# Challenges in Changing Social Norms: Evidence from Interventions Targeting Child Marriage in Ethiopia

Vinci Chow\*

Chinese University of Hong Kong

Eva Vivalt<sup>†</sup>

University of Toronto

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#### Abstract

We study a set of interventions in Ethiopia geared towards eliminating child marriage. The interventions facilitate community discussion about child marriage and provide economic incentives for girls to stay in school and remain unmarried. Changing social norms is often thought of as very difficult, and if there is a marriage penalty to being among the first to deviate to an older age of marriage, raising the typical age at first marriage could be especially challenging. Regardless, using weighting and a differencein-differences approach we find that both interventions reduce the probability a girl 8 - 17 years old has been married by about 4 to 7 percentage points. We observe some positive spillover effects: the program appears to have increased the intra-household decision-making power of women. However, we also find suggestive evidence of increased polarization in beliefs about child marriage, including some possible backlash especially among men. No robust effects were seen on education outcomes, suggesting that in contrast to other studies this was not the mechanism through which the intervention had an effect.

<sup>\*</sup>vincichow@cuhk.edu.hk.

<sup>&</sup>lt;sup>†</sup>eva.vivalt@utoronto.ca.

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# 1 Introduction

Globally, 26% of women aged 20-24 years were married when they were under 18 (UNICEF, 2013); approximately 39,000 girls currently under the age of 18 get married every day, a third of whom are under 15 (UNFPA, 2012). Child marriage disproportionately targets women and restricts the opportunities available to them. In Ethiopia, the setting of this paper, girls are routinely pulled out of school when they get married. Early marriage has also been linked to negative health consequences, such as fistula and other complications in pregnancy, and has been hypothesized to affect a range of issues relating to women's empowerment, such as workforce participation, the balance of decision-making power within households, and time use more generally.

Despite the potential importance of early marriage for these economic and social outcomes, empirical evidence on the effects of child marriage and programs to prevent child marriage has been limited, as is illustrated in several reviews (e.g. Lee-Rife et al., 2012; Malhotra et al., 2011). We study a program that consisted of several different interventions falling under two broad categories: the facilitation of conversation and provision of information about child marriage, and the provision of economic incentives. The intervention was divided geographically into "intensive" and "expansion" treatment arms. The information interventions were provided in some form in both the "intensive" and "expansion" areas and consisted of facilitating or encouraging "community conversations", in which trainers or community facilitators organized community meetings, presented material on the harmful effects of child marriage, and facilitated dialogue about child marriage; providing materials and training to peer educators that were involved in organizing school clubs; and providing materials and training to engage school children to campaign against child marriage, including megaphones, digital recorders and camera equipment. The economic incentives component was only provided to the "intensive" treatment arm and included entrepreneurship training for female parents or caregivers and school materials for girls staying in school, conditional on girls remaining unmarried and attending school. We will present results for both arms although it should be noted that these comparisons are not well-powered and sites were selected for the "intensive" and "expansion" arms in a way that could affect results. We thus do not wish to lean too heavily on any differences between the treatment arms.

We evaluate the program using weighting and a difference-in-differences approach, devoting a

substantial share of the paper to analysis of pre-trends in the treatment and control areas, the baseline balance of covariates, and different methods and specifications. The data come from a baseline and follow-up survey, with the geographic areas selected for the follow-up survey by the research team based on analysis of the baseline data to try to obtain better matches. Matching was done at the kebele level, and for decades before the study started there was a secular decrease in child marriage, potentially hastened in recent years by increased attention to the issue, including the passage of a law. Before matching, the treatment areas had higher rates of child marriage than the control areas, but the trends towards increasing age of first marriage were not significantly different in the treatment or control areas. While we cannot completely rule out the possibility of unobserved differences between the treatment areas seemed to exhibit lower rates of child marriage than the control areas.

Overall, we find the program decreased the probability that a girl aged 8-17 had ever been married by 4 to 7 percentage points. Interestingly, the program seems to have led to increasingly polarized views on early marriage, with more respondents in the treatment group at follow-up reporting that marriage before the age of 15 was looked on more favourably or unfavourably in their community than it previously had been and fewer reporting opinions were unchanged. Women in the treatment group believed they should have more decision-making power in the household, but the treatment had limited to no effect on education and possibly even negatively affected men and women's stated attitudes towards rape and other violence against women.

The null effects on education are interesting in light of a number studies of cash transfer programs conditioned on staying in school and studies of girls' scholarships programs finding that these programs can help decrease child marriage (Duflo *et al.*, 2015; Hahn *et al.*, 2015). Baird *et al.* (2011) find less promising effects for conditional cash transfers. Krishnan *et al.* (2014) examines the effect of cash transfers explicitly conditioned on remaining unmarried on age at first marriage and finds a significant effect. Nanda *et al.* (2014) and Sinha and Yoong (2009) also consider cash transfers conditioned on remaining unmarried, though they do not consider this outcome variable. There is also evidence that even unconditional cash transfers can decrease child marriage (Baird *et al.*, 2011), as can other income shocks (Corno, Hildebrandt and Voena, 2016; Hildebrandt, 2014; Rosenzweig and Stark, 1989). Finally, there is some notable work on women's empowerment programs and vocational training that may be relevant: Bandiera *et al.* (2014) finds strong effects of a women's empowerment program, but Buehren *et al.* (2015) does not and Buchmann *et al.* (2017) finds effects only for a financial incentive but no effects of women's empowerment programs. The paper perhaps closest to ours looks at an earlier precursor to the program we study, a pilot in the same region of Ethiopia, the Amhara region (Erulkar and Muthengi, 2009). Though the sample was small, that paper finds strong effects. Our study differs in that the sample was much larger and in that the program they studied had different content, including a stronger economic incentives arm: if girls attended program meetings and remained unmarried, upon graduation girls and their families would jointly receive a goat, worth approximately \$20 U.S. at the time. It is possible that the economic incentives in our study were simply too small to have a distinctly observable effect. This would also help to explain the null results on education, as much of the incentives that were offered were education-based: if these transfers were influential, we might have expected to see more movement in the education outcomes for those receiving them. However, as mentioned, our mostly null differences between treatment arms may also be due to limited power, and we also observe some differences in educational outcomes at baseline that complicate the analysis.

The rest of the paper proceeds as follows. First, we provide more information about marriage in Ethiopia, describe the data and present some summary statistics. We then discuss the methods used and how the treatment effects are identified given the structure of the program. Results are presented on several different outcomes, including early marriage; attitudes to intra-household decision-making, sex and violence; education; and social norms. Finally, we present robustness checks and discuss the results before concluding.

# 2 Early Marriage in Ethiopia

## 2.1 Background

According to the 2011 Demographic and Health Survey (DHS), the DHS closest to the study's baseline, the median age at first marriage, nation-wide, was 16.5 for women aged 25-49 and 23.2 for men.<sup>1</sup> Those who had no education had a median age at first marriage of 15.9, as opposed to

<sup>&</sup>lt;sup>1</sup>The situation is believed to be rapidly improving, so the DHS statistics could be much better if restricted to younger women, who we will see tend to marry later than older cohorts.

23.8 for those who had more than a secondary education. 63% of women were married below the age of 18, and 62% had been sexually active. The Amhara region, the focus of this study, is a rural area in the northern part of the country and has the worst rates of child marriage within Ethiopia.

Child marriage, defined as marriage below the age of 18, became illegal in Ethiopia in 2000.<sup>2</sup> However, enforcement has been poor. In our sample, at baseline 33.4% of fathers and 32.8% of mothers stated that they were aware of the law in the treatment areas, and 34.5% and 31.4%, respectively, in the control areas. In the baseline survey, we will see that parents report an average age of first marriage for girls of 13-14 years; however, this is restricted to those daughters who were already married.

Typically, marriages in this region are arranged by the parents. Elders from the groom's family will approach the bride's family and offer gifts as bride price, sometimes through village matchmakers. There is a lot of variation in the provision of bride price. Only about half the households in our sample reported receiving a bride price when a girl married. There is also a practice, very rare in the Amhara region, of abducting girls, raping them, and then sending an offer of marriage and a bride price back through village elders to the girl's family. At that point the family will usually accept the marriage and the offered bride price. This practice was made illegal in 2004 after much debate, but was always practiced more in the southern regions of Ethiopia than in the Amhara region (Osnes, 2013). In our sample, less than 1% of married girls report having been abducted.

Polygyny is occasionally practiced, but rare. The region is mostly Orthodox Christian, with a minority Muslim community. In our data, 99% of the respondents indicated that they were Orthodox Christians, with the remaining 1% being Muslim.

Fathers who had a married daughter under the age of 18 at baseline said that the main benefit they expected from the marriage was "community respect" (57%). The second most popular answer was that there were no important benefits (22%); 20% cited some form of financial rationale.<sup>3</sup> The main benefit they foresaw for the daughter was also "community respect" (38%); 35% reported their girls would receive some kind of financial benefit.<sup>4</sup> Decisions were almost entirely made by the parents. Only 21% of daughters were informed about their upcoming marriages, and only 50% of these knew the person they were to marry before the marriage.

