (40 blocks). In control sub-blocks, participants received 50 taka (USD $0.50) per weekly survey. In work sub-blocks, participants could work for four days per week, earning 300 taka (USD $3) per day, totaling 1200 taka weekly. In cash sub-blocks, participants received the same 1200 taka (USD $12) weekly as an unconditional cash transfer. In unpaid work sub-blocks, participants engaged in the same work activity for no pay, besides the 50 taka received for surveys. Each household was randomized to have either the husband or the wife receive the assigned intervention. All households were informed of the six-week study duration, with surveyors returning weekly for brief surveys and compensation. We made the randomized treatment allocation publicly known to all participants by displaying their randomized treatment status on the surveyors' tablet screens. Table 1 reports summary statistics and balance across the arms.

Employment intervention details Our employment intervention replicates that of Hussam et al. (2022) and was offered to those in the work and unpaid work group.[6] Individuals who were assigned to the work first watched an instructional video we created to ensure they understood the task. Enumerators then explained the task again verbally. The task involved selecting fifteen same-sex neighbors and tracking these individuals' activities four times per day on a series of visual time-use worksheets (Figure 2). We informed participants that we were interested in understanding the typical daily activities of individuals in their neighborhood and that their neighbors' identities would remain anonymous to both the surveyors and the research team. Workers were assigned three or five workdays per week for a total of 24 days of work over the six weeks, with all dates predetermined and noted on a calendar

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[6]The one notable departure from the work activity of Hussam et al. (2022) is that we did not embed an explicit community-centered purpose to the work.

Table 1: Balance in observables across treatment arms

	(1) Control	(2) Work	(3) Cash	(4) Unpaid	(5) (1) vs. (2)	(6) (1) vs. (3)	(7) (1) vs. (4)
Age	29.69	29.32	30.10	29.78	0.37	0.36	0.67
People in HH	5.40	5.39	5.45	5.44	0.64	0.98	0.89
Math Literacy Index	3.23	3.27	3.18	3.23	0.85	0.58	0.66
Digit Span Index	6.07	6.11	6.00	6.22	0.79	0.31	0.63
Life Satisfaction Index	16.70	16.40	16.11	16.48	0.42	0.09	0.71
Self-Worth Index	14.49	14.71	14.89	14.58	0.38	0.34	0.34
Purpose Index	14.48	14.58	14.84	14.53	0.94	0.86	0.93
Work Last 30 Days	0.08	0.07	0.07	0.05	0.69	0.78	0.28
Worked Myanmar	0.33	0.32	0.33	0.34	0.43	0.73	0.87
Hrs Idle/Day	3.94	3.85	3.98	3.87	0.65	0.34	0.86
Locus of Control	15.04	15.01	14.90	15.03	0.80	0.56	0.69
Healthy Days	24.84	25.17	25.32	25.24	0.28	0.12	0.51
PHQ	6.56	6.43	6.38	6.46	0.66	0.62	0.66
Stress Index	5.56	5.70	5.48	5.68	0.98	0.50	0.90
Diff. Conversations	12.56	12.63	12.55	12.29	0.26	0.84	0.22
Savings (BDT)	261.37	345.56	236.93	320.52	0.40	0.74	0.51
Consumption 2 Wks (BDT)	3710.52	3459.56	3645.39	3687.83	0.23	0.73	0.58
Observations	360	717	720	716			
Joint F-Test					0.35	0.99	0.72

Notes: Columns (1), (2), (3), and (4) show the average value of the variable in the respective treatment arm. Column (5) shows the p-value of the difference in means between the control and work treatment groups, Column (6) shows the p-value between control and cash, and Column (7) shows the p-value between cash and unpaid.

which was given as a gift to all participants. Participants dropped off their worksheets at the end of the workday in a tamper-proof box at the home of a pre-assigned refugee neighbor within each sub-block (the 'facilitator'). Facilitators were also workers and had no access to the contents of the box. They were asked to place a sheet at the end of the day's work with the day's date, so that any submission 'below' that sheet was time-stamped to having been submitted on that day. The facilitators received an additional 50 taka per week for providing this assistance.

At the end of the week, each worker would show up at the facilitator's home, where an enumerator checked the participant's work for any mistakes (eg. no missing sheets, submission made on the correct days; fifteen tick marks per sheet; no replication across days or obvious variation in handwriting suggesting someone else had done their work). To encourage high-quality work, we introduced a pay penalty: consecutive mistakes over two weeks would result in no payment from the fourth week onwards. However, participants were never at risk of losing their job nor otherwise being punished by the employer (the enumerator). The participant received their payment after the enumerator verified the quality of their work and administered a short survey.

This work task was designed with several considerations in mind. First, we aimed for equal participation between men and women, so we chose a task that did not involve strenuous manual labor but still required physical and mental effort. Workers performed repetitive

movements outdoors in hot and muddy camp conditions, and completing the task required focus. Additionally, the task was intended to occupy a substantial portion of the day without being a full-time commitment; we estimated that it would take about three hours each work-day. Second, because not all participants were literate, we devised a task that demanded no literacy or numeracy skills beyond basic counting. The time-sheet was a visual tool featuring a comprehensive list of activities commonly undertaken by individuals in the camps (eating, napping, going to the market, getting rations, praying, etc.) Workers simply needed to place tick marks next to the activities they observed their neighbors engaging in. Third, we crafted a work task that encouraged workers to step outside their homes and interact with others but did not necessitate explicit socialization. Workers could silently observe their neighbors and complete their worksheets, or they could engage in conversation if they chose to. Previous research by Hussam et al. (2022) indicates that additional conversations during workdays were rare. In sum, these factors led to a work task similar to non-manual labor available in the camp, often provided as "paid volunteer opportunities" by NGOs. It suited the constraints of our study population and aimed to be neither too attractive nor too unattractive considering the refugee camp context.

Interpreting the magnitude of cash interventions   Every refugee in the camps receives a monthly e-voucher of 1050 taka through the Bangladeshi government and the World Food Programme. This voucher allows them to purchase a limited quantity of food staples, including a maximum of thirteen kilograms of rice, two kilograms of lentils, one liter of oil, and ten eggs. Relative to this, our cash and work-for-cash interventions more than quadruple potential consumption per recipient. Notably, despite the common grievance that these rations are insufficient, refugees often resell portions of these staples to host community members at discounted rates to secure the cash needed to purchase other basic foods which the e-voucher does not qualify for, such as salt or vegetables.

This e-voucher remains the only reliable source of income for refugees. Those who are lucky enough to find wage employment report a range of wages, from approximately 300 taka per day for unskilled work with NGOs to 700 taka for skilled work, and manual day labor around 400 taka per day. These are neither steady nor long-term jobs. Of those who worked, the average male (female) in our sample reports having worked 3.2 (3.6) days in the previous month at an average wage of 540 (330) taka. Relative to this, one month of our cash and cash-for-work interventions is four (five) times the income received from alternative employment opportunities.

As a result of being unexpectedly expelled from Myanmar and spending five years in the camps, along with the absence of other opportunities to generate income, most refugees

have very few economically valuable assets, such as land or cattle, and minimal savings. The average participant in our study reports savings at baseline of 302 taka (USD $3), with the median participant reporting zero savings.

4 Data Collection and Survey Instruments

4.1 Timeline and survey instruments

We conducted a baseline survey in January 2023, which was administered to both members of the couple. The following week, the field team revisited these households to disclose their randomized treatment status and conduct the first midline survey. Subsequently, brief surveys were conducted weekly for five weeks with the participating household member, followed by payment disbursal. We conducted an endline survey five weeks after the start of work. A final follow-up survey took place approximately five weeks after the endline to ensure that participants did not experience any negative effects from the work opportunity. We observed a 3% attrition rate at the endline, which did not differ across treatment arms. Additionally, there were no indications of differential attrition among partners or by gender in the endline survey (Table A1).[7]

4.2 Outcome variables

All outcomes we describe below are collected via the surveys described above. The questions in these surveys were drawn from previous work in the camps (Hussam et al., 2022) and piloted extensively with households that were not included in the study sample. We describe the outcomes in broad detail below and refer the reader to the PAP for a detailed description of how each question was posed, and each outcome was constructed.

First stage We check that our interventions worked as intended (shifting respondents time-use and financial portfolio). We collect three measures of how money is used: consumption, savings, and loans. We also rely on a new time-use survey module designed by (Field et al., 2022) to categorize time spent on productive activities, sleep/leisure and idle time.

Main effects Our main outcomes include general mental well-being and intimate partner violence. Their impact on each other is bidirectional; both reflect the interpersonal dynamics

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[7]We conducted a follow-up survey 6 weeks after the end of our work assignment to ensure that there were no negative long-run consequences of the work coming to an end. We do not find evidence of any worsening of outcomes in treatment households. Results are available upon request.

within which each one is embedded. We measure eight dimensions of psychosocial wellbeing, including depression (PHQ-9), Locus of Control (Levenson's Scales), life satisfaction (Diener's Satisfaction With Life Scale), stress (Cohen's Perceived Stress Scale), sociability (positive conversations), stability (Cantril Self-Anchoring Striving Scale), purpose and self-worth.[8] We measure intimate partner violence by asking women ten questions about instances of intimate partner violence (IPV) within the household drawn from the Demographic Health Surveys, exploring occurrences of verbal abuse (7 questions), and physical abuse (3 questions). We also ask two questions to measure attitudes and tolerance for IPV within the household. For men, we ask only about their experiences of verbal abuse using four of the seven questions administered to women.

Other outcomes We explore the impact of our interventions on measures that extend beyond contemporaneous well-being. In particular, we examine whether there is evidence indicating a shift in power distribution within the household, as measured by bargaining power and norms within the household. We play an incentivized bargaining game drawn from (McKelway, 2020). We invite both members of a couple to decide how to allocate 250 taka (2.50 USD) between themselves and their spouse. Both respondents play this game independently with separate enumerators, and then together. Their responses at each stage are written on chits and placed in a tin alongside a random number. One chit is drawn at random, which corresponds to the amount the respondent receives. Beyond this revealed preference measure of bargaining power, we also ask respondents how they engage in conversation with their partner through a series of questions drawn from IRC (2022).

We measure power dynamics in the household in three ways: intra-household decision making, norms, and aspirations for children. We measure intra-household decision making as in (Christian et al., 2021) by asking a series of nine questions designed to track how decisions over consumption and time-use are made within the household. We construct an index of norms for men within the household from two questions drawn from IRC (2022) that relate to the level of respect men who engage with their wives should expect. Similarly, we construct an index of norms for women in the workplace composed of four questions that ask respondents how much they think women should work. Finally, we adapt a survey module developed by (Field et al., 2021) that asks respondents to choose a hypothetical husband (wife) for a daughter (son) they have (or might have in the future). The respondent must

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[8]We construct an index of purpose by asking respondents to first consider the person in their community (family) who *contributes the most* to their respective community (family), and then have the respondent rank where they would place themselves relative to this individual (Hussam et al., 2022). Similarly, we construct an index of self-worth by having respondents consider the person in their community (family) who they *respect the most* in their community (family), and then have the respondent rank where they would place themselves relative to that individual (Hussam et al., 2022).

choose between two men with the same education and income but only one of them would allow the respondent's daughter to work outside for pay, and between two women with the same education and the same income, but one of the women wishes to work outside the home for pay.

Multiple hypothesis testing We use two strategies to account for the range of hypotheses we test. First, we report our primary outcomes, psychosocial well-being and intimate partner violence, as an inverse-covariance weighted index variables following Anderson (2008). Second, with each table, we calculate the sharpened False Discovery Rate (FDR) q-values to control for the expected proportion of individual rejections that are type I errors (Anderson, 2008).

Pre-analysis plan (PAP) This study was pre-registered on the AEA Registry and underwent the pre-results review process at the Journal of Development Economics. Deviations from the PAP are minor and described in detail in Appendix Section B.

5 Experimental Results

5.1 Empirical Framework

We now estimate the effects of the work, cash, and unpaid treatments using the following specification:

$$Y^1_{ibc} = \beta_0 + \beta_1 Work_{ibc} + \beta_2 Cash_{ibc} + \beta_3 Unpaid_{ibc} + \gamma_c + \delta_e + Y^0_{ibc} + X_{ibc} + \varepsilon_{ibc} \qquad (1)$$

where Y^1_{ibc} represents the relevant outcome for individual i in sub-block b and camp c, X_{ibc} is a vector of sociodemographic controls selected via double-selection LASSO following Belloni, Chernozhukov, and Hansen (2014), and ε_{ibc} is an error term which we cluster at the block level. We include fixed effects for camp γ_c and enumerator δ_e.[9] We control for the baseline value of the outcome variable Y^0_{ibc} when available in an ANCOVA specification following McKenzie (2012). Our coefficients of interest are β_1, the impact of employment, β_2, the impact of cash, and β_3, the impact of productive activity alone. We evaluate whether there exist non-pecuniary benefits to work through a test of equality between β_1 and β_2. We also test whether gainful employment confers psychosocial benefit above productive activity by testing equality between β_1 and β_3.

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[9]We include enumerator fixed effects following Di Maio and Fiala (2019) in order to account for the fact that respondents' answers to sensitive questions may be influenced by the specific enumerator.

5.2 First stage

Completion of work We first establish that participants engaged in the treatment they were offered. Figure 1 exhibits the fraction of individuals assigned to the data-collection task who completed their work. While completion rates in the unpaid work group are unsurprisingly below those of the employed group, both groups consistently exhibit greater than 90% completion rate.

Figure 1: Task completion
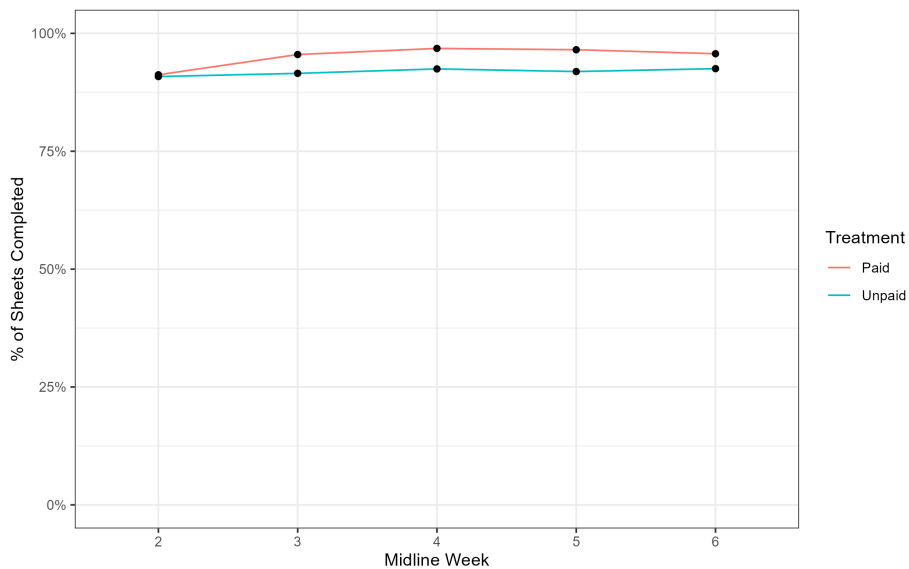
We then consider whether the interventions substantively altered their time-use and consumption. Table 2 demonstrates that participants in the work and unpaid work groups shifted their time spent in a typical day from idleness or sleep to productive activities, relative to both the cash and control groups. Tables A4 and A5 present a more detailed breakdown of time-use by gender. Both working men and women shift time away from caring for family, self, and relaxing in order to perform the work. Men also appear to reduce the amount of time spent on self-employment activities, while women substitute away from performing chores inside the home.