<sup>&</sup>lt;sup>2</sup>Proclamation No.213/2000: The Revised Family Code Proclamation of 2000.

<sup>&</sup>lt;sup>3</sup> "Financial support", "social security", or to "get income".

<sup>&</sup>lt;sup>4</sup> "Financial support", "social security", "own income".

Finally, marriage seldom occurs across kebeles, and even more seldom across zones, which will aid our identification strategy as it means the risk of spillover effects is low.

# 2.2 Data

The data used in this paper come from two surveys - a baseline carried out in 2012 and a followup survey in 2014. The program began in 2012 after the baseline. The surveys were carried out in three zones in the Amhara Region: East Gojjam, West Gojjam, and South Gondar. Ethiopia is divided into ethnically based regions which are largely politically autonomous. The Amhara Region is one of these regions.

The baseline survey data comprise 2,591 households across 52 woredas and 171 kebeles. A kebele is the smallest administrative sub-district region (similar to a ward or neighborhood association) and may contain several villages with a total population of approximately 5,000; a woreda is a district within the zone that typically contains a couple dozen kebeles. All kebeles were selected from the Amhara Region, as is described in more detail in the methods section. Local authorities within each village were asked for a list of households within the village, and simple random sampling from this list was used to determine which households to visit, with the added constraint that each household surveyed had to have a girl under the age of 18 living at home.<sup>5</sup> Within each household, there was a separate survey for fathers, mothers, girls and boys, in addition to a household roster.<sup>6</sup> The household roster could include other people beyond the nuclear family, such as daughters-in-law, siblings of the parent, or grandparents. However, relatively few daughters-in-law were reported, and the focus of the survey was on the biological children of the family.<sup>7</sup> Having survey responses from multiple household members is an asset despite this limitation, and we will be able to examine heterogeneity in responses by the type of respondent for several questions.

The follow-up survey covered a restricted subgroup of 36 kebeles. Approximately 20 households were surveyed within each kebele, for a total of 694 households; at baseline, 1,339 households were surveyed within these kebeles, as the baseline survey was much bigger. The 20 households per

<sup>&</sup>lt;sup>5</sup>The next household on the list would be substituted if not.

<sup>&</sup>lt;sup>6</sup>In theory, each survey was supposed to be delivered to just the person it was directed to, but there remains the possibility others listened in.

<sup>&</sup>lt;sup>7</sup>It is possible that this is partially a function of boys tending to marry when older; if a family contained a married boy, they would be less likely to also have a young girl in the household, though families in the region are large. It is also possible that some daughters-in-law were told to pretend to be daughters for the sake of hiding child marriage.

kebele surveyed in the follow-up were randomly drawn from the set surveyed at baseline, but where the baseline households could not be located, a new household would be drawn from the kebele. The potential for selection effects will be described later, but results will be presented alternatively using all data from these kebeles for the increased sample size or else using a restricted subgroup in which we do not expect to see the same selection.

Figure 1 shows a kernel density plot of age at first marriage at baseline for girls in this sample according to different respondents (fathers, mothers, and girls). A version of this plot with the different respondents' answers for age at first marriage overlaid on one another is provided in the Appendix (Figure 6). It should be noted that these statistics are conditional on a girl being married; the unconditional mean would be much higher. The average age at first marriage for girls who are married as reported by each type of respondent is 13.6, 13.5 and 12.1, respectively. The only notable difference is between how the girls themselves respond and how their parents respond. However, the "girls" sample is limited to those under the age of 18, while the parents can be reporting on their over-18 daughters. If we imagine the girl-reported distribution is censored, and similarly truncate the distribution of age at first marriage reported by fathers and mothers to be below 18, the gap is much reduced: fathers would then report an average age at first marriage of 12.4 and mothers of 12.5. The remainder of the gap between these numbers and the average report by girls may reflect differential reporting by girls and their parents. Only seven boys below the age of 18, out of 547 who answered this question in the 36 selected kebeles, reported being married.

The girls then are typically marrying men a few years older than themselves. The baseline survey only collected data on when men who were married above the age of 18 got married if they were fathers at the time of the survey. The average father got married at 18.7; the average mother, at 12.4. The average age at first marriage seems to have shifted upwards over time for both men and women.

Marriage can mean many things. The survey correspondingly distinguished between being promised but not married and being married with or without cohabitation. In most cases, the girl moved in with the boy's family after marriage, and marriage quickly followed being promised (Figure 1), but some girls still live at home at least part-time after marriage.

Respondents might have different preferences over when to get married and may have preferred to get married earlier or later than was reflected in baseline patterns. Thus, the baseline survey also



Figure 1: Age at Being Promised and Married, By Respondent

Responses are taken from the father's survey, the mother's survey, and the girl's survey, respectively. There is little difference between the age of first being promised and the age of first being married, and the different types of respondents report similar ages. Only girls under 18 were asked to answer this question, so their responses are censored.

asked for the "ideal" age at first marriage for girls and boys. Responses are occasionally different across different types of respondents, particularly between the older and younger generation, but these differences are very slight in magnitude, as illustrated in Table 1. Fathers and mothers desired earlier marriage for girls and later marriage for boys than the girls and boys themselves desired; the younger generation reported less of a difference in the ideal age of first marriage between the sexes.

The surveys targeted those households that had at least one girl under the age of 18 in the household. Therefore, the age of female respondents was bimodally distributed, with higher densities amongst children and their mothers, one generation removed. As previously discussed, child marriage may have been decreasing over time, even in the absence of the intervention. Figure 2 shows the distribution of age at first marriage for the mothers and fathers in the data; almost all current mothers married below the age of 18 themselves.

Figure 3 shows the evolution of the age of first marriage for the mothers in the data in the treatment and control areas. This figure comes the closest to providing information about potential "pre-trends". The difference-in-differences approach on which the bulk of the paper relies depends on the assumption of there being no changes at the same time as the intervention in one of the treatment and control areas, and one of the things that could cause such a change is a continuing differential trend. The age of first marriage was higher among mothers in the control group before the intervention, with an insignificantly greater rate of change. Unless there was a reversal in these trends, this would imply that, if anything, the control areas might be expected to

continue to decrease child marriage by more over the duration of the study.

It is also worth considering the marital status of girls in the treatment and control areas before the intervention began. While we do not have age at first marriage for different cohorts of girls, Table 2 presents summary statistics by treatment status and age. At baseline, more girls of various ages were reported to be unmarried in the control group. We will return to consider differences in baseline covariates and whether they can be mitigated after providing more details about the intervention.

	Age at which girls	Age at which boys
Respondent	should marry	should marry
Boy	18.1	20.3
Girl	18.1	20.4
Father	17.9	20.6
Mother	17.8	20.7

Table 1: Ideal Age at First Marriage for Girls and Boys, By Type of Respondent

This table provides the mean value for each type of respondent of the age they state that they think girls should marry and the age they state that they think boys should marry.

Figure 2: Age at Which Parents Married



This figure shows the distribution of the ages at which mothers and fathers in the sample married.



Figure 3: Pre-trends: Mothers' Age at First Marriage

This figure shows the pre-trends of the mothers' age at first marriage in the treatment and control areas, fit with a linear time trend according to their year of birth.

# **3** Intervention Description

The program was implemented by the Ethiopian government, and early project documents specify a theory of change to be tested. In particular, the hypothesis was that social norms and economic factors (that may in part drive the social norms) lead to early marriage. The program attempted to change social norms through "community conversations". In this program, a wide range of influential community stakeholders were provided information about child marriage and trained as community conversation facilitators to engage others in discussions about early marriage. The program was also designed to educate parents on the downsides of early marriage, so they would be more averse to choosing early marriage for their children, and to empower children, in the hopes that they would be more willing to vocally oppose early marriage. To address the economic drivers of social norms and child marriage, the program also provided economic incentives to avoid early marriage, under the hypothesis that some girls could be married earlier for their or their family's financial benefit. Thus, there were two treatment arms in the study: one arm which focused on community dialogue and information alone (the "expansion" treatment), and another arm that added economic incentives (the "intensive" treatment).

In the community dialogue arm, a group of core trainers were used to train influential community members (ICMs) to lead "community conversations" as community conversation facilitators. These facilitators would then work in pairs to hold these conversations at the village level, often with other local organizations. For example, when religious leaders were trained as community conversation facilitators, they might hold an event at their church or mosque.

The goal of these conversations was to encourage reflection on the hardships faced by young girls entering marriage, eliciting empathy, and for the ICMs to discuss and dispel myths surrounding early marriage. After training, ICMs were then asked to lead smaller community conversations with at least 10 households. The approach of asking community members to deliberately reflect has similarities to Broockman and Kalla's work on "deep canvassing", in which activists are trained to go into a community door-to-door and engage others in lengthy and in-depth discussions face-to-face (2016). The ICMs consist of community leaders, elders, religious leaders, parent teacher association members, and gender activists and Women's Association members.

Apart from community conversations, girls' and boys' clubs were also formed at schools. The

	Con	trol	Treatment		
	Number	Percent	Number	Percent	p-value
18-19 Years of Age					
Married	6	19.4	26	22.6	
Unmarried	23	74.2	60	52.2	(0.040)
Promised	1	3.2	1	0.9	
Widowed	0	0.0	0	0.0	
Divorced	1	3.2	28	24.4	(0.010)
16-17 Years of Age					
Married	23	10.0	72	14.2	
Unmarried	187	81.3	348	68.4	(< 0.001)
Promised	7	3.0	21	4.1	
Widowed	12	5.2	0	0.0	(<0.001)
Divorced	1	0.4	68	13.4	(<0.001)
14-15 Years of Age					
Married	34	11.0	60	9.0	
Unmarried	269	87.1	547	82.1	(0.062)
Promised	4	1.3	25	3.8	(0.041)
Widowed	2	0.7	0	0.0	
Divorced	0	0.0	34	5.1	(<0.001)
12-13 Years of Age					
Married	16	4.8	39	5.9	
Unmarried	312	94.3	610	91.5	
Promised	1	0.3	13	2.0	(0.044)
Widowed	2	0.6	5	0.8	
Divorced	0	0.0	0	0.0	

Table 2: Marital Status of Girls at Baseline

This table summarizes the marital status of girls in the household roster at baseline. The p-values provided are the results of Fisher exact tests of differences between treatment and control. Fisher exact tests are used due to the relatively small sample sizes. The p-values compare the number of girls in treatment and control for that row with the number of girls in treatment and control in any other row in that age group (implicitly generating a 2x2 table). It should be emphasized that these p-values are correlated across rows within an age group. Nonetheless, the table displays the p-values as if they tests were run one row against the others, rather than providing a statistic comparing the distributions across all rows within an age group, in order to show which marital statuses appear to be driving the overall differences for each age group. In particular, the number of girls who are married at baseline is relatively comparable across treatment and control groups within an age group, while the number who are divorced or promised is often statistically different.

girls' clubs had an activity-based curriculum that was delivered by trained local female facilitators. It was designed to help improve girls' confidence and thereby potentially increase their ability to exercise agency. It was hoped that the threat of a backlash effect would be mitigated by the community conversations led by community leaders. The clubs also gave girls access to information on family planning and reproductive health and helped build their social networks. The boys' clubs also facilitated discussions on family planning and reproductive health. In addition to the girls' and boys' clubs, the program supported mini media school clubs that provided girls and boys with an opportunity to voice their support of the campaign to end child marriage. For example, cassette-based resources were distributed so as to generate recordings that could be broadcast on the school public address system, and materials were provided to make posters to hang on the school walls. Girls' clubs already existed in some areas: at baseline, 27.1% of girls in treatment areas and 11.2% of girls in control areas said they were part of a girls' club. The program leveraged existing clubs where possible, but otherwise supported the establishment of new clubs and trained teachers to select and train peer educators within the schools who, with the support of the teachers, would organize meetings within these clubs.

The economic incentives treatment arm was designed to provide a combination of short-run benefits in the form of school materials provided to the girls and long-run, potentially more sustainable, benefits in the form of access to a revolving loan fund and financial literacy training to the parents (Table 3). The program team was aware that the literature on microfinance is not encouraging (*e.g.* Banerjee *et al.*, 2015) but was in search of a sustainable solution.

The school materials that were provided consisted of a school bag, exercise book, pen, pencil, pencil sharpener, eraser, ruler, soap and sanitary towels. These were generally provided at the beginning of each academic semester, *i.e.* twice a year, following the schedule in Appendix Table 12. The transfer was dependent not just on school enrollment but also upon remaining unmarried.

The purpose of the revolving loan fund was to encourage income-generating activities (IGAs) to enable families/caregivers to delay their daughters' marriage. The IGAs were selected by the individual beneficiaries themselves, but each individual had to fulfill the requirements of their local Savings and Credit Cooperative (SACCO) in addition to the program's requirements. The SAC-COs assessed each proposed IGA and made their own determination on whether to allow it based on various factors like its feasibility, the experience of the beneficiary, and working capital. Once

Type of Be	enefit	Beneficiaries				
Material transfer		School girls and re-enrolled out-of-school girls aged 9-16				
Revolving	loan fund	Female caregivers of school and re-enrolled out-of-school				
		girls, or male caregivers in households with no female care-				
		givers				
Financial	literacy	Female caregivers of school and re-enrolled out-of-school				
training		girls, or male caregivers in households with no female care-				
		givers				

 Table 3: Types of Economic Incentives and Beneficiaries

This table lists the additional benefits provided in the intensive treatment arm.

a household joined a SACCO, the SACCO could request funds from the program. The maximum loan available was ETB 3,500 over the life of the loan, and loans had to be paid back within 2 years. The maximum interest rate was 7.25%.

The revolving loan fund targeted female caregivers. If there was no female caregiver in a household to receive the loan, a male could receive the loan upon verification by the kebele administrator. In practice, typically less than 5% of participants were male.

The primary types of business activities targeted by the loan were petty trading and agriculture. Beneficiaries were not allowed to use the loan for any purpose other than the IGA that had been approved by the SACCO.

Not everyone in the kebeles could obtain the incentives. For the sake of cost-effectiveness, the program used community-based targeting. In particular, each kebele receiving the economic incentives was required to form a selection committee of seven members representing different stakeholders with the technical assistance of woreda-level program officers. This committee was supposed to follow a set of criteria in selecting beneficiaries: the girls must be aged 9-16; they must be unmarried; they had to have lived in the kebele for at least three months prior to selection; they had to be from poor households; their enrolment and attendance records had to be available; they had to be willing to participate in school clubs; they had to be willing to participate in financial literacy training; and, for out-of-school girls, they had to be willing to return to school. The kebele selection committees were allowed to set other criteria. After the first list of beneficiaries was determined, it also had to be made publicly available for four days to get feedback from the community. Once the girls were selected, their families were automatically eligible for the revolving loan fund, pending SACCO approval. They were also encouraged to participate in the community conversations.

Finally, SACCO officials and other personnel were trained to provide a course on entrepreneurship, financial management, IGAs and basic business skills, and this course was then delivered to caregivers participating in the economic incentives arm. Each course lasted for 3 days.

Notably, while many of the components included in both treatment arms benefited in-school or out-of-school girls willing and able to return to school, the "community conversations" component of the treatment arms had the theoretical potential to benefit even those girls who were not in school and unable to participate in either the school clubs or the economic incentives tied to school participation.

The economic incentives treatment arm could only be offered in areas that had a SACCO and a bank. Specifically, in order to be eligible for the economic incentives arm, a kebele had to be in a woreda with year-round road accessibility; have bank accessibility; have a SACCO; and have average poverty levels. It also had to have a cooperative administrator at the kebele level. Due to these criteria and funding constraints, sixteen kebeles in four woredas were chosen to receive the economic incentives treatment arm. Ten of these sixteen kebeles were selected by the research team after the baseline survey to be part of the follow-up survey. Naturally, the selection criteria for a kebele to receive the "intensive" treatment raises questions as to how comparable these areas are with the kebeles receiving the "expansion" treatment, an issue we will discuss in the next section.

# 4 Method

East and West Gojjam received the program and South Gondar did not; it was not possible to allocate the program on a more local level, such as by kebele, but South Gondar was chosen as the area from which control kebeles would be selected due to the geographical proximity and similarity in its demographics and cultural practices to East and West Gojjam, just across the Abay River. The follow-up survey targeted those kebeles identified as the closest match with baseline kebeles, as determined by the research team, independently from the government. To balance baseline covariates between the treatment and control group, we use inverse probability weighting and then leverage a difference-in-differences approach, clustering by kebele. In particular, the basic specification is of the form:

$$Y_{ikt} = \alpha + \beta_1 Post_t + \beta_2 T_k + \beta_3 Post_t \cdot T_k + \epsilon_{ikt}$$
(1)

where Y indicates the outcome, *i* indexes the individual, *k* indexes the kebele, *t* indexes the time period, *Post* is a dummy variable for the post-treatment period, *T* is a treatment indicator pooling intensive and expansion treatment arms, and  $\epsilon$  is error. We also present some regressions that interact the intensive arm separately to observe any additional change in response to the intensive treatment, i.e.:

$$Y_{ikt} = \alpha + \beta_1 Post_t + \beta_2 T_k + \beta_3 Post_t \cdot T_k + \beta_4 T_k^I + \beta_5 Post_t \cdot T_k^I + \epsilon_{ikt}$$
(2)

where  $T_k^I$  is a binary variable that takes the value one if the kebele is in the intensive treatment arm. Recalling that the intensive treatment arm consists of the expansion treatment plus extra incentives,  $\beta_3$  in this regression can be interpreted as capturing the effect of the expansion program and  $\beta_5$  any additional effect of the incentives.