Table 2: Time use, treated

	(1) Productive	(2) Sleep/Leisure	(3) Idle
Work	0.937***	-0.906***	-0.137***
	(0.070)	(0.071)	(0.036)
Cash	-0.034	0.022	-0.032
	(0.053)	(0.053)	(0.035)
Unpaid	0.851***	-0.826***	-0.114***
	(0.066)	(0.067)	(0.037)
Control Mean	0.000	-0.000	0.000
Shrp. q-val Work	0.001	0.001	0.001
Shrp. q-val Cash	1.000	1.000	1.000
Shrp. q-val Unpaid	0.001	0.001	0.001
Observations	2429	2429	2425

Notes: All outcomes have been standardized. (1) is the total amount of time in the previous day spent in productive activities (including our work task). (2) is the total amount of time in the previous day spent sleeping or in leisure. (1) and (2) are derived from the same question block, which requires the respondent to give a time accounting for the past 24 hours. (3) is a separate question and directly asks the respondent the number of hours they spend sitting idle "in a usual day". Regressions include camp and enumerator fixed effects, controls selected by lasso, and the baseline value of the outcome variable. Standard errors are clustered at the block level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 3 then explores the impact of the treatments on financial behavior. We document significant increases in savings and financial security and significant reductions in borrowing among the work and cash groups relative to the unpaid and control groups, with no meaningful changes in consumption or lending. Tables A2 and A3 disaggregate these results by the gender of the treated beneficiary: we see no systematic differences between treated men or women. We also observe that both treated sexes share their additional income with their spouses, as evidenced by significant improvements in both partner husbands' and partner wives' savings and sense of financial stability. We further investigate whether men and women exhibit different consumption patterns across the full set of products we ask about (Appendix Tables A6 and A7). While treated men are more likely to spend on education and treated women are more likely to spend on paan (a luxury good) and small household items, the differences between both groups are small.

Table 3: Financial portfolio, treated

	(1) Total Consumption	(2) Savings	(3) Borrowing	(4) Lending	(5) Can Spend 1000
Work	-54.438	557.336***	-664.135***	0.001	0.114***
	(268.091)	(81.575)	(254.619)	(0.014)	(0.024)
Cash	73.310	519.004***	-508.177*	-0.010	0.110***
	(275.769)	(82.631)	(271.095)	(0.013)	(0.025)
Unpaid	9.337	20.253	89.513	-0.019	0.006
	(283.117)	(81.096)	(257.441)	(0.012)	(0.027)
Control Mean	4140.761	375.913	2479.310	0.052	0.739
Shrp. q-val Work	0.613	0.001	0.010	0.613	0.001
Shrp. q-val Cash	0.463	0.001	0.065	0.306	0.001
Shrp. q-val Unpaid	1.000	1.000	1.000	1.000	1.000
Observations	2429	2264	2424	2426	2426

Notes: All outcomes are unstandardized; (1)-(3) are in BDT, and (4)-(5) in percentage points. (1) is the total amount of money the respondent has spent in the last two weeks. (2) is the total savings the respondent holds. (3) is the total amount the respondent is currently borrowing. (4) is whether the respondent currently has money lent to anyone. (5) is whether the respondent can currently cover an emergency expense of 1000 taka. Regressions include camp and enumerator fixed effects, controls selected by lasso, and the baseline value of the outcome variable. Standard errors are clustered at the block level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

5.3 Contemporaneous wellbeing

We now turn to our primary outcomes. As described above, we focus on two sets of outcomes: psychosocial wellbeing, an index of depression severity, stress, life satisfaction, sociability, purposefulness, self-worth, locus of control, and stability; and intimate partner violence, an index of verbal and physical abuse from one's partner. We underscore that each may have an effect on the other and we make no causal claim between them: both outcomes may reflect the interpersonal dynamics within which one is embedded in their household.

5.3.1 Psychosocial wellbeing

We first present the impact of employment on psychsocial wellbeing. Table 4 presents the treatment effects from Equation 1, pooled across men and women. Individuals who work experience a 0.09 SD increase in their psychosocial wellbeing, significant at the one percent level. We observe improvements across each component of the index as well – employed individuals exhibit a significant reduction in depression, and improvements in life satisfaction. They also experience imprecise reductions in stress, and imprecise improvements in sociability, purpose, self-worth, sense of control over their life, and sense of stability in the present and anticipated future. [10] Both men and women appear to have internalized the psychosocial benefits of employment. [11]

The employment arm not only improves psychosocial well-being relative to the control arm, but also produces notably greater improvements in psychosocial well-being than both

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[10]Beneficiaries of the Work treatment could be more likely to believe that that gainful employment increases their access to future working opportunities, relative to the Cash or Unpaid groups. To investigate this potential confounder, we provided paper certificates to half of all treated participants, randomized at the block level. These certificates documented the participants' involvement in our project, and could be used as an enhancement to their resume. If psychosocial benefits derive from the expectation of future work, there should be an effect associated with receiving this certificate. There is no evidence of participants in the Work arm receiving additional improvement from the certificate. Results are available upon request.

[11]We demonstrate this by engaging individuals in the employment arm an additional suprise week of work at various wage levels using an incentivized Becker-DeGroot-Marschak (BDM) method. We inform participants that due to limited funds, we can't pay everyone their previous wage and first ask if they would be willing to work without payment. This approach motivates reservation wage elicitation. The proportion of respondents who are willing work for free serves as an estimate of the percentage of respondents with a negative reservation wage of at least the foregone amount.

Figure 3 is a cumulative distribution of the expressed reservation wages, disaggregated by gender. 99.3% (99.1%) of women (men) in the Work and Unpaid groups show interest in working the additional week. Within the Work group, 49.5% (45.4%) of interested women (men) are willing to work for zero wage, while in the Unpaid group, 37.0% (34.2%) of women (men) are willing to work without pay. Of these, 38.3% (39.1%) of women (men) continue to prefer working for free, even when offered the alternative of up to 200 taka (USD $2) in compensation for answering a brief survey.

Notably, 96.8% (98.1%) of all women (men) who agreed to work did so at the wage drawn in the elicitation exercise. These results suggest that participants understand the psychosocial value of this employment opportunity.

the cash arm and the unpaid work arm. The cash treatment yields an imprecisely estimated 0.03 unit increase in the mental health index, and we can reject equality of effects between employment and cash at the one percent level. Strikingly, despite being conducted with a distinct population four years later, these results mirror those of Hussam et al. (2022), which found a similar three to four-fold increase in psychosocial wellbeing among work recipients relative to cash recipients. Like Hussam et al. (2022) and multiple other papers in the literature as described in Ridley et al. (2020), the only component that the cash treatment moves meaningfully is life satisfaction.[12] As with cash, we can also reject equality of effects between employment and unpaid work, which yields an imprecisely estimated 0.02 unit increase in the mental health index. In other words, the significant psychosocial benefits of employment are driven neither by the income received nor by the experience of engaging in productive activity, but rather some combination of the two.

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[12]The reduction in level effects between these two studies, with Hussam et al. (2022) finding a 0.21 SD increase in the psychosocial index, is unsurprising, as depression rates have declined and work opportunities have increased in the camps over the four year period.

Table 4: Psychosocial wellbeing, full sample

	(1) PS Index	(2) PHQ	(3) Stress	(4) Life Sat.	(5) Social	(6) Purpose	(7) Self-Worth	(8) Control	(9) Stability
		Individual Components of PS Index							
Work	0.089***	0.164**	0.099	0.099**	0.060	0.093	0.088	0.089	0.060
	(0.031)	(0.065)	(0.063)	(0.048)	(0.044)	(0.057)	(0.057)	(0.055)	(0.056)
Cash	0.028	0.022	-0.066	0.091**	-0.083*	0.081	0.093	0.006	0.006
	(0.032)	(0.065)	(0.062)	(0.045)	(0.046)	(0.057)	(0.057)	(0.053)	(0.056)
Unpaid	0.019	0.072	-0.042	-0.021	0.017	0.050	0.033	0.081	-0.059
	(0.032)	(0.065)	(0.060)	(0.046)	(0.050)	(0.055)	(0.053)	(0.055)	(0.057)
Control Mean	0.004	0.000	-0.000	0.000	-0.000	-0.000	-0.000	0.000	-0.000
Shrp. q-val Work		0.111	0.166	0.154	0.180	0.166	0.166	0.166	0.194
Test Work=Cash	0.007	0.010	0.005	0.840	0.000	0.791	0.911	0.069	0.233
Shrp. q-val Work=Cash		0.023	0.020	0.593	0.002	0.593	0.593	0.095	0.229
Test Work=Unpaid	0.002	0.082	0.015	0.003	0.289	0.313	0.176	0.869	0.009
Shrp. q-val Work=Unpaid		0.115	0.036	0.029	0.218	0.218	0.197	0.484	0.034
Observations	2429	2429	2425	2425	2425	2425	2425	2425	2425

Notes: All outcomes have been standardized against the full sample of men and women. (2) is an index created from the nine-question PHQ-9. (3) is an index of three questions inspired by Cohen's Perceived Stress scale. (4) is an index created from Diener's Satisfaction With Life Scale. (5) is how many people the respondent had conversations with yesterday. (6) is an index of the respondent's self rating of relative to the person who does the most in their family and community. (7) is similar to (6), but relative to the person who is respected the most. (8) is an index created from Levenson's Multidimensional Internal Locus of Control Scales. (9) is an index assessing stability by asking respondents how secure they feel at the moment and expect to feel in the future. The overall index (1) is an inverse covariance weighted sum of the previous seven outcomes. Regressions include camp and enumerator fixed effects, controls selected by lasso, and the baseline value of the outcome variable. Standard errors are clustered at the block level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

We next present results disaggregated by the gender of the treated beneficiary and their partner. Table 5 presents impacts on treated women. Employed women experience a 0.08 SD improvement ($p = 0.054$) in their psychosocial wellbeing (Panel A, Column 1). This effect is twice the magnitude of the cash intervention (0.04 SD, $p = 0.318$) and nearly five times that of unpaid work (0.01 SD, $p = 0.719$) and is driven by a substantial reduction in depressive symptoms and a greater sense of stability. Panel B turns to the husbands of treated women. We document no systematic impacts of wives' employment on husbands' wellbeing, with an effect size of -0.002 SD. Husbands of women receiving cash or unpaid work exhibit declines in their psychosocial wellbeing of -0.04 and -0.05 SD respectively, but these effects are imprecisely estimated.

We then consider male beneficiaries in Table 6. Like women, employed men experience signficant improvements in their psychosocial wellbeing, exhibiting a 0.106 SD increase in their index ($p = 0.003$), driven by reductions in depression severity and improvements in their sociability, feeling of purposefulness, and sense of control over their lives. Importantly, we cannot reject equality between the impacts of employment on treated men and treated women ($p = 0.380$): women, despite few of them having ever worked for pay in our context, appear to benefit *as much as men* from an employment opportunity. And similar to women, neither cash alone nor unpaid work alone yield statistically significant improvements in men's wellbeing, with the impacts of employment being four times greater than those of cash (0.024 SD, $p = 0.532$) and five times greater than those of unpaid work (0.021 SD, $p = 0.598$), and both differences statistically significant.

What of these men's wives? Panel B presents the psychosocial impacts of each treatment on the beneficiary's wife. A treated husband leads to improvements in a wife's psychosocial wellbeing regardless of the treatment: employment (0.10 SD, $p = 0.020$), cash (0.09 SD, $p = 0.034$), or unpaid work (0.07 SD, $p = 0.101$). Notably, we cannot reject that an employed woman and the wife of an employed man experience equivalent gains in psychosocial wellbeing ($p = 0.920$). Among these wives, effects manifest in a reduction in depression severity and a greater sense of purposefulness and self-worth. Among the wives of husbands receiving cash or unpaid work, a marked increase in self-worth appears to be a driving force.

In sum, while we observe comparable impacts of employment on the psychosocial wellbeing of men and women, we observe significant differences in spillovers onto beneficiaries' spouses: husbands of treated women show little to no reaction, while wives of treated men exhibit substantial improvements in their wellbeing. This remains true even for the wives of husbands receiving cash or unpaid work, despite little to no change in these men's own psychosocial wellbeing (Table 6). We now turn to our outcome of intimate partner violence to directly examine how employment affects relational dynamics within a household.

Table 5: Psychosocial wellbeing, female-treated households

Panel A: Treated Women		Individual Components of PS Index							
	(1) **PS Index**	(2) PHQ	(3) Stress	(4) Life Sat.	(5) Social	(6) Purpose	(7) Self-Worth	(8) Control	(9) Stability
Work	0.081* (0.042)	0.187** (0.086)	0.107 (0.093)	0.113 (0.072)	-0.060 (0.090)	0.047 (0.076)	0.084 (0.071)	-0.016 (0.074)	0.128** (0.064)
Cash	0.041 (0.041)	0.035 (0.084)	-0.053 (0.092)	0.128** (0.064)	-0.259*** (0.089)	0.023 (0.072)	0.065 (0.067)	0.012 (0.076)	0.052 (0.069)
Unpaid	0.014 (0.040)	0.101 (0.086)	-0.027 (0.092)	-0.051 (0.066)	-0.053 (0.110)	0.021 (0.074)	0.034 (0.064)	0.055 (0.079)	0.006 (0.068)
Control Mean	-0.000	-0.000	-0.000	0.000	0.000	-0.000	-0.000	-0.000	0.000
Shrp. q-val Work		0.225	0.429	0.301	0.621	0.621	0.429	0.667	0.225
Test Work=Cash	0.224	0.036	0.051	0.806	0.005	0.663	0.742	0.652	0.209
Test Work=Unpaid	0.035	0.263	0.119	0.012	0.941	0.662	0.377	0.292	0.054
Observations	1212	1212	1210	1210	1210	1210	1210	1210	1210

Panel B: Partner Men		Individual Components of PS Index							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Work	-0.002 (0.034)	0.002 (0.083)	0.026 (0.088)	-0.034 (0.071)	-0.014 (0.074)	0.082 (0.087)	0.049 (0.102)	-0.050 (0.073)	0.002 (0.097)
Cash	-0.039 (0.034)	-0.001 (0.085)	-0.076 (0.087)	-0.131** (0.063)	-0.057 (0.074)	0.045 (0.086)	0.055 (0.098)	-0.058 (0.078)	-0.004 (0.094)
Unpaid	-0.051 (0.033)	-0.034 (0.083)	-0.090 (0.088)	-0.091 (0.063)	-0.026 (0.074)	0.055 (0.085)	-0.034 (0.099)	-0.125* (0.076)	-0.082 (0.097)
Control Mean	0.053	-0.000	0.000	0.000	0.000	0.000	0.000	-0.000	0.000
Shrp. q-val Work		1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Test Work=Cash	0.182	0.965	0.175	0.131	0.437	0.555	0.943	0.899	0.928
Test Work=Unpaid	0.068	0.539	0.101	0.352	0.837	0.668	0.307	0.197	0.270
Observations	1175	1175	1175	1175	1175	1175	1175	1175	1175

Notes: All outcomes have been standardized against the respondent's gender. (2) is an index created from the nine-question PHQ-9. (3) is an index of three questions inspired by Cohen's Perceived Stress scale. (4) is an index created from Diener's Satisfaction With Life Scale. (5) is how many people the respondent had conversations with yesterday. (6) is an index of the respondent's self rating of relative to the person who does the most in their family and community. (7) is similar to (6), but relative to the person who is respected the most. (8) is an index created from Levenson's Multidimensional Internal Locus of Control Scales. (9) is an index assessing stability by asking respondents how secure they feel at the moment and expect to feel in the future. The overall index (1) is an inverse covariance weighted sum of the previous seven outcomes. Regressions include camp and enumerator fixed effects, controls selected by lasso, and the baseline value of the outcome variable. Standard errors are clustered at the block level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 6: Psychosocial wellbeing, male-treated households