There are some tradeoffs inherent to this approach. Abadie and Imbens (2008; 2011) showed that after weighting, standard errors should be adjusted to account for the fact that the weights were estimated. Yet, there is still no theory of how these estimates should be adjusted in the presence of clustering, and recent papers suggest it may be preferable to cluster (DuGoff, Schuler and Stuart, 2014). We believe that kebele-level variation could be important, especially as this is the level at which treatment was assigned. Children may also not have a school in their village and might share one within the kebele, and part of the intervention is school-based.

For these reasons, in the main regressions we employ a difference-in-differences approach with weighting and clustering at the kebele level. However, we also present a set of regressions using augmented inverse probability weights, which correct standard errors for the fact the weights were estimated but do not cluster. Augmented inverse probability weighting has the additional advantage that it is "doubly-robust" to misspecification (Glynn and Quinn, 2009).

As discussed, sixteen kebeles were selected for the intensive treatment (economic incentives and

information) while the rest in the treatment group were provided with the lower-cost expansion treatment arm (information only). While 52 woredas and 171 kebeles were part of the baseline survey, the follow-up only reached 36 kebeles; eighteen from the treatment group and eighteen from the matched control kebeles. Of these, ten were from the intensive treatment arm and eight from the expansion treatment arm. This substantial reduction in kebeles was due to the project having a limited amount of funding at the time of the follow-up survey. The 36 kebeles were selected by the research team as those which allowed the closest matches between treatment and control given baseline data; threeway matching (to compare the intensive treatment with the expansion treatment) was not considered, and subsequent revisions to the data lead us to re-weight in this paper for a better fit.

While we use two methods (clustered difference-in-differences regressions after weighting and unclustered augmented inverse probability weighting), we also select three sets of variables for weighting in two different ways.

First, we use a parsimonious set of variables we believe are likely to be correlated with marriage ("main weights"). In particular, we considered the age of the girls in each district, to guard against demographic differences; the percent under the age of 18 who were currently married or promised; the average number of girls in each household, which could be related to both the household size and preferences over the sex of children; the average total household consumption; and how positively or negatively respondents in that district say their communities view early marriage. In an alternative specification ("alternative weights"), we also include attendance.

Second, for robustness, instead of manually selecting which variables to use in the regression, we adopt the statistical learning technique of L1-regularization, or lasso regression, to select the variables ("lasso-selected weights"). We have many variables in the baseline survey that could help to predict treatment and are not missing data, and an automated procedure could help select an optimal set on which to focus. Appendix A provides more details on this approach. Apart from the automated procedure potentially finding better variables to use for weighting than we could by reflection, this approach has the advantage that it takes judgment out of our hands to a certain extent; while it does not bind our hands as a pre-analysis plan would, it can still serve to mitigate risk of subconscious bias.

Table 4 provides summary statistics for several key variables pre- and post-weighting using the

main weights. Appendix Tables 13 and 14 provide these statistics using the alternative weights and the lasso-selected weights, respectively. In most regressions, we will consider the two treatment arms together, so these tables show the balance of covariates after weighting treatment and control groups. We also conducted threeway weighting between the intensive treatment kebeles, the expansion kebeles, and the control kebeles, for the specifications that look for differences by treatment arm. The balance tables for these weights are in the Appendix (Tables 15-23). When weighting on relatively few variables, some differences in baseline covariates remain significant. We will primarily focus on comparisons of the treatment vs. the control arms to help mitigate this issue, as this results in plausibly better matches. Further, we will take care to present results using the various weighting schemes for robustness, so that even if one particular weighting scheme is not credible on its own, it is supported by alternative weights.

One area of potential weakness is that for both the main weights and the weights using lassoselected variables, school attendance and age at stopping schooling according to the household roster remains unbalanced (though the equivalent of the latter question on the girl's survey is not). The alternative weights explicitly weight on attendance and therefore somewhat mitigate this issue, but with those weights the highest grade completed significantly differs. We are trying to use a parsimonious set of matching variables to avoid weights relying too much on a few data points, however, this suggests caution in interpreting results. Results using all three weighting schemes will be presented, as well as results using the threeway weights where applicable.

In addition to using two methods and constructing the weights in three ways, we also separately consider two samples of households. Recall that all households at baseline and follow-up had to have at least one girl under 18 in them. This selection criteria applied to both treatment and control groups and may be expected to result in underestimates of child marriage since married girls would be more likely to have left the household. Unfortunately, we cannot identify those households that the enumerators skipped due to their not having a girl under the age of 18 in them, however, we can restrict attention to those households which had a young girl age 0-6 at baseline, as they would be very unlikely to have left the household by follow-up but they could have older sisters of marriageable age. In the follow-up, mothers were asked to report on all their children, regardless of whether they had left the household, and state their age and whether they were still living and, if so, whether they were living at home (and why they were not living at home if they were not). 100% of 8 year old children were reported to still be living at home at the follow-up in both treatment and control areas, so restricting attention to those with a girl age 0-6 at baseline (2-8 at follow-up) should mitigate the selection issue. We will consider this specification, while less well-powered, to be the preferred specification.

As described earlier, we have several data sources. Those that are the most directly relevant to evaluating the impact of the interventions on child marriage are the household surveys, which had a household roster that asked for all members of the household and their marital status; the mothers' survey, which asked mothers to provide a birth history of all their children; and the girls' survey, in which girls were asked their age and whether they had been married or promised, and if so when.

Each data source has its limitations. The household roster is the most complete and comparable across the baseline and follow-up, but it only focuses on those in the household. The mothers' survey adds to this because it tells us if a daughter has left the household for marriage and her age. The girls' survey is perhaps the most credible in the face of potential social desirability bias. We find the household roster's reports of child marriage are correlated with the mothers' survey at 0.80, while the mothers' and girls' responses are correlated at 0.95. The roster and mothers' birth history agree 95.6% of the time on the girls in the household's ages, with no obvious patterns to the discrepancies,<sup>8</sup> but 14.0% of the time the girls disagree with their roster-listed age, and 10.7% of the time saying they are 1 year younger than the roster claims.<sup>9</sup> The drawback of using the girls' survey data is that it could be selected (a parent or caregiver had to give consent for a child to participate) and girls were only asked whether they were ever married or promised, and if so their age at that time, not whether they were currently married or promised.

All results, unless indicated otherwise, are on the roster data supplemented by the mothers' birth history when a daughter is living outside the home. The daughters that are living outside the home but who are identified in the mothers' birth history records comprise 6.8% of this sample. However, we also present results using the girls' survey for robustness.

<sup>&</sup>lt;sup>8</sup>The mothers state a slightly older age 2.1% of the time and the rosters state a slightly older age 2.3% of the time.

 $<sup>^{9}2.0\%</sup>$  of the time they state they are more than 1 year younger than the roster claims.

Table 4:	Sample	Characteristics.	Pre- and	Post-Weighting.	Main	Weights

	Pre-Weigh	nting			Post-Weig	hting		
	Control	Treatment	Difference	p-value	Control	Treatment	Difference	p-value
Age married (F)	13.58	13.62	-0.04	0.93	13.76	13.75	0.02	0.97
Age married (M)	14.03	13.24	0.79	0.04	14.12	13.45	0.68	0.20
Age married (G)	12.95	11.66	1.28	0.06	13.07	11.74	1.33	0.02
Marriage below age 15 exists (F) $(2 = No, 1 = Yes)$	1.70	1.72	-0.02	0.58	1.72	1.72	0.00	1.00
Marriage below age 15 exists (M) $(2 = No, 1 = Yes)$	1.73	1.70	0.03	0.32	1.74	1.70	0.04	0.63
Marriage below age 15 common (F) (3 = Very common, 2 = common, 1 = rare)	1.26	1.32	-0.05	0.40	1.24	1.30	-0.07	0.47
Marriage below age 15 common (M) (3 = Very common, 2 = common, 1 = rare)	1.24	1.30	-0.06	0.32	1.23	1.26	-0.03	0.75
Marriage below age 18 exists (F) $(2 = No, 1 = Yes$	1.33	1.50	-0.17	0.00	1.36	1.50	-0.15	0.05
Marriage below age 18 exists (F) $(2 = No, 1 = Yes$	1.43	1.49	-0.06	0.06	1.45	1.50	-0.05	0.61
Marriage below age 18 common (F) (3 = Very common, 2 = common, 1 = rare)	1.42	1.35	0.07	0.18	1.40	1.33	0.07	0.48
Marriage below age 18 common (M) (3 = Very common, 2 = common, 1 = rare)	1.30	1.36	-0.06	0.23	1.30	1.35	-0.05	0.64
Age girls should marry (F)	17.75	17.98	-0.24	0.16	17.88	18.13	-0.25	0.45
Age girls should marry (M)	17.70	17.80	-0.10	0.56	17.80	17.98	-0.19	0.59
Age girls should marry (B)	17.92	18.14	-0.23	0.33	18.22	18.24	-0.02	0.97
Age girls should marry (G)	17.89	18.20	-0.30	0.01	17.99	18.27	-0.28	0.36
Age boys should marry (F)	21.14	20.36	0.78	0.00	21.19	20.39	0.80	0.04
Age boys should marry (M)	21.02	20.57	0.46	0.04	20.92	20.63	0.29	0.51
Age boys should marry (B)	20.61	20.15	0.45	0.16	20.90	20.37	0.53	0.47
Age boys should marry (G)	20.52	20.39	0.13	0.43	20.55	20.43	0.12	0.69
How is marriage below age 15 perceived (F) $(2 = Negatively, 1 = positively)$	1.88	1.90	-0.02	0.44	1.88	1.91	-0.03	0.52
How is marriage below age 15 perceived (M) $(2 = \text{Negatively}, 1 = \text{positively})$	1.87	1.85	0.02	0.42	1.87	1.87	0.00	1.00
How do religious leaders perceive it (F) $(2 = Do not support, 1 = support)$	1.94	1.89	0.05	0.02	1.93	1.91	0.02	0.61
How do religious leaders perceive it $(M)$ (2 = Do not support, 1 = support)	1.88	1.86	0.02	0.41	1.89	1.88	0.01	0.87
How do influential community members view early marriage? (F) $(3 = \text{Bad}, 2 = \text{normal}, 1 = \text{good})$	2.74	2.77	-0.03	0.46	2.73	2.81	-0.07	0.39
How do influential community members view early marriage? (M) $(3 = \text{Bad}, 2 = \text{normal}, 1 = \text{good})$	2.58	2.68	-0.11	0.02	2.58	2.71	-0.14	0.23
Attends school (G) $(2 = No, 1 = Yes)$	1.28	1.16	0.13	0.00	1.28	1.16	0.12	0.03
What is the highest grade completed? (H)	5.23	5.14	0.10	0.67	5.45	5.03	0.42	0.29
At what age did [Name] discontinue schooling? (H)	14.58	15.90	-1.32	0.00	14.70	15.85	-1.15	0.03
How old were you when you stopped schooling? (G)	12.32	12.91	-0.59	0.11	12.39	12.99	-0.60	0.17
Share of time spent on work (H)	0.43	0.38	0.05	0.00	0.41	0.39	0.02	0.56
Share of time spent on school (H)	0.34	0.40	-0.05	0.00	0.36	0.40	-0.03	0.43
Share of time spent on leisure (H)	0.23	0.22	0.00	0.73	0.23	0.22	0.01	0.55
Was there a bride price for the girl? (F) $(2 = No, 1 = Yes)$	1.47	1.33	0.14	0.01	1.48	1.35	0.13	0.28
Was there a bride price for the girl? (M) $(2 = No, 1 = Yes)$	1.47	1.37	0.10	0.04	1.50	1.37	0.13	0.27
Was there a bride price for the girl? (G) $(2 = No, 1 = Yes)$	1.40	1.54	-0.14	0.06	1.40	1.55	-0.15	0.28
Total consumption (H)	24835.23	31852.31	-7017.08	0.05	26555.11	29226.05	-2670.94	0.59
TV ownership (H)	0.05	0.04	0.02	0.20	0.06	0.04	0.02	0.52
Decision-making index (F)	0.82	0.70	0.12	0.00	0.83	0.72	0.12	0.05
Decision-making index (M)	0.19	0.24	-0.05	0.30	0.18	0.25	-0.07	0.40
Sex coercion index (F)	0.86	0.81	0.06	0.00	0.86	0.81	0.05	0.28
Sex coercion index (M)	0.62	0.63	-0.01	0.60	0.58	0.64	-0.06	0.30
Violence index (M)	0.43	0.47	-0.04	0.07	0.40	0.47	-0.06	0.29
Voice index (M)	1.37	1.60	-0.23	0.00	1.40	1.60	-0.20	0.03
Have you heard of the new criminal code (F) $(2 = No, 1 = Yes)$	1.68	1.70	-0.01	0.71	1.65	1.73	-0.08	0.41
Age law states for girls to marry (F)	17.73	17.98	-0.25	0.34	17.67	18.16	-0.48	0.22

\*(F) indicates a response from the father's survey; (M) a response from the mother's survey; (G) a response from the girl's survey; (B) a response from the boy's survey; (H) a response from the household survey. "Treatment" pools the intensive and expansion treatment arms. Total consumption is obtained from summing all food and non-food consumption. For the father's decision-making index, the father was asked whether he or his wife had more say in making several kinds of decisions (large household purchases; mall household purchases; deciding when to visit family, friends, or relatives; deciding what to do with the money she earns; deciding to marry off the daughter; deciding to marry the son); the index is the share of the time the father answered that his wife had more say than he did. For the mother's decision-making index, the mother was asked whether she had more say in making several kinds of decisions (children's decision-making index, the mother sus asked whether she had more say in making several kinds of decisions (children's decision-making index, the mother was asked whether she had more say in making several kinds of decisions (children's decision-making index, the mother was asked whether she had more say in making several kinds of decisions (children's education; children's marriage plans; use of family planning methods; deciding when to visit family, friends, or relatives; deciding on the household budget; lending or borrowing; consulting with someone (doctor, nurse, traditional healer, etc.) if a child is sick; paying for medicine or treatment for a sick child); the index is the share of the time the mother answered that she had more say than her husband did. For the sex coercion index, both the father and the mother were (separately) asked whether, if a woman refused sex with her husband, he had the right to: get angry and warn her; refuse to give her money or other means of financial support; use force and have sex with her even if she doesn't want to have it; go and have sex with another wom

# 5 Results

#### 5.1 Early Marriage

Both treatment arms appear to reduce child marriage by around 4-7 percentage points depending on the specification. The intensive treatment arm appears to reduce the likelihood by a little more than the expansion arm, but this difference is insignificant.

Figure 4 provides some first graphical evidence in the form of a hazard plot for being unmarried at baseline and follow-up for girls under 18. At follow-up, a clear difference is seen between treatment and control. The Appendix contains additional figures (Figures 7-9) supplying the results using the alternative weights and the weights using lasso-selected variables, and with further disaggregation in the treatment.

Table 5 reports results from regressions on whether a girl was ever married, for those aged between 8-17. Columns 1 and 3 pool the two treatment arms, while in columns 2 and 4 the coefficient on the interaction between the intensive treatment and the follow-up survey estimates the additional effect of being in the intensive arm. The coefficient on the interaction of the intensive treatment arm with the post-treatment dummy is negative and would imply that the intensive arm reduced child marriage by 2-3 percentage points more than the expansion treatment, however, this difference is not significant.

The second two columns of Table 5 focus on those households with young girls in them. As these households would have been selected to be sampled regardless as to whether older girls in the household married and left the household, these regressions constitute our preferred specification. Results are slightly less well-powered, but still suggest a reduction of roughly the same magnitude as the other results.

Appendix tables provide a variety of robustness checks. Appendix Tables 24-25 report similar results using the alternative hand-selected and lasso-selected weights. Appendix Table 26 provides corresponding results for the outcome variable of being currently married or promised. Results here are a bit weaker for both treatments. This might be due to divorce or separation being quite common in the sample, with 32% of girls in the baseline household roster who had ever been married reporting divorce or separation, and 39% reporting divorce or separation at follow-up. Given the high rate of divorce, having ever been married may be a more informative measure.



Figure 4: Hazard Plots for Being Unmarried at Baseline and Follow-Up, Main Weights

The figure on the left shows the hazard plot at baseline; the figure on the right, at follow-up. "Treatment" pools the intensive and expansion treatment arms.

Appendix Table 27 shows results for the full sample as well as for households with young girls using augmented inverse probability weighting, which is doubly-robust to misspecification. Further robustness checks are provided in Appendix Table 28, which presents results focusing on the girls' survey, and Appendix Table 29, which reports results restricting attention to the set of households surveyed at both baseline and follow-up. The results for reducing early marriage are overall quite robust to these different specifications.

Differences between the intensive and expansion treatment arms remain insignificant in these tables. We do not want to lean too heavily on these differences being insignificant, given that the tests are not well-powered. However, we will later see null effects on education outcomes, providing further suggestive evidence that the main mechanism through which the treatment worked was not the economic incentives. Nonetheless, it is theoretically possible for the economic incentives (that were conditioned on girls going to school and staying unmarried) to affect marriage without affecting education. This could be the case, for example, if they were not pivotal to education decisions.