Panel A: Treated Men		Individual Components of PS Index							
	(1) **PS Index**	(2) PHQ	(3) Stress	(4) Life Sat.	(5) Social	(6) Purpose	(7) Self-Worth	(8) Control	(9) Stability
Work	0.106***	0.136*	0.083	0.091	0.134**	0.139*	0.095	0.200***	-0.016
	(0.036)	(0.081)	(0.084)	(0.066)	(0.062)	(0.079)	(0.086)	(0.072)	(0.078)
Cash	0.024	0.009	-0.087	0.059	-0.010	0.154*	0.129	0.001	-0.040
	(0.039)	(0.082)	(0.086)	(0.067)	(0.065)	(0.079)	(0.082)	(0.069)	(0.078)
Unpaid	0.021	0.025	-0.077	0.009	0.064	0.080	0.035	0.094	-0.121
	(0.040)	(0.083)	(0.086)	(0.065)	(0.066)	(0.079)	(0.084)	(0.071)	(0.080)
Control Mean	0.010	-0.000	0.000	0.000	-0.000	0.000	-0.000	-0.000	-0.000
Shrp. q-val Work		0.159	0.228	0.223	0.122	0.159	0.223	0.047	0.456
Test Work=Cash	0.005	0.057	0.027	0.532	0.009	0.807	0.612	0.001	0.710
Test Work=Unpaid	0.004	0.098	0.029	0.090	0.195	0.343	0.382	0.101	0.108
Observations	1217	1217	1215	1215	1215	1215	1215	1215	1215

Panel B: Partner Women		Individual Components of PS Index							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Work	0.102**	0.213**	0.148	0.034	-0.101	0.170***	0.248***	-0.054	0.120
	(0.044)	(0.100)	(0.097)	(0.074)	(0.100)	(0.062)	(0.069)	(0.076)	(0.088)
Cash	0.094**	0.058	0.052	0.166**	-0.091	0.044	0.175***	0.014	0.101
	(0.045)	(0.097)	(0.094)	(0.071)	(0.104)	(0.061)	(0.066)	(0.083)	(0.087)
Unpaid	0.073	0.078	0.073	0.057	-0.065	0.070	0.149**	0.044	0.108
	(0.045)	(0.099)	(0.093)	(0.071)	(0.101)	(0.065)	(0.067)	(0.076)	(0.083)
Control Mean	-0.091	0.009	-0.002	-0.017	0.004	0.021	0.014	0.025	0.002
Shrp. q-val Work		0.073	0.193	0.377	0.349	0.024	0.003	0.371	0.207
Test Work=Cash	0.794	0.018	0.199	0.029	0.890	0.036	0.232	0.343	0.772
Test Work=Unpaid	0.319	0.046	0.292	0.713	0.605	0.103	0.112	0.133	0.849
Observations	1188	1188	1188	1188	1188	1188	1188	1188	1188

Notes: All outcomes have been standardized against the respondent's gender. (2) is an index created from the nine-question PHQ-9. (3) is an index of three questions inspired by Cohen's Perceived Stress scale. (4) is an index created from Diener's Satisfaction With Life Scale. (5) is how many people the respondent had conversations with yesterday. (6) is an index of the respondent's self rating of relative to the person who does the most in their family and community. (7) is similar to (6), but relative to the person who is respected the most. (8) is an index created from Levenson's Multidimensional Internal Locus of Control Scales. (9) is an index assessing stability by asking respondents how secure they feel at the moment and expect to feel in the future. The overall index (1) is an inverse covariance weighted sum of the previous seven outcomes. Regressions include camp and enumerator fixed effects, controls selected by lasso, and the baseline value of the outcome variable. Standard errors are clustered at the block level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

5.3.2 Experience of IPV

Table 7 presents the impacts of each treatment on the intimate partner violence experienced by treated women. We observe moderate reductions in the IPV index, an index of experiences of verbal abuse, physical abuse, and beliefs around whether husbands can engage in physical abuse, across all three treatment arms. These effects are not statistically different from each other across arm and remain fairly imprecise: we cannot reject a zero effect even in a pooled regression (Table A10) of all treatments.

Table 7: Self-reported IPV, treated women

	Treated Women	Components of IPV Index		
	(1)	(2)	(3)	(4)
	IPV Index	Verbal Abuse	Phys Abuse	Husband Norms
Work	-0.062	-0.063	-0.061	-0.082
	(0.071)	(0.092)	(0.076)	(0.076)
Cash	-0.074	-0.062	-0.083	-0.042
	(0.068)	(0.088)	(0.075)	(0.075)
Unpaid	-0.068	-0.057	-0.077	-0.124*
	(0.063)	(0.082)	(0.074)	(0.074)
Control Mean	0.000	0.000	0.000	0.000
Shrp. q-val Work		0.975	0.975	0.975
Test Work=Cash	0.846	0.994	0.726	0.473
Test Work=Unpaid	0.916	0.936	0.810	0.442
Observations	1210	1210	1210	1169

Notes: All outcomes have been standardized. (1) is an inverse covariance weighted sum of the following columns. (2) is an index of the frequency of seven verbal abuse IPV actions, including jealousy, humiliation, and insulting, with a higher score corresponding to higher frequency. (3) is an index of (a) the frequency of threatened physical abuse and (b) the woman's attitudes toward physical abuse. (4) is an index of her husband's attitudes toward physical abuse. Regressions include camp and enumerator fixed effects, controls selected by lasso, and the baseline value of the outcome variable. Standard errors are clustered at the block level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

While not central to our question, we also collect data on men's experience of verbal abuse, reported in Table A9. As shown in Panel A, employed men report experiencing slightly greater verbal abuse from their wives (though imprecisely estimated), driven by a 19% increase in reported jealousy.

We now again turn to the partners of treated beneficiaries. Remaining in Table A9, Panel B, we observe that the husbands of treated women experience some reduction in verbal abuse, driven primarily by a reduction in insults, though again this is imprecisely estimated.

What of the wives of treated husbands? Table 8 demonstrates that treating men with employment, cash, or unpaid work yields very large and statistically significant reductions in the degree of intimate partner violence experienced by their wives. This is reflected across both verbal and physical domains. Table A8 disaggregates the verbal and physical abuse indices and presents outcomes as binary variables for whether the action or norm *ever* occurred within the past month or is considered acceptable. Columns 1-7 correspond to the verbal abuse index; Columns 8-10 to the physical abuse index. Panel B shows that wives of men from all treatments report a 31%-42% reduction in the frequency with which their husbands threaten to harm them or someone close to them and a 7% reduction in tolerance for violence against women in order to keep the family together. Curiously, Panel A of A8 demonstrates no such effect for women who receive employment themselves.

Notably, the treatments do not appear to meaningfully alter a man's attitudes towards abuse (Table 8, Column 4), despite altering his actions.

Table 8: Self-reported IPV, partner women

| | Partner Women | Components of IPV Index | | |
| | (1) | (2) | (3) | (4) |
	IPV Index	Verbal Abuse	Phys Abuse	Husband Norms
Work	-0.152**	-0.133	-0.163**	0.008
	(0.075)	(0.091)	(0.082)	(0.067)
Cash	-0.159**	-0.243***	-0.068	-0.032
	(0.075)	(0.086)	(0.083)	(0.074)
Unpaid	-0.181**	-0.178**	-0.179**	-0.098
	(0.074)	(0.087)	(0.083)	(0.074)
Control Mean	0.027	0.004	0.000	0.000
Shrp. q-val Work		0.172	0.172	0.434
Test Work=Cash	0.900	0.096	0.128	0.514
Test Work=Unpaid	0.567	0.526	0.786	0.069
Observations	1188	1188	1188	1184

Notes: All outcomes have been standardized. (1) is an inverse covariance weighted sum of the following columns. (2) is an index of the frequency of seven verbal abuse IPV actions, including jealousy, humiliation, and insulting, with a higher score corresponding to higher frequency. (3) is an index of (a) the frequency of threatened physical abuse and (b) the woman's attitudes toward physical abuse. (4) is an index of her husband's attitudes toward physical abuse. Regressions include camp and enumerator fixed effects, controls selected by lasso, and the baseline value of the outcome variable. Standard errors are clustered at the block level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

The presence of the cash and unpaid arms (Table 8) allows us to probe the channels

underlying the relationship between employment and intimate partner violence. We find that men who receive cash reduce their IPV rates as much as those who are employed; at first-pass this might suggest that an alleviation of financial constraints is instrumental. However, we also document a reduction in IPV of comparable magnitude among men engaged in unpaid work, for whom financial constraints have not been alleviated. Conversely, the reduction in IPV among men with unpaid work might suggest, at first-pass, that reduced contact with one's partner (by virtue of spending more time outside at work) may be a primary channel; however, recipients of cash do not spend additional time outside the home, and we observe the IPV reduction by them as well. Moreover, such a channel would imply a similar effect on IPV when the *woman* is treated with employment or unpaid work, as in this case the woman leaves the house and thereby reduces contact with her partner. But Table 7 reveals no such impact. In other words, we find no compelling evidence that either the channel of financial constraints or that of time spent together, the two mechanisms most commonly posited in existing literature, can explain the reduction in IPV we document among the wives of employed men.

What, then, might be generating these effects? More broadly, how might we explain the asymmetry in spillovers between treated men and treated women for *both* psychosocial wellbeing and intimate partner violence? In the following section, we explore three possible stories: (1) that objective functions differ by sex: namely, women derive utility from both their own and their partner's wellbeing, while men derive utility primarily from their own; (2) that men and women manifest depression differently, with men more likely to externalize their depression; and (3) that individuals prefer that both they and their partners inhabit existing gender norms.

These proposed mechanisms draw from several different streams of research. For the first, seminal work by Manser and Brown (1980) models the interests of husbands and wives as potentially divergent, introducing different utility functions for each member of the household. Empirical evidence suggests that women appear to prioritize their children's welfare: they allocate spending differently (Phipps and Burton, 1998), and transfers allocated to women are associated with improved anthropometric outcomes (Duflo, 2003) and higher child survival rates (Thomas, 1990). While this literature indicates differences in utility between men and women, our paper specifically investigates how each gender may derive utility differently from their partner's well-being (Conlon et al. (2021) show that husbands and wives treat information from their partner differently).

With respect to the second mechanism, the epidemiological literature finds that women are diagnosed with depression approximately twice as frequently as men (Salk, Hyde, and Abramson, 2017). Some argue that men may express depressive symptoms differently

(Cochran and Rabinowitz, 1999; Association, 2013). Efforts to develop male-specific depressive symptom scales are based on the observation that men are more inclined to externalize emotional distress through anger, irritability, or substance abuse (Martin, Neighbors, and Griffith, 2013; Winkler, Prjek, and Kaspar, 2005; Newman et al., 2006). However, most studies on this topic are limited to cross-sectional data in controlled clinical settings.

Our third possible mechanism builds on empirical evidence that gender norms contribute significantly to differences in labor market participation rates among women (Jayachandran, 2021; Fernandez and Fogli, 2009). In the United States, when wives earn more than their husbands, their share of household income decreases significantly, while the probability of divorce and increased dissatisfaction in the marriage increase. (Bertrand, Kamenica, and Pan, 2015). These long-standing cultural norms have historical roots (Alesina, Giuliano, and Nunn, 2013): a century ago, a married American woman's employment signified that her husband could not provide for his family (Goldin, 1990). Recent empirical work also demonstrates that one's perceptions of social norms around women's work influences one's own opinion of female labor market participation (Bursztyn, González, and Yanagizawa-Drott, 2020; Bernhardt et al., 2018). Our research design allows us to test this mechanism by examining how work provision and the degree to which one values traditional gender roles interact to influence psychosocial well-being.

5.4   Mechanisms for spillovers

Differing objective functions   We first consider the possibility that husbands and wives in our context possess fundamentally different utility functions: husbands may derive utility primarily from their own wellbeing, while wives derive it from their own and others' wellbeing.

The ideal test for this theory would be to deliver an exogenous shock to a single member of a household and measure wellbeing for each member. Our experiment does precisely this, at the level of the couple. And while women do indeed exhibit large improvements to their own psychosocial states when their husbands are employed, Tables 6 and 5 suggest that wives are not merely internalizing their husbands' preferences. Women whose husbands received the cash treatment report an increase in wellbeing, even when the men themselves do not experience the same. As we document a sharing of resources in the household, perhaps these wives are deriving satisfaction from the cash shared by her partner. However, we also observe psychosocial improvements in the wives of men who are unpaid, for whom no new resources are shared. This suggests that, while distinct utility functions may explain part of our findings, it remains incomplete.

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Differences in how depression manifests   An alternative interpretation is that men and women possess the same utility functions, but male unhappiness is more likely to be externalized through aggression. A reduction in depression would then manifest in a reduction in intimate partner violence. Indeed, Table 9 demonstrates a negative relationship between the man's psychosocial health at baseline and the incidence of verbal violence reported by their wives at baseline. Women also exhibit this pattern, as demonstrated in Table 10, though the correlation is significantly lower than that of men, suggesting that men do indeed externalize their depression more. However, we observe significant reductions in wives' experience of IPV even when treated men's psychosocial wellbeing remains relatively unchanged, as in the cash and unpaid work group. As before, while differences in externalization may explain part of our results, it cannot tell the whole story.

Table 9: Correlation between wives' reported IPV and husbands' PHQ, baseline

	IPV Verbal Index
PHQ - Husband	-0.028***
	(0.009)
	IPV Physical Index
PHQ - Husband	0.011*
	(0.006)
	Husband's Norms Index
PHQ - Husband	-0.024***
	(0.005)
Observations	2498

Notes: A lower IPV index indicates *less* frequent occurrence. A higher PHQ index indicates less depression. Regressions include camp and enumerator fixed effects and controls for age, number of people in the household, marital status, and education status. Standard errors are clustered at the block level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Preferences for existing gender norms   Traditional gender norms in the context we study approximate the following: men earn money for the family through engagement in a non-household activity, and women manage the household and children. If individuals derive utility from inhabiting their traditional gender norms and believing that their partners are doing the same, we should expect to see psychosocial improvements accordingly. Indeed, we document psychosocial effects among (1) employed men and (2) all untreated women (who remain at home engaged in their household activities) *whose husbands are treated.*

Table 10: Correlation between husbands' reported IPV and wives' PHQ, baseline

	IPV Verbal Index - Men
PHQ - Wife	-0.014***
	(0.005)
Observations	2499

Notes: A lower IPV index indicates *less* frequent occurrence. A higher PHQ index indicates less depression. Regressions include camp and enumerator fixed effects and controls for age, number of people in the household, marital status, and education status. Standard errors are clustered at the block level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

This suggests that, while men may not experience the receipt of cash or unpaid work as sufficiently fulfilling their expected gender norm (as we do not observe improvements in their own psychosocial wellbeing), their wives appear to: their husbands are still earning money (cash) or engaging in productive work for which they receive a nominal amount (unpaid work) at the end of each week.

Importantly, the psychosocial effects we document within these two subgroups are driven largely by improvements in feelings of purposefulness and/or self worth. Specifically, employed men report substantial improvements in their sense of purpose, an index of how valuable they feel within their family and within their community (Table 6). In parallel, their wives exhibit significant improvements in their sense of purpose and their self-worth, whereas working women report no significant improvement in either. Wives of men who are receiving cash or unpaid work also exhibit large improvements in their self-worth, perhaps because they can perform their household 'duties' while their husbands are otherwise engaged, each thereby occupying the role they were 'intended' for. Indeed, wives of men engaged in unpaid work allocate significantly more time to caring for their family than their control counterparts (Table A4).

As a further test, we consider whether gains in wellbeing are concentrated among women who value a partner who inhabits traditional gender norms. Specifically, we define a "status quo" spousal preference as one in which the woman, at baseline, identifies 'financial security' or 'a good work ethic' as the most important feature to have in a husband.[13] Table 11 examines heterogeneity in psychosocial improvements along this margin. We find that wives who prefer such men (Column 2) experience a 0.22 SD (0.21 SD) greater improvement in their psychosocial index when their husband receives cash (unpaid work) relative to wives who do not have such a preference, statistically significant at the one (five) percent level. This subgroup of wives drives the psychosocial improvements we document among the wives

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[13]Other options available to the respondent are "taking good care of children and other family members", "being admired and respected by people in the community", and "putting others' needs before their own".

of men receiving cash or unpaid work. Notably, we do not observe this heterogeneity in the work group, presumably because employed men exhibit large improvements in their psychosocial wellbeing themselves that *all* women directly benefit from, regardless of their baseline preferences.

Table 11: Psychosocial index, heterogeneity by preference for status quo spouse

	Panel A: By Treatment			
	(1) Treated Women	(2) Partner Women	(3) Treated Men	(4) Partner Men
Work	0.087	0.091*	0.099**	0.009
	(0.074)	(0.055)	(0.046)	(0.039)
Cash	0.078	-0.063	-0.025	-0.022
	(0.072)	(0.059)	(0.051)	(0.041)
Unpaid	0.018	-0.070	0.019	0.004
	(0.069)	(0.064)	(0.053)	(0.040)
Work x Status Quo	-0.010	0.006	0.014	-0.021
	(0.077)	(0.076)	(0.064)	(0.057)
Cash x Status Quo	-0.057	0.219***	0.103	-0.035
	(0.074)	(0.078)	(0.071)	(0.057)
Unpaid x Status Quo	-0.005	0.207**	0.004	-0.114**
	(0.071)	(0.082)	(0.069)	(0.053)
Status Quo	0.011	-0.113*	-0.026	0.042
	(0.057)	(0.065)	(0.057)	(0.045)
Test Work=Cash Interact	0.468	0.000	0.094	0.788
Test Work=Unpaid Interact	0.946	0.002	0.850	0.043
Test Work+Work Interact	0.073	0.083	0.026	0.799
Test Cash+Cash Interact	0.625	0.005	0.151	0.232
Test Unpaid+Unpaid Interact	0.759	0.013	0.655	0.013

	Panel B: Treatments Pooled			
Treated	0.061	-0.007	0.033	-0.004
	(0.065)	(0.052)	(0.045)	(0.034)
Treated x Status Quo	-0.025	0.137**	0.036	-0.047
	(0.064)	(0.070)	(0.061)	(0.048)
Status Quo	0.012	-0.113*	-0.023	0.034
	(0.057)	(0.065)	(0.057)	(0.045)
Control Mean	-0.000	-0.091	0.010	0.053
Test Treatment+Interact	0.336	0.011	0.140	0.223
Observations	1212	1188	1217	1175

Notes: 47.7% of men and 68.3% of women have a preference for a status quo spouse. This tests heterogeneity in the effect of the intervention along that dimension. A man is said to prefer a status quo spouse when he lists "taking good care of children and other family members" as his most important feature for a spouse. A woman is said to prefer a status quo spouse when she lists "financial security" or "good work ethic" as her most important feature. **The outcome measured is the psychosocial index, standardized against the respondent's gender.** Regressions include camp and enumerator fixed effects. Standard errors are clustered at the block level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

In sum, while all three mechanisms are likely at play, a preference for existing gender

norms appears consistent with the full landscape of our results. We note one open question regarding the relationship between our two main outcomes. Our results suggest that men are not meaningfully happier when they are given cash or unpaid work. How, then, does a reduction in IPV for their wives come about? Perhaps the improved psychosocial wellbeing of the wives in these arms manifests in an improved inter-household dynamic, making women more deferential to their husbands as each fulfills a preferred or familiar gender role. This may, in turn, lead to husbands responding with greater kindness and reduced abuse, independent of their own psychosocial state: one need not be less depressed to be less abusive. This is consistent with the observation that, while actual abuse among treated men declines, their beliefs about when, or under what conditions, physical abuse is appropriate do not change (Table 8, Column 4). In other words, the treatments may have altered household conditions, rather than preferences around abuse.

6   Policy Implications

We find that providing men with a work opportunity significantly improves not only their wellbeing, but also the wellbeing - both psychosocially and physically - of their wives. However, we now take seriously the distinction made by Sen (1999) between wellbeing and agency: development interventions may succeed in raising one but not the other, as these outcomes do not necessarily move in concert. Stated optimistically, extending opportunities for labor and education can enhance women's capabilities, conferring greater control over their environment and generating positive impact to wellbeing in the household beyond the acquisition of human capital alone (Nussbaum, 2000). For example, growth in labor market opportunities for women have been associated with reductions in early marriage and child-bearing (Jensen, 2012; Heath and Mobarak, 2015). Meanwhile, education appears to increase women's investment in their children's educational activities (Andrabi, Das, and Khwaja, 2012).

In our setting, while we document clear improvements in immediate wellbeing among the wives of treated men, employing men may reinforce existing power imbalances and thereby reduce female agency within the household. Conversely, employing women may redistribute power within the household in their favor. [14] We therefore probe whether employing men

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[14]To consider potential longer-run impacts, we also collected data on depressive symptoms and self-reported IPV about six weeks after the conclusion of the treatment period. Improvements in psychosocial wellbeing and reductions in self-reported IPV dissipate; though estimates point in the same direction, they are noisy. One surprising exception is that husbands of treated women assigned to the Work and Unpaid groups see significant reductions in depressive symptoms. We hypothesize that this is due to a restoration of the household to the community's gender norm; that is, the woman in the household is no longer visibly working in the community. Results for these medium-range results are available upon request.

versus women alters power dynamics within households, as captured by intra-household bargaining, social norms, and aspirations for children.

6.1 Household bargaining

Tables 12 and 13 present a series of outcomes that proxy for bargaining power within the household: revealed preference measures, [self-reported] actions in the household, and [self-reported] beliefs and norms about the distribution of power and gender roles. Columns 1-2 present the results, for female- and male-treated households respectively, of an incentivized bargaining game modeled after McKelway (2020) that measures the power exerted by each member of a couple when bargaining over how to allocate a finite budget. We report two relevant measures: first, whether the wife participated (i.e. spoke up) in the bargaining process at all, as observed by the enumerator; and second, whether the wife successfully obtained, during negotiation, at least the amount that she stated she privately desired. Across all subsamples, neither the employment treatment nor cash and unpaid work have meaningful impacts on the dynamics of the bargaining game. Women receiving cash appear to speak up more, but those in the employed group and the unpaid group do not. Nor does speaking up more translate into greater success in the bargaining game for women receiving cash. Outcomes are similar in male-treated households; none of the treatment arms has a significant impact on the final allocation in the bargaining game.

Column 3 reports the impact of the treatments on a measure of the respondent's [self-perceived] ability to alter their partner's position in the case of disagreement. As with the revealed preference exercise, none of the treatments significantly alter the female respondent's self-reported influence upon their partner in the household. Nor do we see evidence of a retrenchment in power among employed men; if anything, treated men in the work arm appear to lose, or perhaps relinquish, some decision-making influence to their wives, although this coefficient loses significance upon correction for multiple hypothesis testing.

Column 4 reports an index of questions around how consumption and time-use decisions are made within the household; Column 5 reports the same for how a respondent believes these decisions *should* be made in the household. Employed women experience no greater decision-making power nor a meaningful change in their beliefs about who should have power. Employed men do not exhibit a [self-reported] retrenching of decision-making power (or beliefs). Their wives do report a 0.1 SD reduction in the extent to which they make decisions in the household over consumption and time-use, but this coefficient also loses significance upon correction for multiple hypothesis testing.

Columns 6 and 7 report respondents' agreement with non-traditional gender norms:

whether men should help within the household (column 6) and whether women should be able to work outside the home (column 7). Treated women exhibit a 0.7 SD increase in their beliefs that women should be able to work outside the home, though this too does not survive correction for multiple hypothesis testing. We observe no meaningful movement on any other margin.

We next turn to beliefs about children. While adults may have difficulty altering their power preferences for themselves and their partners, there may be malleability in their expectations for the next generation. Tables 14 and 15 each present four outcomes: we first ask the respondent for the preferred level of education for their eldest (real or hypothetical) daughter and son (Columns 1 and 2). We then ask respondents whether they would prefer to have a daughter-in-law who wishes to work outside the home for pay or not (Column 3). Finally, we ask whether they would prefer to have a son-in-law who, all else equal, permits his wife (the respondent's real or hypothetical daughter) to work outside the home for pay or not.

Treated women (Panel A, Table 14) report no meaningful change in educational aspirations for their sons or daughters. However, they are significantly more likely to prefer a daughter-in-law who wishes to work for pay outside the home ($q = 0.012$), consistent with the personal shift they report (Table 12, Column 6) in beliefs about whether women should be able to work outside the home. Note, however, that this does not translate into a greater desire for their *own* daughter to work: treated women do not differentially prefer a son-in-law who permits his wife to work.

The husbands of treated women (Panel B, Table 14) exhibit large and statistically significant increases in the educational aspirations they have for their daughters but not their sons. At first pass, this seems encouraging: perhaps these men, having now experienced the improved wellbeing of their treated wives and households, wish the same for their daughters. However, changes in educational aspirations do not translate into changes in work norms: these men do not deferentially prefer daughter-in-laws who wish to work for pay, nor son-in-laws who permit their wives to work for pay; in fact, while noisy, they appear to prefer the opposite.[15] This combination of effects may suggest that the husbands of treated women desire greater education for their daughters in service of a better marriage match, a pattern observed in a variety of contexts (Goldin, 2006; Chiappori, Salanié, and Weiss, 2017; Ashraf et al., 2020): perhaps experiencing a household where they remain unemployed while their wives are externally engaged leads these men to desire a better future for their

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[15]A wife's assignment to the unpaid arm has a statistically significant negative effect on their husband's preferences for both a daughter and a daughter-in-law's ability to work for pay, despite large positive effects on the educational aspirations for their daughters.

daughters. Higher education, rather than serving as an avenue for improved labor market prospects, serves to improve the daughter's 'quality' in the marriage market such that she may be matched with a wealthier man who will not need his wife to work.

Turning to treated men and their wives (Table 15), we observe little movement along any of the outcomes. Treated men are neither more nor less likely to educate their daughters or prefer daughters who can work outside the home. Interestingly, the wives of employed men state a greater preference for a son-in-law who allows her daughter to work outside the home ($q = 0.066$). We see little change on other margins.

In sum, across a wide array of measures intended to proxy for the intrahousehold bargaining power of husbands and wives, we observe little movement. We find that our interventions do not increase the bargaining power of their recipients, neither redistributing power to treated women in the household nor retrenching power with treated men. We underscore that, insofar as certain employment opportunities might impart skills and facilitate future outside opportunities, our intervention cannot speak to the potential value of employment in increasing agency in the household: the employment we offer was explicitly designed to do neither. However, insofar as social protection is often delivered via cash or short-term and unskilled day labor, we find little evidence that such programs, in our context, can alter actual power or beliefs about the distribution of power in the household.

Table 12: Household bargaining, female-treated households

Panel A: Treated Women

	(1) Wife Participated	(2) Barg Success	(3) Influence	(4) Action Index	(5) Belief Index	(6) Men in HH	(7) Women at Work
Work	0.002	0.040	0.022	-0.001	-0.048	0.082	0.071*
	(0.035)	(0.043)	(0.061)	(0.073)	(0.063)	(0.071)	(0.043)
Cash	0.069**	0.014	0.020	-0.002	0.024	0.028	-0.011
	(0.034)	(0.047)	(0.058)	(0.070)	(0.054)	(0.068)	(0.040)
Unpaid	0.005	0.021	0.001	-0.132*	-0.047	0.006	-0.010
	(0.036)	(0.042)	(0.061)	(0.070)	(0.060)	(0.075)	(0.043)
Control Mean	0.689	0.696	0.000	-0.005	-0.005	-0.000	0.000
Shrp. q-val Work	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Shrp. q-val Cash	0.456	1.000	1.000	1.000	1.000	1.000	1.000
Shrp. q-val Unpaid	1.000	1.000	1.000	0.772	1.000	1.000	1.000
Observations	1157	1160	1210	1210	1210	1210	1210

Panel B: Partner Men

	Barg Success	Influence	Action Index	Belief Index	Men in HH	Women at Work
Work	0.036	-0.023	-0.053	-0.030	0.076	0.003
	(0.040)	(0.044)	(0.061)	(0.060)	(0.078)	(0.052)
Cash	0.040	-0.048	-0.025	-0.085	0.042	-0.033
	(0.038)	(0.045)	(0.062)	(0.061)	(0.077)	(0.053)
Unpaid	-0.027	0.049	-0.003	-0.008	0.074	-0.075
	(0.039)	(0.042)	(0.064)	(0.062)	(0.081)	(0.046)
Control Mean	0.753	-0.033	0.067	0.045	0.000	0.047
Shrp. q-val Work	1.000	1.000	1.000	1.000	1.000	1.000
Shrp. q-val Cash	1.000	1.000	1.000	1.000	1.000	1.000
Shrp. q-val Unpaid	1.000	1.000	1.000	1.000	1.000	1.000
Observations	1169	1175	1175	1175	1175	1175

Notes: Columns (3)-(7) are standardized. (1) is an indicator of whether the wife participated during the bargaining game. (2) is an indicator of whether the respondent received at least the amount they privately wanted. (3) is an index of how much ability the respondent has to influence their partner in case of disagreement. (4) is an inverse covariance weighted sum of (a) an index of who decides how much to spend on a set of five item types, (b) an index of what percentage of the household's budget they can spend, and (c) an index of who decides who performs a set of four time use categories. A higher index value means that the *respondent* holds greater sway over decision-making. (5) is similar to (4), but of who *should* decide how to spend or do, and how much. (6) is an index of level of disagreement with the statements "A husband who helps his wife with the household chores should not be respected" and "A husband who makes important decisions jointly with his wife is weak". (7) is an inverse covariance weighted sum of hours women should be allowed to work in/outside the block, level of disagreement with the statement "A wife who prioritizes work outside the home over household-chores is not a good wife", and willingness to accept a daughter-in-law who wishes to work outside the home/son-in-law who allows his wife to work outside the home. Regressions include camp and enumerator fixed effects, controls selected by lasso, and the baseline value of the outcome variable. Standard errors are clustered at the block level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

	Panel A: Treated Men					
	Barg Success	Influence	Action Index	Belief Index	Men in HH	Women at Work
Work	-0.019	-0.086*	0.021	0.054	-0.110	0.018
	(0.040)	(0.052)	(0.054)	(0.049)	(0.083)	(0.041)
Cash	-0.020	-0.035	-0.013	0.030	-0.065	0.004
	(0.040)	(0.052)	(0.052)	(0.051)	(0.074)	(0.043)
Unpaid	-0.007	-0.002	-0.031	0.020	0.030	-0.046
	(0.042)	(0.050)	(0.054)	(0.054)	(0.075)	(0.042)
Control Mean	0.786	-0.000	0.002	0.000	-0.000	-0.004
Shrp. q-val Work	1.000	1.000	1.000	1.000	1.000	1.000
Shrp. q-val Cash	1.000	1.000	1.000	1.000	1.000	1.000
Shrp. q-val Unpaid	1.000	1.000	1.000	1.000	1.000	1.000
Observations	1192	1215	1215	1215	1215	1216

	Panel B: Partner Women						
	(1) Wife Participated	(2) Barg Success	(3) Influence	(4) Action Index	(5) Belief Index	(6) Men in HH	(7) Women at Work
Work	-0.002	-0.039	-0.012	-0.100**	-0.091	-0.006	0.042
	(0.032)	(0.041)	(0.062)	(0.050)	(0.058)	(0.075)	(0.045)
Cash	0.051	-0.004	-0.019	-0.058	-0.003	0.022	-0.009
	(0.032)	(0.042)	(0.062)	(0.054)	(0.057)	(0.072)	(0.043)
Unpaid	0.026	-0.019	0.012	-0.026	-0.002	0.004	-0.063
	(0.031)	(0.042)	(0.064)	(0.056)	(0.056)	(0.074)	(0.044)
Control Mean	0.680	0.728	-0.035	-0.478	-0.147	-0.010	-0.001
Shrp. q-val Work	1.000	0.810	1.000	0.458	0.525	1.000	0.810
Shrp. q-val Cash	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Shrp. q-val Unpaid	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Observations	1179	1179	1188	1188	1188	1188	1188