#### 5.2 Attitudes Towards Intra-Household Decision-Making

Fathers and mothers were separately asked a series of questions about attitudes regarding who should make certain household decisions. While the program did not target these outcomes, it

	All Hou	iseholds	House with You	holds ing Girls
	(1)	(2)	(3)	(4)
	Ever married	Ever married	Ever married	Ever married
Follow-Up	0.015	0.015	0.028	0.023
	(0.02)	(0.01)	(0.03)	(0.04)
Treatment	0.014	0.002	-0.008	-0.020
	(0.03)	(0.03)	(0.03)	(0.04)
Treatment *	-0.054***	-0.040**	-0.068*	-0.039
Follow-Up	(0.02)	(0.02)	(0.04)	(0.04)
Age	$0.019^{***}$	$0.018^{***}$	$0.016^{***}$	$0.017^{***}$
	(0.00)	(0.00)	(0.00)	(0.00)
Intensive Treatment		0.031		0.019
		(0.03)		(0.04)
Intensive Treatment $*$		-0.019		-0.033
Follow-Up		(0.02)		(0.02)
Constant	$-0.172^{***}$	-0.166***	-0.130***	-0.135**
	(0.04)	(0.04)	(0.05)	(0.05)
Control Mean	0.078	0.071	0.087	0.087
Observations	4254	4254	1586	1586
$R^2$	0.04	0.04	0.04	0.05

Table 5: Regressions of Treatment on Marriage Outcomes, Main Weights

This table shows the outcome of regressions of the treatment on whether girls were ever married, on the full sample as well as on the sample of households with young girls at baseline. The main weights are used, and standard errors are clustered by kebele. "Treatment" pools the intensive and expansion treatment arms. These results use the household roster data supplemented by the mothers' survey for girls who have left the household. is possible that it had spillover effects on these outcomes through empowering women. Table 6 presents results from ordered logistic regressions regarding who should make particular decisions, with "1" indicating that husbands should make that decision, "2" indicating the decision should be a joint one, and "3" indicating that the wives should make that decision. Marginal effects are presented.

Some effects are visible for mothers. In the sample of all households, mothers report significantly increased decision-making power over their children's marriages, the household budget, and in lending and borrowing decisions. These results are if anything greater in terms of their point estimates but less significant when restricted to the smaller sample of households with young girls. Fathers, in contrast, do not appear to have changed their beliefs much. Appendix Tables 30-31 show some weakly significant results for fathers using alternative and lasso-selected weights, but these results are not robust. It should be noted that we may not expect attitudes to shift uniformly across the different domains. Preferences could change for some domains more than others, and it is also possible that to obtain more decision-making power in one domain parents might cede decision-making power in another. Overall, there appears to have been some spillover effects on mothers' attitudes, but we do not observe robust changes for fathers from these questions.

Do the changes in mothers' attitudes also translate to changes in earnings? Mothers do not appear more likely to earn their own money but they do report having more say in deciding how to spend the money they have earned, with less being decided by the husband or through joint decisions (Table 7). However, these results are not significant on the smaller group of households with young girls. Results are largely comparable using alternative weights (Tables 32-33 in the Appendix).

			All Households		Households with Young Girls		
Orrestien	Treatment	Odds	Confidence		Odds	Confidence	
Question	Status	Ratio	Interval	p-value	Ratio	Interval	p-value
Fathers' survey							
Large HH	Control	1.18	0.44 - 3.15		1.61	0.45 - 5.72	
purchases	Treatment	1.41	0.64 - 3.12		1.41	0.63 - 3.13	
Small HH	Control	0.37	0.14 - 0.93		0.34	0.13 - 0.87	
purchases	Treatment	0.55	0.28 - 1.06		0.48	0.22 - 1.02	
When to visit	Control	0.66	0.20 - 2.10		1.73	0.32 - 9.20	
family/friends	Treatment	1.10	0.39 - 3.12		0.61	0.13 - 2.82	
Use of wife's	Control	0.28	0.15 - 0.55		0.31	0.16 - 0.59	
earnings	Treatment	0.44	0.27 - 0.72		0.36	0.17 - 0.77	
Daughter's	Control	0.45	0.12 - 1.71		1.13	0.17 - 7.42	
marriage	Treatment	1.14	0.36 - 3.59		0.55	0.08 - 3.73	
Son's	Control	0.45	0.13 - 1.60		0.93	0.15 - 5.80	
marriage	Treatment	1.22	0.41 - 3.67		0.77	0.11 - 5.16	
Mothers' survey							
Children's	Control	1.64	1.29 - 2.08		2.86	1.41 - 5.81	
education	Treatment	2.01	1.31 - 3.10		2.60	1.45 - 4.67	
Children's	Control	1.50	1.21 - 1.86	(0.028)	2.20	1.17 - 4.13	
marriage	Treatment	2.72	1.68 - 4.42		3.45	1.92 - 6.19	
Use of family	Control	1.32	1.03 - 1.68		1.65	0.81 - 3.39	
planning	Treatment	1.69	1.14 - 2.51		1.84	1.18 - 2.89	
When to visit	Control	1.39	1.12 - 1.72		1.95	0.99 - 3.82	
family/friends	Treatment	1.85	1.27 - 2.71		2.20	1.33 - 3.63	
HH budget	Control	1.35	1.13 - 1.62	(0.000)	1.80	1.08 - 3.01	(0.015)
	Treatment	4.00	2.62 - 6.11		4.94	2.79 - 8.72	
Lending/	Control	1.39	1.08 - 1.81	(0.002)	1.99	0.98 - 4.02	(0.059)
borrowing	Treatment	3.51	2.12 - 5.80		5.14	2.58 - 10.24	

Table 6: Marginal Effects for Ordered Logit Using Main Weights: Who Do You Think Should Have a Greater Say in Each of the Following Decisions? (1 = Husband, 2 = Both Jointly, 3 = Wife)

This table presents the average marginal effects of moving from the pre-treatment (baseline) to post-treatment (follow-up) period, for the treatment and control group, pooling the intensive and expansion treatment arms. Odds ratios and 95% confidence intervals are provided. The final column indicates the significance of any differences between the treatment and control group between baseline and follow-up (i.e. the p-value on the interaction between treatment and follow-up, if significant).

			All Households			Households with Young Girls		
	Treatment	Odds	Confidence		Odds	Confidence		
Question	Status	Ratio	Interval	p-value	Ratio	Interval	p-value	
Earns money	Control	3.21	1.54 - 6.68		3.59	1.65 - 7.80		
	Treatment	2.48	1.16 - 5.33		2.79	0.88 - 8.85		
Wife decides	Control	0.94	0.39 - 2.23		0.64	0.21 - 1.96		
how money is spent	Treatment	6.29	1.85 - 21.45	(0.015)	2.78	0.28 - 27.86		
Wife and husband jointly	Control	1.33	0.51 - 3.44		1.73	0.54 - 5.57		
decide how money is spent	Treatment	0.12	0.03 - 0.52	(0.009)	0.21	0.01 - 3.16		

Table 7: Marginal Effects for Mothers' Survey: Logistic Regressions on Earning and Spending Using Main Weights

This table presents the average marginal effects of moving from the pre-treatment (baseline) to post-treatment (follow-up) period, for the treatment and control group, pooling the intensive and expansion treatment arms. Odds ratios and 95% confidence intervals are provided. The final column indicates the significance of any differences between the treatment and control group between baseline and follow-up (i.e. the p-value on the interaction between treatment and follow-up, if significant).

## 5.3 Attitudes to Sex and Violence

Results relating to sex and violence against women are more concerning. First, fathers and mothers were asked a set of attitudinal questions relating to sex. In particular, they were separately asked whether, if a woman refuses to have sex with her husband when he wants to, he has the right to get angry and reprimand her; refuse to give her money or other financial support; use force to have sex; or have sex with another woman. Results are provided in Table 8. In the full sample, both fathers and mothers in the treatment group appear to be sometimes more permissive towards husbands at follow-up, a trend which continues in the sample of households with young girls. Appendix Tables 34-35 provide results under the different weighting schemes, which are similar. Results for men are slightly stronger than results for women.

Mothers were also asked about whether husbands were ever justified in using violence against their wives. There is likewise some suggestion of a backlash effect here (Appendix Table 36). However, the treatment group often reported significantly different attitudes at baseline, so caution must be taken in interpreting these results. Results using the alternative weighting schemes are reported in Appendix Tables 37-38 and are largely consistent.

### 5.4 Education

Despite the promising results on early marriage, there were no robust changes in education (Table 9 and Appendix Tables 39-40), and the only significant results in fact showed a *decrease* in school enrollment. Caution must be taken in evaluating these results, as the weighting schemes did not fully close the gap between treatment and control groups at baseline for school enrollment. The results for the highest grade completed were not significantly different at baseline and are null.

While we do not want to lean too hard on these results, they do suggest a difference between this study and earlier studies that considered child marriage in the context of interventions that encouraged girls to stay in school. In our case, the intervention does not appear to increase school participation, despite the incentives provided to girls enrolled in school, so the mechanism through which early marriage decreases appears different.