Notes: Columns (3)-(7) are standardized. (1) is an indicator of whether the wife participated during the bargaining game. (2) is an indicator of whether the respondent received at least the amount they privately wanted. (3) is an index of how much ability the respondent has to influence their partner in case of disagreement. (4) is an inverse covariance weighted sum of (a) an index of who decides how much to spend on a set of five item types, (b) an index of what percentage of the household's budget they can spend, and (c) an index of who decides who performs a set of four time use categories. A higher index value means that the *respondent* holds greater sway over decision-making. (5) is similar to (4), but of who *should* decide how to spend or do, and how much. (6) is an index of level of disagreement with the statements "A husband who helps his wife with the household chores should not be respected" and "A husband who makes important decisions jointly with his wife is weak". (7) is an inverse covariance weighted sum of hours women should be allowed to work in/outside the block, level of disagreement with the statement "A wife who prioritizes work outside the home over household-chores is not a good wife", and willingness to accept a daughter-in-law who wishes to work outside the home/son-in-law who allows his wife to work outside the home. Regressions include camp and enumerator fixed effects, controls selected by lasso, and the baseline value of the outcome variable. Standard errors are clustered at the block level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

6.2 Implications for children

We do not survey children in this experiment and therefore cannot speak directly to the impact of parental employment on child wellbeing. However, our data give us some directional

Table 14: Aspirations for children, female-treated households

	Panel A: Treated Women			
	Eldest Daughter	Eldest Son	Daughter-in-Law	Son-in-Law
Work	-0.007	0.001	0.184***	-0.051
	(0.079)	(0.087)	(0.066)	(0.069)
Cash	-0.097	0.053	0.114*	-0.061
	(0.082)	(0.085)	(0.066)	(0.068)
Unpaid	-0.134*	0.026	0.025	-0.066
	(0.078)	(0.082)	(0.069)	(0.067)
Control Mean	0.000	-0.000	-0.542	-0.446
Shrp. q-val Work	1.000	1.000	0.012	0.297
Shrp. q-val Cash	0.889	0.889	0.208	0.227
Shrp. q-val Unpaid	0.212	0.602	1.000	1.000
Observations	1210	1210	1210	1210

	Panel B: Partner Men			
	(1) Eldest Daughter	(2) Eldest Son	(3) Daughter-in-Law	(4) Son-in-Law
Work	0.268***	-0.099	-0.110*	-0.105
	(0.102)	(0.087)	(0.058)	(0.066)
Cash	0.221**	-0.020	-0.056	-0.054
	(0.098)	(0.092)	(0.057)	(0.068)
Unpaid	0.205**	-0.063	-0.110**	-0.117**
	(0.097)	(0.098)	(0.053)	(0.060)
Control Mean	-0.000	0.000	-0.618	-0.600
Shrp. q-val Work	0.017	0.145	0.125	0.125
Shrp. q-val Cash	0.051	0.711	0.755	0.755
Shrp. q-val Unpaid	0.076	0.350	0.053	0.053
Observations	1175	1175	1175	1175

Notes: All outcomes have been standardized. (1) is the preferred level of education for the oldest daughter. (2) is preferred level of education for the oldest son. The raw score for (1) and (2) are as follows: 0 for no education, 1 for Grades 1-5, religious or vocational education, 2 for Grades 6-10, 3 for Grades 11-12, and 4 for university or higher. (3) is preference for a daughter-in-law who wishes to work outside the home. (4) is preference for a son-in-law who allows his wife to work outside the home. The raw score for (3) and (4) are as follows: -1 for less working freedom for the woman, 0 for no preference, and 1 for more working freedom. Regressions include camp and enumerator fixed effects, controls selected by lasso, and the baseline value of the outcome variable. Standard errors are clustered at the block level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

sense of these effects. Namely, male-treated households exhibit a smaller net reduction in time spent on childcare (Tables A4 and A5). These households also exhibit the largest reduction in intimate partner violence, which may improve the emotional environment within which children exist. Conversely, we do observe that the husbands of treated wives desire greater education for their daughters (Table 14). While this does not translate into pref-

Table 15: Aspirations for children, male-treated households

	Panel A: Treated Men			
	(1) Eldest Daughter	(2) Eldest Son	(3) Daughter-in-Law	(4) Son-in-Law
Work	-0.040 (0.091)	-0.134 (0.085)	-0.028 (0.048)	-0.052 (0.053)
Cash	0.045 (0.091)	-0.076 (0.082)	0.062 (0.053)	0.040 (0.057)
Unpaid	0.035 (0.098)	-0.110 (0.088)	-0.018 (0.053)	-0.035 (0.055)
Control Mean	0.000	0.000	-0.594	-0.588
Shrp. q-val Work	0.496	0.311	1.000	1.000
Shrp. q-val Cash	1.000	1.000	0.948	0.948
Shrp. q-val Unpaid	0.723	0.723	1.000	1.000
Observations	1215	1215	1215	1215

	Panel B: Partner Women			
	(1) Eldest Daughter	(2) Eldest Son	(3) Daughter-in-Law	(4) Son-in-Law
Work	0.128 (0.079)	0.093 (0.084)	0.028 (0.069)	0.149** (0.069)
Cash	-0.065 (0.076)	0.114 (0.083)	0.012 (0.068)	0.109 (0.068)
Unpaid	0.009 (0.075)	0.026 (0.088)	0.007 (0.069)	0.059 (0.064)
Control Mean	0.013	0.016	-0.524	-0.518
Shrp. q-val Work	0.264	0.264	0.521	0.066
Shrp. q-val Cash	0.517	0.517	0.751	0.270
Shrp. q-val Unpaid	1.000	1.000	1.000	1.000
Observations	1188	1188	1188	1188

Notes: All outcomes have been standardized. (1) is the preferred level of education for the oldest daughter. (2) is preferred level of education for the oldest son. The raw score for (1) and (2) are as follows: 0 for no education, 1 for Grades 1-5, religious or vocational education, 2 for Grades 6-10, 3 for Grades 11-12, and 4 for university or higher. (3) is preference for a daughter-in-law who wishes to work outside the home. (4) is preference for a son-in-law who allows his wife to work outside the home. The raw score for (3) and (4) are as follows: -1 for less working freedom for the woman, 0 for no preference, and 1 for more working freedom. Regressions include camp and enumerator fixed effects, controls selected by lasso, and the baseline value of the outcome variable. Standard errors are clustered at the block level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

erences for greater female access to the labor market, greater education may have direct benefits to individual and household wellbeing beyond its instrumental or signaling value in the labor market. If anything, girls' education may be valued for conferring advantages in the marriage market (as cited above) over benefits to labor (Deng et al., 2023). Education also

appears to reduce the likelihood of early marriage and fertility as well as increase autonomy in decision-making (Elsayed and Shirshikova, 2023). On the other hand, its causal impact on domestic violence is ambiguous (Erten and Keskin, 2021). To the extent that these educational aspirations actually manifest, the total impact on child wellbeing remains ambiguous. Implicit in this is the recognition that the impact of the interventions we examine on the wellbeing of future *women* likewise remains an open question.

6.3 Implications for targeting

Our discussion thus far has documented asymmetric spillovers by gender depending on whether the man or woman is targeted. To better quantify the total household implications of gendered treatment on psychological and interpersonal wellbeing, we take individual men and women as the unit of observation and interact each treatment arm with an indicator for whether the man was targeted in that individual's household:

$$
\begin{aligned}
Y^1_{ibc} = {} & \beta_0 + \beta_1 Certificate + \beta_2 Work_{ibc} + \beta_3 Work_{ibc} \times ManTargeted + \\
& \beta_4 LargeCash_{ibc} + \beta_5 LargeCash_{ibc} \times ManTargeted + \beta_6 Volunteer_{ibc} + \\
& \beta_7 Volunteer_{ibc} \times ManTargeted + \gamma_c + \delta_e + Y^0_{ibc} + X_{ibc} + X_{ibc} \times ManTargeted + \varepsilon_{ibc}
\end{aligned}
$$

All terms are as defined in the empirical framework, and all controls are interacted with the man's targeting status. Table 16 suggests that treating men generates greater increases in *household* (husband and wife combined) psychosocial wellbeing for all three treatment groups, significant at the ten percent level (Column 1).[16] There is also suggestive evidence that targeting men leads to greater reductions in IPV experienced by women (Column 2). We estimate a significant decrease in IPV index for the Work ($p = 0.039$), Cash ($p = 0.038$), and Unpaid ($p = 0.014$) treatments only when offered to the man.

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[16]Panel B shows estimates from the same specification while pooling all treatments arms. We find that on average across all treatments treating men improves psychosocial wellbeing more than targeting women by 0.06 standard deviations.

Table 16: Psychosocial and IPV indices, individual-level differences by treatment gender

	Panel A: By Treatment	
	(1) PS Index	(2) IPV Index
Work	0.036	-0.059
	(0.027)	(0.071)
Work x Man Treated	0.057*	-0.093
	(0.032)	(0.085)
Cash	-0.002	-0.076
	(0.026)	(0.066)
Cash x Man Treated	0.056*	-0.086
	(0.032)	(0.081)
Unpaid	-0.018	-0.064
	(0.026)	(0.062)
Unpaid x Man Treated	0.062*	-0.124
	(0.032)	(0.084)
Control Mean	-0.007	0.013
Test Work+Work x Man Treat	0.003	0.044
Test Cash+Cash x Man Treat	0.096	0.035
Test Unpaid+Unpaid x Man Treat	0.187	0.013
Observations	4792	2398

	Panel B: Treatments Pooled	
Any Treatment	0.003	-0.061
	(0.023)	(0.058)
Treatment x Man Treated	0.060**	-0.106
	(0.029)	(0.073)
Control Mean	-0.007	0.013
Test Any Treatment+Treatment x Man Treat	0.036	0.017
Observations	4792	2398

Notes: Outcomes are presented at the individual level. (1) is the overall psychosocial index, composed of eight components, including PHQ, stress, self-worth, and purpose. (2) is the woman's IPV index, composed of verbal violence, threatened physical violence, and the husband's attitudes toward violence. A higher PS index corresponds to better psycho-social wellbeing; a higher IPV index corresponds to higher frequency of violence. The number of observations is not equal because (2) includes only observations of women. Regressions include camp and enumerator fixed effects, controls selected by lasso, and the baseline value of the outcome variable. Standard errors are clustered at the block level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

7   Conclusion

Our study documents the significant psychosocial improvements that a six week, part-time gainful employment program can impart on a highly vulnerable population in a setting where unemployment is pervasive. It finds that these impacts go above and beyond the psychosocial impacts of cash alone or unpaid work alone (consistent with Hussam et al. (2022)), and importantly that these impacts are roughly equivalent regardless of the sex of the employed beneficiary. However, when we consider the spillovers in psychosocial and physical wellbeing of one's treatment status on one's partner, we document a stark asymmetry: the husbands of treated women exhibit no change in their wellbeing, but the wives of treated men exhibit substantial improvements in both their psychosocial wellbeing and their experience of verbal and physical abuse from their husbands. We further investigate whether treating men comes at the cost of creating greater power imbalances in their favor. We do not find systematic evidence the men consolidate power, or that their wives become less empowered. Similarly, we do not find systematic evidence that treating women improves their agency either. We do, however, document that the husbands of treated women have higher education aspirations for their daughters - suggestive evidence that the program may have altered norms for future, but not current, women.

This study raises a number of interesting questions that we leave for future work. What should be the objective of a social planner or policymaker? Should we seek to raise income and consumption, or happiness, or both? Should we seek to improve mental and physical wellbeing today by reinforcing existing social norms or disrupt such norms in the hope of improving the agency of next generation's vulnerable? How do we trade off certain immediate improvements with uncertain future improvements?

In considering these questions, we ought also to recall that norms in relatively gender-equitable societies evolved as the result of a lengthy process of public debate and skill-biased technological change. Female labor force participation in the United States increased throughout the first half of the twentieth century in part because of an increasing supply of office work, against which social stigma was not so strong as for manual labor (Goldin, 1994). Yet even as the presence of women in the workplace became normalized, college-educated Americans remained conservative in their thinking about the proper role of the sexes well into the 1960s, with particular concern for the welfare of children if the mother were to work (Goldin, 2023). Though the path that developing societies are taking will not mimic that of the US, history reminds us of the contested nature of questions about who ought to work.

These questions are particularly challenging when we are engaged with the world's most materially, politically, or socially vulnerable populations, whose immediate needs are press-

ing. Future work may consider employment programs that do impart skills or long term opportunities and thereby have a greater potential impact on agency within the household, as well as a deeper investigation into how individuals value the preservation of gender norms in otherwise vulnerable and uncertain settings.

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Figures

Figure 2: Work task worksheets

(a) Female

(b) Male
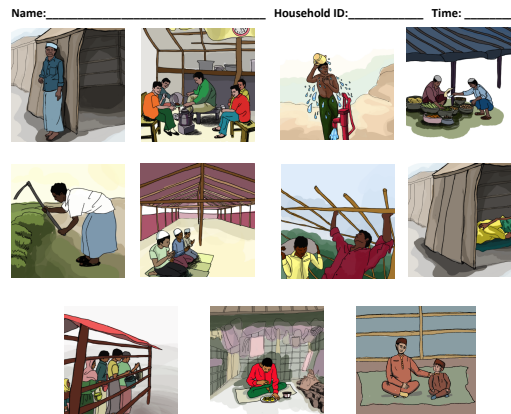
Notes: This figure presents the time sheets provided to the women (Panel A) and men (Panel B) who were randomized into the employment intervention. Each individual received four identical sheets per work day, with the time of day they were intended to be completed pre-filled on the top right, and space to put tally marks below each picture. Each sheet includes an exhaustive pictorial list of the activities one might be engaged in within the camps. For women, from top left to bottom right: being idle, praying in the tent, coking in the tent, caring for children, sowing in a women's center, cooking in a cooking center, spending time with friends or family, washing clothes or bathing, going to the market, fetching water, fetching firewood, waiting in line for rations, or napping. For men, from top left to bottom right: being idle, sitting in a tea stall, bathing, going to the market, napping, doing agricultural labor, praying at the mosque, doing construction labor, waiting in line for rations, eating, or feeding children/spending time with children.

Figure 3: Labor supply curve, by gender
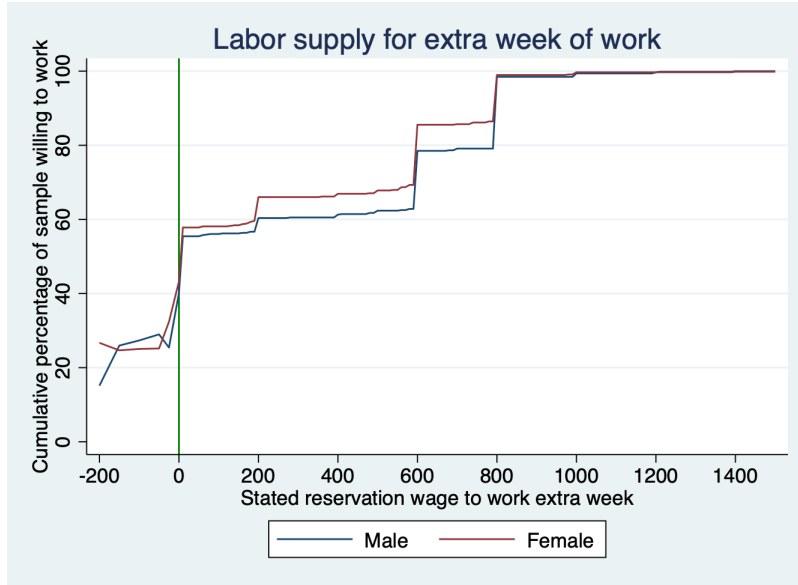
Notes: This figure presents the cumulative distribution function of the reservation wage expressed by employment treatment participants for an additional week of work using the incentivized Becker-DeGroot-Marschak mechanism. The horizontal axis is in units of Bangladeshi Taka. The vertical dotted line represents the point at which individuals express a willingness to work one additional week for zero pay. Negative reservation wages are a measure of how much respondents are willing to forego earning in an alternative (minimal effort) task in order to continue working for one week with no pay.

The Household at Work: A Field Experiment in the Rohingya Refugee Camps
Online appendix

Yueh-ya Hsu, Reshmaan Hussam, Erin Kelly, and Greg Lane

Contents

A Appendix Tables and Figures

A.1 Tables

A.1.1 Attrition

Table A1: Attrition, endline survey

	(1) Treatment	(2) Partner	(3) Male	(4) Female
Work	0.001	-0.011	-0.012	0.002
	(0.012)	(0.015)	(0.014)	(0.013)
Cash	-0.001	-0.005	-0.009	0.003
	(0.012)	(0.015)	(0.014)	(0.013)
Unpaid	0.001	0.014	0.002	0.013
	(0.012)	(0.015)	(0.014)	(0.013)
Mean in Control	0.033	0.056	0.053	0.036
Observations	2515	2519	2518	2516

Notes: This table reports attrition for the endline survey in each treatment arm relative to control. Standard errors are clustered at the camp level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

A.1.2   First Stage

Table A2: Financial portfolio, male-treated households

	Panel A: Treated Men				
	(1) Total Consumption	(2) Savings	(3) Borrowing	(4) Lending	(5) Can Spend 1000
Work	-183.537	483.018***	-309.705	-0.009	0.084***
	(353.335)	(112.172)	(345.478)	(0.022)	(0.032)
Cash	-26.210	416.024***	-265.058	-0.030	0.066**
	(368.538)	(111.832)	(356.540)	(0.020)	(0.033)
Unpaid	-132.349	-23.924	-32.677	-0.037*	-0.013
	(366.540)	(112.855)	(360.246)	(0.020)	(0.035)
Control Mean	4458.772	591.176	2679.532	0.076	0.772
Shrp. q-val Work	0.677	0.001	0.588	0.677	0.019
Shrp. q-val Cash	0.606	0.002	0.297	0.154	0.101
Shrp. q-val Unpaid	1.000	1.000	1.000	0.448	1.000
Observations	1217	1127	1215	1216	1216

	Panel B: Partner Women				
	(1)	(2)	(3)	(4)	(5)
Work	-72.181	307.040***	-163.135	0.037***	0.127***
	(292.480)	(90.866)	(268.576)	(0.014)	(0.041)
Cash	-161.016	325.460***	-251.394	0.014	0.090**
	(272.056)	(91.640)	(265.082)	(0.012)	(0.042)
Unpaid	-246.186	-30.898	450.807	0.003	0.023
	(306.436)	(80.249)	(317.076)	(0.012)	(0.041)
Control Mean	3810.947	286.310	1745.882	0.018	0.747
Shrp. q-val Work	0.476	0.004	0.374	0.008	0.005
Shrp. q-val Cash	0.498	0.002	0.347	0.326	0.068
Shrp. q-val Unpaid	1.000	1.000	1.000	1.000	1.000
Observations	1188	1112	1188	1188	1188

Notes: All outcomes are unstandardized; (1)-(3) are in BDT, and (4)-(5) in percentage points. (1) is the total amount of money the respondent has spent in the last two weeks. (2) is the total savings the respondent holds. (3) is the total amount the respondent is currently borrowing. (4) is whether the respondent currently has money lent to anyone. (5) is whether the respondent can currently cover an emergency expense of 1000 taka. Regressions include camp and enumerator fixed effects, controls selected by lasso, and the baseline value of the outcome variable. Standard errors are clustered at the block level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A3: Financial portfolio, female-treated households

Panel A: Treated Women

	(1) Total Consumption	(2) Savings	(3) Borrowing	(4) Lending	(5) Can Spend 1000
Work	72.619	634.791***	-1035.482***	0.009	0.145***
	(328.725)	(80.278)	(322.037)	(0.016)	(0.038)
Cash	177.739	605.474***	-697.785*	0.009	0.154***
	(339.946)	(82.844)	(358.237)	(0.017)	(0.037)
Unpaid	145.416	68.323	157.194	-0.003	0.026
	(338.196)	(75.626)	(354.848)	(0.015)	(0.039)
Control Mean	3833.531	166.800	2285.876	0.028	0.706
Shrp. q-val Work	0.493	0.001	0.002	0.406	0.001
Shrp. q-val Cash	0.317	0.001	0.055	0.317	0.001
Shrp. q-val Unpaid	1.000	1.000	1.000	1.000	1.000
Observations	1212	1137	1209	1210	1210

Panel B: Partner Men

	(1)	(2)	(3)	(4)	(5)
Work	41.727	390.042***	-905.543**	0.022	0.068**
	(325.544)	(81.516)	(367.888)	(0.018)	(0.031)
Cash	292.206	370.044***	-989.329***	0.037*	0.037
	(329.387)	(88.659)	(371.403)	(0.021)	(0.032)
Unpaid	137.056	25.174	22.711	0.009	-0.080**
	(353.350)	(79.166)	(390.350)	(0.016)	(0.034)
Control Mean	4482.576	422.976	3345.176	0.029	0.759
Shrp. q-val Work	0.417	0.001	0.029	0.134	0.037
Shrp. q-val Cash	0.177	0.001	0.016	0.083	0.145
Shrp. q-val Unpaid	1.000	1.000	1.000	1.000	0.097
Observations	1175	1084	1175	1175	1175

Notes: All outcomes are unstandardized; (1)-(3) are in BDT, and (4)-(5) in percentage points. (1) is the total amount of money the respondent has spent in the last two weeks. (2) is the total savings the respondent holds. (3) is the total amount the respondent is currently borrowing. (4) is whether the respondent currently has money lent to anyone. (5) is whether the respondent can currently cover an emergency expense of 1000 taka. Regressions include camp and enumerator fixed effects, controls selected by lasso, and the baseline value of the outcome variable. Standard errors are clustered at the block level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A4: Time use components, male-treated households

Panel A: Treated Men

	(1) Sleeping	(2) Daily Wage	(3) Self-employed	(4) Chores Outside	(5) Chores Inside	(6) Care Family	(7) Care Self	(8) Relaxing
Work	-0.569***	4.021***	-0.262***	-0.395***	-0.138	-0.426***	-0.454***	-1.763***
	(0.116)	(0.307)	(0.080)	(0.095)	(0.092)	(0.089)	(0.061)	(0.192)
Cash	-0.009	-0.150	-0.014	0.132	0.010	-0.067	0.007	0.100
	(0.113)	(0.206)	(0.094)	(0.101)	(0.101)	(0.080)	(0.068)	(0.166)
Unpaid	-0.348***	3.791***	-0.240***	-0.437***	-0.284***	-0.482***	-0.388***	-1.588***
	(0.119)	(0.294)	(0.080)	(0.107)	(0.092)	(0.084)	(0.064)	(0.203)
Control Mean	8.147	0.929	0.776	2.579	1.624	2.474	2.006	5.465
Shrp. q-val Work	0.001	0.001	0.001	0.001	0.017	0.001	0.001	0.001
Shrp. q-val Cash	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Shrp. q-val Unpaid	0.002	0.001	0.002	0.001	0.002	0.001	0.001	0.001
Observations	1215	1215	1215	1215	1215	1215	1215	1215

Panel B: Partner Women

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Work	-0.282**	0.023	-0.004	-0.104	0.087	-0.024	0.018	0.271*
	(0.122)	(0.056)	(0.089)	(0.072)	(0.066)	(0.068)	(0.069)	(0.157)
Cash	-0.265**	0.015	0.150	-0.106	0.057	0.099	-0.026	0.067
	(0.122)	(0.059)	(0.093)	(0.072)	(0.064)	(0.064)	(0.066)	(0.160)
Unpaid	-0.379***	0.033	-0.014	-0.062	0.038	0.130**	0.073	0.166
	(0.128)	(0.065)	(0.091)	(0.076)	(0.068)	(0.062)	(0.066)	(0.164)
Control Mean	8.335	0.218	0.529	2.853	3.071	2.871	2.253	3.871
Shrp. q-val Work	0.196	0.840	0.932	0.485	0.485	0.840	0.840	0.423
Shrp. q-val Cash	0.322	0.666	0.335	0.335	0.422	0.335	0.655	0.655
Shrp. q-val Unpaid	0.026	1.000	1.000	0.991	1.000	0.149	0.884	0.884
Observations	1188	1188	1188	1188	1188	1188	1188	1188

Notes: All outcomes are in hours. Regressions include camp and enumerator fixed effects, controls selected by lasso, and the baseline value of the outcome variable. Standard errors are clustered at the block level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A5: Time use components, female-treated households

Panel A: Treated Women

	(1) Sleeping	(2) Daily Wage	(3) Self-employed	(4) Chores Outside	(5) Chores Inside	(6) Care Family	(7) Care Self	(8) Relaxing
Work	-0.861***	4.703***	0.018	-0.574***	-0.664***	-0.686***	-0.592***	-1.357***
	(0.112)	(0.264)	(0.086)	(0.068)	(0.076)	(0.063)	(0.070)	(0.152)
Cash	-0.039	0.006	0.210**	-0.044	-0.005	-0.108*	-0.114*	0.087
	(0.100)	(0.150)	(0.088)	(0.069)	(0.078)	(0.059)	(0.063)	(0.144)
Unpaid	-0.695***	4.265***	0.008	-0.545***	-0.537***	-0.573***	-0.404***	-1.496***
	(0.115)	(0.242)	(0.085)	(0.070)	(0.076)	(0.059)	(0.070)	(0.130)
Control Mean	8.023	0.164	0.508	2.887	3.124	2.989	2.299	4.006
Shrp. q-val Work	0.001	0.001	0.117	0.001	0.001	0.001	0.001	0.001
Shrp. q-val Cash	1.000	1.000	0.153	1.000	1.000	0.198	0.198	1.000
Shrp. q-val Unpaid	0.001	0.001	0.131	0.001	0.001	0.001	0.001	0.001
Observations	1210	1210	1210	1210	1210	1210	1210	1210

Panel B: Partner Men

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Work	0.026	-0.238	-0.054	0.013	-0.062	0.018	0.102*	0.202
	(0.116)	(0.204)	(0.098)	(0.081)	(0.073)	(0.077)	(0.062)	(0.154)
Cash	0.067	-0.292	-0.035	0.076	-0.039	-0.075	0.129**	0.178
	(0.114)	(0.213)	(0.110)	(0.088)	(0.073)	(0.076)	(0.057)	(0.166)
Unpaid	0.035	-0.280	0.021	-0.044	0.001	-0.065	0.172***	0.168
	(0.115)	(0.198)	(0.099)	(0.082)	(0.078)	(0.075)	(0.057)	(0.148)
Control Mean	8.124	1.406	0.882	2.506	1.571	2.379	1.776	5.356
Shrp. q-val Work	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Shrp. q-val Cash	1.000	1.000	1.000	1.000	1.000	1.000	0.249	1.000
Shrp. q-val Unpaid	1.000	1.000	1.000	1.000	1.000	1.000	0.023	1.000
Observations	1175	1175	1175	1175	1175	1175	1175	1175

Notes: All outcomes are in hours. Regressions include camp and enumerator fixed effects, controls selected by lasso, and the baseline value of the outcome variable. Standard errors are clustered at the block level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

A.1.3 Consumption

Table A6: Selected consumption components, male-treated households

Panel A: Treated Men

	(1) Better Food	(2) Paan	(3) Education	(4) Heathcare	(5) Give Loans	(6) Festivals	(7) Small HH
Work	-16.909	-9.010	30.863**	13.195	37.795	-149.250	9.863
	(68.261)	(29.507)	(14.915)	(97.280)	(45.979)	(153.376)	(13.562)
Cash	-56.456	-22.037	34.326***	33.840	120.038**	-89.535	4.925
	(67.471)	(28.963)	(13.044)	(100.518)	(50.133)	(158.931)	(12.475)
Unpaid	-19.859	-29.779	20.664	80.305	70.756	-154.872	13.783
	(72.070)	(30.693)	(13.520)	(98.328)	(47.353)	(151.516)	(13.908)
Control Mean	1678.830	553.392	87.895	768.047	66.830	476.520	169.673
Shrp. q-val Work	1.000	1.000	0.373	1.000	1.000	1.000	1.000
Shrp. q-val Cash	1.000	1.000	0.063	1.000	0.063	1.000	1.000
Shrp. q-val Unpaid	0.870	0.870	0.870	0.870	0.870	0.870	0.870
Observations	1214	1215	1179	1201	1167	1175	1203

Panel B: Partner Women

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Work	-95.816	29.870	20.665	11.322	-33.469	-119.789	1.964
	(64.752)	(27.722)	(15.886)	(69.387)	(55.402)	(131.056)	(13.744)
Cash	-77.021	21.000	1.014	60.158	13.453	-66.249	-10.138
	(65.094)	(29.265)	(14.562)	(73.458)	(61.496)	(141.131)	(13.794)
Unpaid	-137.842**	22.926	8.790	42.165	30.934	-144.623	17.470
	(69.776)	(29.670)	(16.211)	(80.528)	(60.321)	(134.304)	(15.603)
Control Mean	1597.235	426.706	104.793	733.471	160.923	314.012	126.652
Shrp. q-val Work	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Shrp. q-val Cash	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Shrp. q-val Unpaid	0.514	1.000	1.000	1.000	1.000	1.000	1.000
Observations	1181	1181	1148	1177	1157	1146	1176

Notes: All outcomes are in BDT and unstandardized. Regressions include camp and enumerator fixed effects, controls selected by lasso, and the baseline value of the outcome variable. Standard errors are clustered at the block level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A7: Selected consumption components, female-treated households

Panel A: Treated Women

	(1) Better Food	(2) Paan	(3) Education	(4) Heathcare	(5) Give Loans	(6) Festivals	(7) Small HH
Work	71.853	67.741**	16.216	2.029	76.795	-122.370	8.511
	(77.839)	(31.646)	(15.813)	(81.298)	(72.291)	(101.189)	(13.054)
Cash	46.741	39.558	3.893	28.997	41.772	-80.400	25.604**
	(78.752)	(27.117)	(14.719)	(87.117)	(72.324)	(108.744)	(12.744)
Unpaid	80.993	37.102	3.558	41.322	75.195	-76.434	17.288
	(75.266)	(25.726)	(14.967)	(89.555)	(67.186)	(113.642)	(12.651)
Control Mean	1525.085	431.441	126.789	828.192	100.046	305.148	130.554
Shrp. q-val Work	0.747	0.295	0.747	0.995	0.747	0.747	0.995
Shrp. q-val Cash	1.000	0.769	1.000	1.000	1.000	1.000	0.457
Shrp. q-val Unpaid	0.976	0.976	0.976	0.976	0.976	0.976	0.976
Observations	1203	1203	1171	1197	1165	1164	1195

Panel B: Partner Men

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Work	50.517	-3.267	-38.241**	-77.496	27.028	58.390	14.111
	(79.147)	(27.233)	(17.742)	(86.545)	(67.487)	(149.844)	(12.650)
Cash	34.993	-5.208	-23.737	75.835	-19.850	-0.139	25.911*
	(79.678)	(25.704)	(18.424)	(94.917)	(65.426)	(141.550)	(15.000)
Unpaid	74.227	-29.666	-33.176*	-10.447	83.793	-44.717	20.429
	(77.505)	(26.816)	(18.066)	(99.615)	(72.105)	(143.254)	(14.302)
Control Mean	1671.635	578.894	146.746	849.500	180.456	365.976	173.146
Shrp. q-val Work	1.000	1.000	0.282	1.000	1.000	1.000	1.000
Test Work=Cash	0.775	0.938	0.294	0.040	0.475	0.584	0.350
Test Work=Unpaid	0.663	0.302	0.684	0.389	0.464	0.373	0.597
Observations	1171	1173	1135	1159	1125	1135	1160

Notes: All outcomes are in BDT and unstandardized. Regressions include camp and enumerator fixed effects, controls selected by lasso, and the baseline value of the outcome variable. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the block level.