		All Households			Housel	nolds with You	ung Girls
	Treatment	Odds	Confidence		Odds	Confidence	
Question	Status	Ratio	Interval	p-value	Ratio	Interval	p-value
Fathers' survey							
Get angry and	Control	1.65	0.62 - 4.38	(0.054)	1.46	0.45 - 4.70	(0.079)
reprimand her	Treatment	0.53	0.29 - 0.98		0.42	0.20 - 0.90	
Refuse to give	Control	2.29	0.77 - 6.81	(0.033)	2.50	0.48 - 12.85	
her money	Treatment	0.56	0.29 - 1.10		0.62	0.27 - 1.40	
Use force	Control	1.07	0.39 - 2.92		1.17	0.31 - 4.45	
to have sex	Treatment	0.62	0.39 - 0.98		0.77	0.40 - 1.46	
Have sex with	Control	2.85	0.83 - 9.82	(0.008)	3.40	0.85 - 13.54	(0.016)
another woman	Treatment	0.41	0.21 - 0.78		0.46	0.20 - 1.05	
Mothers' survey							
Get angry and	Control	2.01	1.11 - 3.63		2.36	1.15 - 4.84	
reprimand her	Treatment	1.09	0.67 - 1.78		1.53	1.00 - 2.35	
Refuse to give	Control	2.85	1.34 - 6.06	(0.004)	2.81	1.20 - 6.62	(0.017)
her money	Treatment	0.74	0.47 - 1.18		0.73	0.37 - 1.44	
Use force	Control	2.17	1.16 - 4.05		1.71	0.83 - 3.53	
to have sex	Treatment	1.53	0.86 - 2.74		1.94	1.07 - 3.51	
Have sex with	Control	3.19	1.46 - 6.96	(0.031)	3.11	1.37 - 7.05	(0.002)
another woman	Treatment	1.10	0.63 - 1.93		0.60	0.34 - 1.07	

Table 8: Marginal Effects for Logit Using Main Weights: Do You Think That if a Woman Refuses to Have Sex with Her Husband When He Wants Her to, He Has the Right to...? (0 = Yes, 1 = No)

This table presents the average marginal effects of moving from the pre-treatment (baseline) to post-treatment (follow-up) period, for the treatment and control group, pooling the intensive and expansion treatment arms. Odds ratios and 95% confidence intervals are provided. The final column indicates the significance of any differences between the treatment and control group between baseline and follow-up (i.e. the p-value on the interaction between treatment and follow-up, if significant).

		All	Households		Households with Young Girls			
	(1) School enrollment	(2) School enrollment	(3) Highest grade completed	(4) Highest grade completed	(5) School enrollment	(6) School enrollment	(7) Highest grade completed	(8) Highest grade completed
Follow-Up	0.169***	0.174***	1.277***	1.151***	0.153***	0.149***	1.385***	1.312***
	(0.04)	(0.04)	(0.27)	(0.24)	(0.05)	(0.04)	(0.31)	(0.28)
Treatment	$0.128^{**}$	$0.111^{*}$	-0.187	-0.214	$0.152^{**}$	$0.155^{**}$	0.212	0.254
	(0.06)	(0.06)	(0.32)	(0.49)	(0.07)	(0.06)	(0.36)	(0.49)
Treatment *	-0.070	-0.057	-0.098	0.164	-0.057	-0.094*	-0.397	-0.317
Follow-Up	(0.05)	(0.05)	(0.31)	(0.35)	(0.05)	(0.05)	(0.38)	(0.51)
Age	-0.035***	-0.034***	$0.600^{***}$	$0.604^{***}$	-0.026***	-0.025***	$0.629^{***}$	$0.623^{***}$
	(0.00)	(0.00)	(0.04)	(0.04)	(0.01)	(0.01)	(0.04)	(0.04)
Intensive Treatment		0.024		-0.166		-0.015		-0.164
		(0.05)		(0.46)		(0.04)		(0.49)
Intensive Treatment $*$		-0.051		-0.194		0.031		-0.041
Follow-Up		(0.04)		(0.28)		(0.04)		(0.46)
Constant	$1.182^{***}$	$1.179^{***}$	-4.509***	-4.369***	$1.063^{***}$	$1.068^{***}$	$-5.051^{***}$	-4.846***
	(0.05)	(0.06)	(0.49)	(0.50)	(0.08)	(0.07)	(0.62)	(0.58)
Control Mean	0.78	0.80	3.68	3.67	0.72	0.74	3.12	3.28
Observations	2810	2810	2641	2641	904	904	852	852
$R^2$	0.09	0.09	0.37	0.37	0.09	0.08	0.41	0.40

Table 9: Regression of Treatment on Education Outcomes Using Weighting, Main Weights, Girls' Survey

This table shows the outcome of regressions of the treatment on whether girls were enrolled in school and their highest grade completed. The main weights are used, and standard errors are clustered by kebele. "Treatment" pools the intensive and expansion treatment arms.

## 5.5 Stated Norms

Mothers and fathers were also asked to report on how marriage below the age of 15 was perceived in their community and whether their religion supported it. The interventions appeared to potentially reduce the percent of people who stated their religion supported early marriage; this result is only significant when using the full sample (Table 10). However, they curiously may have had a reinforcing effect on how such a marriage was perceived in the community. The coefficients are fairly large and indicate that early marriage is more positively perceived by the community. Results using the alternative and lasso-selected weights are provided in Table 41-42 in the Appendix and are similar.

These results warrant further explanation. Table 11 suggests that rather than flatly reducing the support for child marriage across the board, the intervention may have led to polarization of beliefs about child marriage, increasing the share of respondents supporting or opposing it while reducing the number who felt neutral towards it. Those who report at follow-up that perceptions of early marriage have stayed roughly the same since five years ago is significantly different at the 0.001 level between the treatment and control groups across all households, though it should be noted that very few respondents gave this answer and we cannot calculate this statistic for the households with young girls since there zero parents in the treatment group reported that perceptions stayed the same. Further, more religious leaders appear to have spoken out against child marriage in the treatment groups. These results could perhaps be explained by the literature on confirmation bias (*e.g.* Rabin and Schrag, 1999), in which any new information can magnify existing biases.

		All Households			Households with Young Girls		
	Treatment	Odds	Confidence		Odds	Confidence	
Question	Status	Ratio	Interval	p-value	Ratio	Interval	p-value
Positively perceived	Control	0.43	0.20 - 0.91		0.38	0.14 - 1.02	
by community	Treatment	2.28	1.18 - 4.41	(0.002)	2.42	0.95 - 6.18	(0.009)
Positively perceived	Control	1.87	0.80 - 4.39		1.34	0.48 - 3.79	
by religion	Treatment	0.43	0.18 - 1.03	(0.019)	0.60	0.23 - 1.56	

Table 10: Marginal Effects for Logit of Treatment on Perceptions of Early Marriage, Main Weights

This table presents the average marginal effects of moving from the pre-treatment (baseline) to post-treatment (follow-up) period, for the treatment and control group. "Treatment" pools the intensive and expansion treatment arms. Odds ratios and 95% confidence intervals are provided. The final column indicates the significance of any differences between the treatment and control group between baseline and follow-up (i.e. the p-value on the interaction between treatment and follow-up, if significant).

	All Households Households with Youn					ng Girls
	Control	Treatment	Total	Control	Treatment	Total
How does this [perceptions of	of marriage	e below 15] c	ompare	with 5 yea	rs ago?	
It is seen more positively	247	267	514	115	119	234
It is seen more negatively	343	372	715	156	163	319
Same as 5 years ago	38	4	42	13	0	13
Total	628	643	1271	284	282	566
From what you know, how o	loes your r	eligion view	early m	arriage?		
It is against early marriage	523	595	1118	243	263	506
It supports early marriage	9	17	26	4	4	8
Does not address it	98	29	127	38	14	52
Total	630	641	1271	285	281	566

Table 11: Polarization in Norms at Follow-Up

This table includes responses from both mothers and fathers, however, many did not answer either question. "Treatment" pools the intensive and expansion treatment arms. The treatment and control groups have significantly different responses to each question, for each sample, at p < 0.01 or lower, in a  $\chi^2$  test, with the exception that we cannot calculate this statistic for the first question for the sample of households with young girls given the zero-valued cell.

#### 5.6 Limitations

It is important to consider whether the sample was selected in any way that could yield misleading results. Households were only surveyed if they had a girl under the age of 18 living at home; otherwise, enumerators proceeded to the next household on the list, continuing until they reached the target number of households in that enumeration area. Usually, married girls would go live with their husbands, so we may be concerned we are selecting households in a way that misses the bulk of child marriage. Both the baseline and follow-up survey restricted the sample in this way across both the treatment and control groups.