A9

A.1.4   IPV Components

Table A8: Self-reported IPV components, women

Panel A: Treated Women

	Verbal							Physical		
	(1) Jealous	(2) Unfaithful	(3) No Friends	(4) No Family	(5) No Money	(6) Humiliate	(7) Insult	(8) Threaten	(9) Tolerate Beating	(10) Right to Beat
Work	0.012	-0.062	-0.104**	-0.052	-0.020	-0.043	-0.031	-0.028	-0.008	-0.001
	(0.036)	(0.038)	(0.043)	(0.037)	(0.041)	(0.046)	(0.039)	(0.030)	(0.028)	(0.032)
Cash	-0.007	-0.082**	-0.023	-0.032	-0.043	-0.069	-0.009	-0.027	-0.011	-0.103***
	(0.038)	(0.040)	(0.045)	(0.037)	(0.038)	(0.043)	(0.039)	(0.029)	(0.028)	(0.033)
Unpaid	-0.004	-0.070*	-0.058	-0.058	-0.019	-0.039	-0.026	-0.039	-0.036	-0.053*
	(0.036)	(0.040)	(0.043)	(0.036)	(0.041)	(0.045)	(0.038)	(0.026)	(0.029)	(0.031)
Control Mean	0.734	0.277	0.350	0.215	0.186	0.424	0.294	0.181	0.864	0.814
Shrp. q-val Work	1.000	0.915	0.179	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Shrp. q-val Cash	1.000	0.214	1.000	0.837	0.837	0.416	1.000	0.837	1.000	0.021
Shrp. q-val Unpaid	0.572	0.519	0.519	0.519	0.527	0.527	0.527	0.519	0.519	0.519
Observations	1210	1210	1210	1210	1210	1210	1210	1210	1210	1210

Panel B: Partner Women

	Verbal							Physical		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Work	-0.018	-0.020	-0.079**	-0.054	-0.060	-0.076	-0.056	-0.065*	-0.060**	-0.023
	(0.038)	(0.036)	(0.040)	(0.043)	(0.038)	(0.047)	(0.041)	(0.036)	(0.029)	(0.038)
Cash	-0.065*	-0.039	-0.071*	-0.080*	-0.092**	-0.147***	-0.087**	-0.063*	-0.024	0.006
	(0.039)	(0.034)	(0.039)	(0.042)	(0.037)	(0.043)	(0.040)	(0.035)	(0.029)	(0.037)
Unpaid	-0.025	-0.055	-0.064	-0.030	-0.109***	-0.135***	-0.097**	-0.088***	-0.059**	0.003
	(0.039)	(0.035)	(0.040)	(0.041)	(0.039)	(0.044)	(0.039)	(0.033)	(0.029)	(0.036)
Control Mean	0.753	0.247	0.359	0.241	0.253	0.500	0.359	0.212	0.859	0.753
Shrp. q-val Work	0.393	0.393	0.301	0.301	0.301	0.301	0.301	0.301	0.301	0.393
Shrp. q-val Cash	0.107	0.141	0.107	0.107	0.068	0.007	0.084	0.107	0.159	0.360
Shrp. q-val Unpaid	0.214	0.094	0.094	0.212	0.024	0.024	0.025	0.024	0.055	0.389
Observations	1188	1188	1188	1188	1188	1188	1188	1188	1188	1188

Notes: All outcomes have been converted into binary variables, where a value of 1 indicates *any* occurrence in the past month (actions) or any acceptability (norms). The column names describe whether the respondent has experienced (1)-(8) or considers acceptable (9)-(10) the action listed in the column names. (1)-(7) make up the verbal IPV index; (8)-(10) the physical IPV index. Regressions include camp and enumerator fixed effects, controls selected by lasso, and the baseline value of the outcome variable. Standard errors are clustered at the block level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

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Table A9: Self-reported verbal IPV, men

Panel A: Treated Men

	(1) IPV Verbal Index	(2) Jealous	(3) No Money	(4) Humiliate	(5) Insult
Work	0.065	0.123***	0.010	-0.031	-0.029
	(0.070)	(0.038)	(0.027)	(0.043)	(0.041)
Cash	0.014	0.072*	-0.018	-0.065	0.041
	(0.067)	(0.039)	(0.025)	(0.041)	(0.041)
Unpaid	-0.026	0.032	0.003	-0.057	-0.015
	(0.069)	(0.042)	(0.026)	(0.042)	(0.040)
Control Mean	-0.000	0.629	0.353	0.359	0.412
Shrp. q-val Work	0.912	0.008	1.000	0.912	0.912
Shrp. q-val Cash	0.994	0.401	0.533	0.401	0.474
Shrp. q-val Unpaid	1.000	1.000	1.000	1.000	1.000
Observations	1215	1215	1215	1215	1215

Panel B: Partner Men

	(1) IPV Verbal Index	(2) Jealous	(3) No Money	(4) Humiliate	(5) Insult
Work	-0.072	0.006	0.011	-0.045	-0.098**
	(0.073)	(0.040)	(0.028)	(0.040)	(0.039)
Cash	-0.106	-0.007	0.001	-0.055	-0.082**
	(0.068)	(0.037)	(0.029)	(0.038)	(0.040)
Unpaid	-0.031	0.011	0.017	-0.022	-0.059
	(0.067)	(0.039)	(0.027)	(0.039)	(0.040)
Control Mean	0.000	0.665	0.276	0.294	0.424
Shrp. q-val Work	0.745	1.000	1.000	0.745	0.068
Shrp. q-val Cash	0.273	0.629	0.629	0.273	0.273
Shrp. q-val Unpaid	1.000	1.000	1.000	1.000	1.000
Observations	1175	1175	1175	1175	1175

Notes: Column (1) is a standardized index of the frequency of the following four IPV actions. Columns (2)-(5) are outcomes converted to binary vairables, where a value of 1 indicates *any* occurrence in the past month. The column names describe whether the respondent has experienced (2)-(5), with a higher score corresponding to higher frequency. Regressions include camp and enumerator fixed effects, controls selected by lasso, and the baseline value of the outcome variable. Standard errors are clustered at the block level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

A.1.5 Other Outcomes

Table A10: Self-reported IPV, pooled

Panel A: Treated Women		Components of IPV Index		
	(1)	(2)	(3)	(4)
	IPV Index	Verbal Abuse	Phys Abuse	Husband Norms
Treated	-0.068	-0.061	-0.074	-0.084
	(0.059)	(0.075)	(0.065)	(0.068)
Control Mean	0.000	0.000	0.000	0.000
Test Treated	0.244	0.422	0.252	0.218
Observations	1210	1210	1210	1169

Panel B: Partner Women		Components of IPV Index		
	IPV Index	Verbal Abuse	Phys Abuse	Husband Norms
Treated	-0.164**	-0.185**	-0.136*	-0.042
	(0.069)	(0.079)	(0.075)	(0.063)
Control Mean	0.027	0.004	0.000	0.000
Test Treated	0.017	0.019	0.069	0.506
Observations	1188	1188	1188	1184

Notes: All outcomes have been standardized. (1) is an inverse covariance weighted sum of the following columns. (2) is an index of the frequency of seven verbal abuse IPV actions, including jealousy, humiliation, and insulting, with a higher score corresponding to higher frequency. (3) is an index of (a) the frequency of threatened physical abuse and (b) the woman's attitudes toward physical abuse. (4) is an index of her husband's attitudes toward physical abuse. Regressions include camp and enumerator fixed effects, controls selected by lasso, and the baseline value of the outcome variable. Standard errors are clustered at the block level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A11: Other outcomes, female-treated households

	Panel A: Treated Women		
	(1) Days Healthy	(2) Cognitive Index	(3) Risk Tol.
Work	0.022	0.077	-0.018
	(0.082)	(0.079)	(0.098)
Cash	-0.183**	-0.029	0.096
	(0.085)	(0.080)	(0.088)
Unpaid	-0.044	0.104	0.098
	(0.088)	(0.080)	(0.091)
Control Mean	0.000	-0.211	0.000
Shrp. q-val Work	1.000	1.000	1.000
Shrp. q-val Cash	0.106	0.706	0.381
Shrp. q-val Unpaid	0.750	0.750	0.750
Observations	1210	1210	1210

	Panel B: Partner Men		
	(1)	(2)	(3)
Work	-0.016	0.095	-0.053
	(0.094)	(0.066)	(0.100)
Cash	-0.168*	0.077	0.033
	(0.101)	(0.061)	(0.100)
Unpaid	0.011	0.089	0.092
	(0.090)	(0.063)	(0.100)
Control Mean	0.000	-0.097	-0.000
Shrp. q-val Work	1.000	0.857	1.000
Shrp. q-val Cash	0.403	0.403	0.448
Shrp. q-val Unpaid	1.000	0.906	0.906
Observations	1175	1175	1175

Notes: All outcomes have been standardized. (1) is the number of days not sick in the past 30 days. (2) is an inverse covariance weighted sum of the digit memory game (sum of level reached) and the number of math questions answered correctly. (3) is the inverse (tolerance, instead of acceptance) of the level at which the respondent was willing to accept the risk game bet. Regressions include camp and enumerator fixed effects, controls selected by lasso, and the baseline value of the outcome variable. Standard errors are clustered at the block level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A12: Other outcomes, male-treated households

	Panel A: Treated Men		
	(1) Days Healthy	(2) Cognitive Index	(3) Risk Tol.
Work	0.158**	-0.141**	0.094
	(0.077)	(0.061)	(0.100)
Cash	-0.107	-0.146**	0.097
	(0.086)	(0.063)	(0.089)
Unpaid	0.005	-0.143**	0.040
	(0.083)	(0.061)	(0.098)
Control Mean	-0.000	0.220	0.000
Shrp. q-val Work	0.065	0.065	0.130
Shrp. q-val Cash	0.224	0.069	0.224
Shrp. q-val Unpaid	1.000	0.060	1.000
Observations	1215	1215	1215

	Panel B: Partner Women		
	(1)	(2)	(3)
Work	0.019	0.049	0.035
	(0.096)	(0.072)	(0.088)
Cash	-0.055	-0.045	-0.070
	(0.092)	(0.076)	(0.089)
Unpaid	0.001	-0.087	0.006
	(0.100)	(0.074)	(0.091)
Control Mean	0.010	-0.132	-0.003
Shrp. q-val Work	1.000	1.000	1.000
Shrp. q-val Cash	1.000	1.000	1.000
Shrp. q-val Unpaid	1.000	1.000	1.000
Observations	1188	1188	1188

Notes: All outcomes have been standardized. (1) is the number of days not sick in the past 30 days. (2) is an inverse covariance weighted sum of the digit memory game (sum of level reached) and the number of math questions answered correctly. (3) is the inverse (tolerance, instead of acceptance) of the level at which the respondent was willing to accept the risk game bet. Regressions include camp and enumerator fixed effects, controls selected by lasso, and the baseline value of the outcome variable. Standard errors are clustered at the block level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

A.1.6 Robustness: Participation Certificate

Table A13: Psychosocial index, heterogeneity by participation certificate

	(1) PS Index	(2) PHQ	(3) Stress	(4) Life Sat.	(5) Social	(6) Purpose	(7) Self-Worth	(8) Control	(9) Stability
					Individual Components of PS Index				
Work	0.072* (0.042)	0.130 (0.090)	0.026 (0.085)	0.117* (0.068)	0.069 (0.057)	0.042 (0.070)	0.032 (0.065)	0.043 (0.080)	0.128* (0.071)
Got Certificate	0.019 (0.052)	0.006 (0.108)	-0.069 (0.100)	0.036 (0.072)	0.129** (0.064)	-0.070 (0.095)	-0.122 (0.088)	0.043 (0.084)	0.168* (0.092)
Work x Got Certificate	0.038 (0.059)	0.091 (0.129)	0.163 (0.126)	-0.035 (0.092)	-0.029 (0.081)	0.103 (0.114)	0.120 (0.106)	0.091 (0.107)	-0.147 (0.112)
Cash	0.034 (0.044)	0.102 (0.090)	-0.031 (0.086)	0.103* (0.062)	-0.054 (0.061)	0.030 (0.069)	0.006 (0.064)	-0.011 (0.078)	0.144** (0.073)
Cash x Got Certificate	-0.011 (0.062)	-0.159 (0.131)	-0.067 (0.127)	-0.027 (0.088)	-0.074 (0.085)	0.117 (0.115)	0.186* (0.111)	0.026 (0.104)	-0.281** (0.112)
Unpaid	0.033 (0.043)	0.093 (0.093)	-0.060 (0.081)	0.010 (0.063)	0.049 (0.066)	0.016 (0.066)	-0.005 (0.060)	0.136* (0.077)	0.040 (0.070)
Unpaid x Got Certificate	-0.031 (0.059)	-0.055 (0.126)	0.026 (0.123)	-0.059 (0.089)	-0.068 (0.086)	0.076 (0.107)	0.089 (0.100)	-0.124 (0.105)	-0.215* (0.113)
Control Mean	0.004	0.000	-0.000	0.000	-0.000	-0.000	-0.000	0.000	-0.000
Shrp. q-val Work	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Test Work=Cash, No Got Certificate	0.239	0.697	0.494	0.802	0.015	0.839	0.668	0.420	0.808
Shrp. q-val Work=Cash, No Got Certificate	0.315	1.000	1.000	1.000	0.134	1.000	1.000	1.000	1.000
Test Work=Cash, Got Certificate	0.006	0.001	0.000	0.905	0.005	0.982	0.569	0.063	0.056
Shrp. q-val Work=Cash, Got Certificate	0.007	0.003	0.003	0.584	0.011	0.584	0.398	0.068	0.068
Test Work=Unpaid, No Got Certificate	0.190	0.634	0.293	0.069	0.710	0.655	0.508	0.160	0.156
Shrp. q-val Work=Unpaid, No Got Certificate	0.235	0.798	0.749	0.749	0.798	0.798	0.798	0.749	0.749
Test Work=Unpaid, Got Certificate	0.000	0.009	0.004	0.021	0.308	0.365	0.237	0.084	0.024
Shrp. q-val Work=Unpaid, Got Certificate	0.001	0.036	0.036	0.039	0.157	0.159	0.157	0.073	0.039
Observations	2429	2429	2425	2425	2425	2425	2425	2425	2425

Notes: This table reports the treatment effect of receiving employment and receiving a certificate (and the interaction). In order to control for potential reciprocity effects, we provided these certificates not only to a subset of our employment arm, but additionally to a randomized subset of cash and control arms. The column shows OLS estimates of a regression of the Psychosocial Index on dummies for work, cash, certificate reception, the interactions, as well as the baseline measure of the Psychosocial Index, camp and enumerator fixed effects, and sociodemographic controls as determined through a double-selection LASSO procedure (Belloni, Chernozhukov, and Hansen, 2014). Standard errors are clustered at the block level.

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A.2   Figures

Figure A1: Participation certificate to boost 'resume'

Notes: The wording of the certificate was made such that it could be applied to all arms; cash-only arms participated in weekly surveys along with all other experiment participants, so technically also engaged in data collection for our project.

B Deviations from Pre-Analysis Plan (PAP)

Below we note the deviations in the analysis from the PAP; available here.

B.1 Outcomes

- We expand our psychosocial wellbeing index by including three dimensions listed as mechanisms in our PAP: **purpose**, **self-worth**, and **sociability**. We limit the definition of sociability to only the measure of how many people the respondent had a conversation with yesterday.

- While we pre-specified **physical wellbeing** (in the form of sick days in the past month), **cognitive ability** (through a digit span and arithmetic test), and **risk preferences** (through a risk-elicitation game) as dimensions of well-being, our results are noisy. We relegate these outcomes to the Appendix.

- We report an index of intimate partner violence as another main outcome. For women, this is composed of a **verbal index** (seven questions about the frequency of verbal abuse from the Demographic Health Survey), **physical index** (one question about the frequency of physical abuse, and two about attitudes toward physical IPV), and **husband's IPV norms index** (the same two attitudinal questions about physical IPV as above, but as responded by the husband).

B.2 Policy Implications

- We re-organize several mechanisms under a discussion of policy implications with the heading **household bargaining**. This includes results from the incentivized **household bargaining** game, ability to **influence** one's spouse in case of disagreement, intra-household **consumption** and **time use** decision-making, and norms for **men in the household** and for **women in the workplace**. These measures remain unchanged from the PAP, but we develop two new revealed preference variables from the bargaining game. The first is an indicator of whether the wife participated in the negotiation round, reported by the enumerator without the respondents' knowledge. The second is an indicator of bargaining success, which takes a value of 1 if the respondent receives *at least* the amount they gave in the private round.

- We re-organize another set of policy-relevant variables under the heading **implications for children**. This includes the pre-specified questions about one's preference for a son-in-law (daughter-in-law) that allows one's daughter (son) to work. We also include

two new variables about the highest level of educational attainment that one desires for their eldest daughter (son).

C   Details on outcome measures

Outcome Variable Descriptions

Psychological Well-being

PHQ9	The standardized total score of 9 questions from the Patient Health Questionnaire-9 (PHQ9)
Locus of Control	The standardized total score from responses to four locus of control questions. "In the last 7 days, how many days did you feel that to a great extent your life is controlled by accidental/chance happenings..."
Life Satisfaction Index	A standardized average of survey responses to four questions from Diener's standardized scale, responses made along a six-point Likert scale.
Stress Index	The standardized total score from three elements of adapted from the Cohen Stress scale. "How many of the last 7 days have you [been able to fall asleep peacefully / felt nervous / felt frustrated]?"
Stability Index	The standardized total score from responses to two stability questions using a Cantril ladder. "How secure [do you feel / think you will feel] [at present / five years from now]"

Other Well-being

Physical Health	Number of days sick in the last 30 days.
Cognitive Ability	A standardized weighted index of the number of correct responses to i) a digit span (forward and backward) memory test and ii) basic arithmetic problems including addition, subtraction, multiplication, and division.
Risk Preference	Measured using incentivized responses to the multiple price list decisions adapted from Holt-Laury and Sprenger (2002).

Engagement of Self

Purpose	The standardized total score from the responses on a scale from 1 to 10 to two questions: "Think of a person you know who *contributes the most* in your [family / community]. If that person is a 10 where would you put yourself?"
Self Worth	The standardized total score from the responses on a scale from 1 to 10 to two questions: "Think of a person you know who you *respect the most* in your [family / community]. If that person is a 10 where would you put yourself?"
Norms for men within the household	"A husband who helps his wife with the household chores should not be respected" and "A husband who makes important decisions jointly with his wife is weak", responses made along a four-point Likert scale.

Norms for women in the workplace	Hours per week that women should be allowed to work outside the home (but inside the block), and outside the home (and outside the block). Next, "A wife who prioritizes work outside the home over household-chores is not a good wife", responses made along a four-point Likert scale. Finally, respondents choose a hypothetical husband for a daughter between two men with the same education and income, but only one of them would allow the respondent's daughter to work outside for pay. For a son, they choose between two women with the same education and the same income, but one of the women wishes to work outside the home for pay.

Engagement with partner

Household bargaining	An incentivized bargaining game where both members of a couple decide how to allocate 250 taka. Also, five questions about how often their spouse considers their opinion and what happens in the event of a disagreement, responses made from five frequency options. Finally, "A wife who frequently expresses her opinion in the household is overbearing/talks too much", responses made along a 4-point Likert scale.
Intimate partner violence	Eight questions exploring occurences of verbal abuse, travel restrictions, and physical abuse, drawn from the Demographic Health Surveys. Also, two questions measuring attitudes toward IPV.
Intra-household decisionmaking	A standardized index from responses to nine questions about consumption decisions and norms, looped over five categories (small household purchases, large household purchases, child, health, luxury). Also, a standardized index from responses to four questions about time-use, looped over four categories (raising children, working outside the home, indoor household chores, and outdoor household chores).

Engagement with outside world

Sociability (Total)	The total number of conversations in the past day with adults.
Sociability (Positive)	The total number of conversations in the past day with adults that the respondent felt were positive.
Sociability (Duration)	The total number of conversations that were longer than 15 minutes.

Other Mechansims (not pre-specified)

Financial portfolio	Amount in savings total and over 90 days. Also, how much currently lent and borrowed to others, and whether respondent could cover an unexpected 1000 taka expense. Finally, consumption across 12 categories in the past two weeks.
Time-use	Amount of time spent on a set of eight activities in the past 24 hours.

Skills	Agree or disagree to: "When you meet a new person, you can speak to him/her easily" and "When you have a busier day than usual, you can finish all your work in time". Also, ability to follow instructions from an enumerator to draw an image.

Table A15: Outcome Variable Collection Periods

	Basline	Weekly	Endline	Follow-up
Psychological Well-being				
PHQ9	X		X	X
Locus of Control	X		X	
Life Satisfaction Index	X		X	
Stress Index	X	X	X	
Stability Index	X		X	
General Wellbeing		X	X	
Other Well-being				
Physical Health	X		X	
Cognitive Ability	X		X	
Risk Preference	X		X	
Engagement of Self				
Purpose	X	X	X	
Self Worth	X		X	
Norms for Men	X		X	X
Norms for Women	X		X	X
Engagement with partner				
Household bargaining	X	X*	X	X
Intimate partner violence	X		X	X
Intra-household decision-making	X		X	
Engagement with outside world				
Sociability (Total)	X		X	
Sociability (Positive)	X		X	
Sociability (Duration)	X		X	
Other Mechanisms				
Financial portfolio	X		X	
Time-use	X		X	
Skills	X		X	
Valuation Work				
Becker-Degroot Marshak				X

*Bargaining is measured differently during weekly surveys than at baseline or endline.

D   Excerpts from Human Rights Council Report

The following is a compilation of excerpts drawn from the United Nations' Human Rights Council Report on Myanmar regarding the "Clearance Operations" in Rakhine State executed by the Myanmar military (referred to below as the *Tatmadaw*) in late August and early September of 2017. These excerpts describe the indiscriminate nature of the violence perpetrated against the Rohingya during these operations. We caution the reader as several of these excerpts are difficult to read. We have left out the most graphic descriptions but direct the reader to the report itself (A/HRC/39/CRP.2) for further evidence of the random nature of violence during the Operations.

- During subsequent operations in villages and towns, the Tatmadaw did also not attempt to distinguish civilians from military objectives. Such indiscriminate attacks resulted in civilian men, women and children being injured or killed, with large numbers of civilians being driven away from their homes and villages. (P.35)

- Information therefore strongly indicates that airstrikes and shelling were used indiscriminately as a more general tactic in the context of "clearance operations," in essence attacking the civilian population as a whole as opposed to being used against specifically identified military targets. (P.35)

- The operations were designed to instill immediate terror, with people woken by intense rapid weapons fire, explosions, or the shouts and screams of villagers. Structures were set ablaze and Tatmadaw soldiers fired their guns indiscriminately into houses and fields, and at villagers. (P.178)

- Many Rohingya were killed or injured by indiscriminate shooting. Rohingya villages were approached without warning, usually from more than one direction, and often in the early morning, by armed Tatmadaw soldiers.... Members of the security forces, primarily Tatmadaw soldiers of the Western Command and the 33rd and 99th LIDs, shot assault rifles towards the Rohingya villages from a distance, not targeting any particular military objective or making any distinction between ARSA fighters and civilians. Men, women and children were all shot at. Many victims referred to the volume of gunfire, with some describing it as "raining bullets." Many were shot and killed or injured while attempting to flee. (P.205)

- One young girl described the operation in Maungdaw Township: "When the soldiers came to my village, we all ran, and they shot at us. We were around 50 people, and maybe half of us were shot. The people shot fell down while they were running. Some died and some escaped. Somehow, I escaped."' (P.205-206)

- One man from Kyein Chaung village tract, known in Rohingya as Boli Bazar, in northern Maungdaw Township explained the circumstances in which his daughter was killed: "I don't know how many people died that day. The military, they were just shooting at whomever. They were shooting at people whenever they saw them, on the

streets or in the houses. When they were shooting, there was no time to look back and care for those who were shot. As people were running, they were shooting at them. That is how my daughter died. She was hit fleeing. I couldn't go back and carry her." (P.206)

- Some Rohingya villagers who could not flee, or who sought shelter inside their houses, were also shot and killed or injured, when bullets penetrated thatched roofs and bamboo walls. Villagers were shot in other locations where they had found shelter, including through rapid arms fire into forested hills where they had fled. (P.206-207)

- The Mission has provided detailed accounts above of corroborated mass killings perpetrated in the villages of Min Gyi, Maung Nu, Chut Pyin, Gu Dar Pyin, the villages of Koe Tan Kauk. Dozens, and in some cases hundreds, of men, women and children were killed. Additional organized mass killings are likely to have taken place. Witnesses reported seeing bodies of large numbers of Rohingya, including those with gunshot and machete wounds, as well as decapitated heads, in burned villages en route to Bangladesh. (P.207)

- Rohingya fleeing the "clearance operations" also faced violent attacks at border crossing points, resulting in loss of life and serious injuries. Soldiers opened fire on groups of Rohingya at or close to border crossing points, including large numbers gathered on the shores of the Bay of Bengal or Naf River, while waiting to cross into Bangladesh.2005 A man from Nga Yant Chaung village tract, Buthidaung Township, described arriving at the Naf River in mid-September 2017 and being fired upon by soldiers. Some of the people ran; others, like him, lay on the ground. He said that 25 people were killed, including three of his relatives. (P.208)

- Soldiers also shot at boats carrying Rohingya to Bangladesh, resulting in further casualties. One witness explained how the boat she was in was shot at by soldiers as it crossed the Naf River, killing three men and two women. Another witness described her experience while waiting for a boat: "Soldiers started shooting, so we crawled away and lay down behind the plants in the mud. I saw many people being shot at. Dead bodies of men, women and children were floating in the river." (P.208-209)

- Another feature of the "clearance operations" was the widespread destruction of Rohingya homes and villages, causing further death and injury through burning. Houses were burned both manually using flammable liquid and matches, and by the use of "launchers," weapons firing a munition that explodes upon impact. This latter method in particular meant that victims were often caught by surprise and had little time to escape. (P.209)

- Landmines, planted by the Tatmadaw in and around Rohingya villages as part of the "clearance operations" also caused death and injury. On or around 26 August 2017, a group of Tatmadaw soldiers approached Sin Oe Pyin (Ywar Gyi) hamlet, in Maung Gyi Taung village tract, Buthidaung Township. They systematically planted mines along the main road to the village, with one villager describing them as being placed "15 feet apart." Once the operations began, the landmines killed and injured many

who tried to flee.2037 As one villager described, "The mines were put at the entrance of the village, that is the only way out so when people were running they stepped on them and died." Another recalled: "Some people were running and were killed by the mines, as they didn't know that they were planted there. Others were hit by the mines as they were coming back from the field. My 18-year old relative died from an explosion coming back from the paddy field just in front of my house." (P.211)

E   Script to participants

FOR EVERYONE: We want to thank you for all the time you have spent with us so far: we have learned so much from you. As a token of our gratitude, we would like to offer you a gift. We do not have a lot of money, but we still want to help by learning about your life and conditions in the camp better so that we can do something in a larger scale in the future. Because we don't have enough for everybody, we are offering a lottery. You might receive: (1) 300 taka today plus a total of 400 taka over the next two months, (2) 300 taka today plus a total of 3600 taka over the next two months, (3) 300 taka today plus a work opportunity from which you can earn 3600 taka over the next two months or (4) Nothing. Most people get nothing (this is the most common happening, most people in your block will receive nothing). Here are a few envelopes, each with a different number on them. I do not know what numbers are in these envelopes. I want you to choose one of these, and tell me the number inside. I will enter it into my tablet and it will tell me which of the gifts you will receive. Does that make sense?

T-0 (Control, No Work)   Congratulations! You drew a number that entitles you to 300 taka today plus a total of 400 taka over the next two months. *Enumerator: Please give three 100 taka bill to the respondent* This is yours to keep and do what you wish with the money. We will come to your block every week for the next eight weeks to check in and see how you are doing and will ask you some questions again. Next week, you will receive 50 taka if you come to meet us in your block and answer a few questions, and this process will continue for the next 8 weeks, adding up to 400 taka by the end. You will have come to the collection point every week to collect money, you cannot send someone else on your behalf. We have a few remaining questions to ask you – it will take about 30 minutes, and then we will be on our way. Is that okay?

T-1 (Cash, No Work)   Congratulations! You drew a number that entitles you to 300 taka today plus a total of 3600 taka over the next two months. *Enumerator: Please give three 100 taka bill to the respondent] This is yours to keep and do what you wish with the money.*   We will come to your block every week for the next eight weeks to check in and see how you are doing and ask you some questions again. Next week you will receive 450 taka if you come to meet us in your block and answer a few questions, and this process will continue for the next 8 weeks, adding up to 3600 taka by the end. You will have come to the collection point every week to collect money, you cannot send someone else on your behalf. We have a few remaining questions to ask you, it will take about 30 minutes and then we will be on our way. Is that okay?

T2a: pay for work with a certain schedule   Congratulations! You drew a number that entitles you to 300 taka today plus a work opportunity where you can earn a total of 3600 taka over the next two months. *Enumerator: Please give three 100 taka bill to the respondent.*This is yours to keep and do what you wish with the money. Now let me tell you about the work opportunity. As you know, we are conducting a research project in which we are trying to understand how you feel about life and how you spend your days in the camps. If we understand this well, we will be able to help you and your community by providing you with the things you need. Does it make sense to you? ENUMERATOR: BEGIN PINK VIDEO HERE. Would you like to accept this work opportunity? Wonderful! Then here are 2 sets of papers for the next 2 days in this current week you will be working. Within each set there are 5 sheets for 5 times during the day on which you will be working. You will get next week's work on the collection day (SPECIFY THE COLLECTION DAY). Here is the calendar that tells you exactly on which days we need you to complete these sheets. At the end of each day, please put the 5-sheet bundle/set in the collection box that will be kept in your block. We will check in with you throughout the week and collect these sheets at the end of the week and make your payment for that week. We have a few remaining questions to ask you, and then we will be on our way. Is that okay?

T2b: pay for work with uncertain schedule   Congratulations! You drew a number that entitles you to 300 taka today plus a work opportunity where you can earn a total of 3600 taka over the next two months. [Enumerator: Please give three 100 taka bill to the respondent] This is yours to keep and do what you wish with the money. Now let me tell you about the work opportunity. As you know, we are conducting a research project in which we are trying to understand how you feel and how you spend your days in the camps. If we understand this well, we will be able to help you and your community by providing you with the things you need. Does it make sense to you? ENUMERATOR: BEGIN BLUE VIDEO HERE. Would you like to accept this work opportunity? Wonderful! Ok, now let me give you a few final details on your work task. For this coming week, you will have to work on *these two days*. At the end of the day you will have to submit your daily work in the collection box and attend a weekly collection session to collect your weekly payment based on your work. Here are 2 sets of papers for the next 2 days in this current week you will be working. Within each set there are 5 sheets for 5 times during the day on which you will be working. You will get next week's work on the collection day (SPECIFY THE COLLECTION DAY). At the end of each day, please put the 5 sheet set in the collection box that will be kept in your block. We will check in with you throughout the week and collect these sheets at the end of the week and make your payment for that week. Even though we'll

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pay you this total amount at the end of every week, we don't know which twenty-four days you will work for us in the next 2 months. We will only be able to tell you at the beginning of each week. That means, when you return us your completed work and get your weekly payments, our collectors will tell you the next week's schedule. Your weekly schedule will be uncertain. We have a few remaining questions to ask you, and then we will be on our way. Is that okay?