We might think that if enumerators had to try more households in the control group before finding ones with girls still living at home, the households most against early marriage might be more selected in this group. In this case, our results might be biased downwards, as we would be comparing the outcomes of those who *ceteris paribus* would be more opposed to child marriage (control) with the outcomes of those who without the intervention might be less opposed to child marriage (treatment); in other words, we might be missing more marriages in the control group. In this case, our estimates would represent a lower bound.

To mitigate this issue, we follow a two-pronged approach. First, our main results restrict attention to the set of households who have a girl age 0-6 at baseline (2-8 at follow-up). These households would always be eligible to take the follow-up survey, regardless of whether or not the older siblings in the household married and left the household. Second, we supplement the household roster data with data from the mothers' survey, as the mothers' survey includes information on children who left the household.

It remains possible that households with young girls in them are different from other households in a way that affects the external validity of the estimates. However, this approach does not seem to result in very different estimates than the regressions using the full sample, which can help to give us confidence in the other results. The significance of these results is a bit reduced, but the sample size is also much smaller, and the magnitudes of the estimates are comparable.

We also saw that even after weighting, statistically significant differences were occasionally reported between the treatment and control group at baseline. With data on many variables having been collected, some differences are likely to be significant by chance; we focused on attaining balance for those variables we believe have the strongest potential to affect results. The issue of comparability of treatment and control areas is particularly important given the different geographic zones of these groups. We tried to address this issue by using multiple methods (clustered weighted difference-in-differences and augmented inverse probability weighting) and multiple weights (based on two sets of hand-selected variables and one set of lasso-selected variables). With the consistency of our main results on child marriage across many specifications, it is difficult to think that the reductions we observe could be entirely due to baseline differences. Still, the non-experimental nature of the data will always remain a limitation.

One may also be concerned about social desirability bias. Based on comparisons across surveys, we think the most conservative approach would be to use the girls' survey responses. For the main outcomes, we present results based on the girls' responses as an additional robustness check.

The validity of the difference-in-differences approach relies on there being no secular changes in the areas across time periods such as shocks affecting marriage or alternative programs. This is not strictly testable. However, we did see that there were no significantly different pre-trends in the age at first marriage for mothers (Figure 3). We also present results using a simple difference between treatment and control as an additional robustness check. These results are presented in Appendix Table 43. These "raw", unweighted results show that at follow-up, the treatment group reported less child marriage. This is particularly striking given that at baseline the treatment group had much higher rates of child marriage than the control group before weighting.

Spillovers between sites are also worth considering. As the main treatment is an information treatment, information could travel across kebeles and tend to bias results towards zero. We do not have data on magnitudes, but the information treatment is not likely to cause households to move, and the economic incentives, while more valuable, are given to the female head of the household and only after an application process, potentially diminishing the likelihood a household would move to be eligible. We do not anticipate much secular migration in these very rural areas over the two years of the study, but it remains possible that our estimates are biased downwards as a result of migration.

Finally, while the marriage market has both a supply and demand side, this paper has focused primarily on the supply of brides. The interventions targeted the supply side (though they could have affected awareness in grooms' families as well), so this is a natural focus. Still, it is also important to know whether the treatment and control areas were comparable at baseline with respect to factors that might influence demand. The most directly relevant variables with which we can investigate this issue are whether a bride price was paid and whether the husbands were of a similar "quality" in the treatment and control areas. Given a comparable "supply" of brides at baseline, the demand should also be comparable if the payment of bride prices and if husband quality are similar. In the data, we have a binary indicator of whether a bride price was paid, which exhibited a large degree of variation. For husband "quality", we have two variables: whether the husband's family had more land, less land, or the same amount of land as the wife's family, and whether the husband was more educated, less educated, or equally educated as the wife. We focus attention on the husbands of girls under 18 at baseline, and since this is a relatively small group, we combine the two quality measures into an index, taking the mean; in an alternative specification, we construct an indicator equal to 1 if husbands have either more land or more education. None of these baseline measures is significantly different between the treatment and control group, pre- or post-weighting.

Of note, this was a large-scale government-implemented program. Government-implemented programs often have smaller effects than programs implemented by NGOs or researchers (Vivalt 2020), but nonetheless we still find promising effects. To the extent that there may be continued interest in girls' clubs after they are first set up and views, once changed, could persist, this could be a cost-effective way of changing social norms and improving girls' lives.

# 6 Conclusions

Early marriage is a significant and under-appreciated problem affecting the lives of millions of women in developing countries. Since marriage involves a matching problem, the best age for an individual to get married depends on the age others get married. Child marriage thus might appear to be a problem that is particularly resistant to change through mechanisms that only affect a small share of the population. Instead, the larger the share of girls who may be affected by the program, the potentially larger the effects. This paper provides some interesting insights on the effects of a large-scale government program that directly seeks to change social norms by facilitating community conversations about child marriage in a way that has the potential to affect both inschool and out-of-school girls. More traditional economic incentives were also provided in another treatment arm. Ultimately, both treatment arms appeared to help reduce child marriage, by 4 to 7 percentage points. The intensive treatment arm seemed to have larger effects, but insignificantly so.

We also observed spillover effects to measures relating to women's empowerment. Girls' mothers were more likely to report that they should contribute to intra-household decisions at follow-up in the treatment group, and they also reported more control over their earnings. Educational outcomes were not affected by the program, consistent with the story that financial incentives for girls who stayed in school and remained unmarried were not driving our results. Perhaps most interestingly, the changes precipitated by the intervention were accompanied by seeming increased factionalism in how respondents viewed child marriage. While these results remain tentative, future studies should carefully consider how to convey messages intended to shift social norms in a way that avoids incurring a potential backlash effect.
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## Appendix A: LASSO Estimator for Variable Selection

The LASSO estimator minimizes the following cost function:

$$\min_{\alpha,\beta} \left\{ \|\beta\|_1 + C \sum_{i=1}^n \log(\exp(y_i - (\alpha + X_i^T \beta)) + 1) \right\}$$
(3)

where C is the inverse strength of regularization,  $y_i$  is the treatment assignment, and  $X_i^T$  are the potential covariates. One can interpret the lasso as minimizing the logistic regression's error function within the boundaries of the constraint  $\|\beta\|_1 \leq h(C)$ , where h is a strictly-increasing function of C. This constraint forces the estimator to set some coefficients to zero. As the strength of regularization increases (smaller C), the constraint becomes more binding, resulting in fewer variables being selected on average.

The actual weights are then calculated from the fitted probability of group assignment, normalized within each group. If g represents the group assignment of region i,  $\hat{p}_{i,g}$  the fitted probability of i being assigned to g and  $J_g$  the set of all regions assigned to group g, region i's weight  $w_i$  is:

$$w_i = \frac{\hat{p}_{i,g}}{\sum_{j \in J_q} \hat{p}_{j,g}} \tag{4}$$

Lasso-estimated coefficients are biased, however, an unbiased estimate can be obtained through first running a regularized regression to select variables, followed by running an unregularized regression with the variables selected. This is the approach we use in this paper, although we observe that the single-stage process gives essentially identical results.<sup>10</sup>

We still need a way to pick C. Several approaches have been proposed in the literature (Kirkland, Kanfer and Millard, 2015). We estimate the model for a wide range of C,<sup>11</sup> restricting attention to those values that minimize the number of variables that have statistically significant differences between the treatment and control group after weighting, while at the same time avoiding models in which so many variables are included that we are able to perfectly predict treatment assignment. If this yields multiple values of C with the same in-sample performance, we choose the value that has the best out-of-sample performance to calculate the weights for subsequent analysis. Specifically,

<sup>&</sup>lt;sup>10</sup>Results available upon request.

<sup>&</sup>lt;sup>11</sup>Specifically, we try: 0.015, 0.016, 0.017, 0.018, 0.02, 0.05, 0.075, 0.1, 1, 10, 100, 1000.

we separate our data into two parts: a *training set* with 80 percent of the villages from each kebele, randomly sampled, and a *test set* with the remaining 20 percent. The estimation of the model is conducted with the training set at the kebele level and validated with the test set. Figure 5 shows the model's performance over different choices of C, with the data plotted on a logarithmic scale. Our optimal choice of C is 0.1. The six variables selected by this approach all seem relevant: whether there is a father in the household; how long it takes to get to school; how many students there are in a girl's class; what their main information source is; during the last 12 months how much the household spent on schooling fees; and other expenses.

Figure 5: Calculation of Weights



Left: The number of variables with non-zero coefficients. Middle: The proportion of observations correctly labeled by the estimator as treatment or control. Right: The number of weighted variables that are significantly different between treatment and control.

When restricting the sample to the set of households that were selected for both the baseline and the smaller follow-up survey, we get similar results for C=0.1: five of the six variables selected in the unrestricted case are selected by this approach.<sup>12</sup> However, C=0.05 performs slightly better, selecting just three variables: the reported age at which boys should marry and, separately, at which girls should marry, and whether respondents know of any marriages below age 15 in their area. We use these variables for weighting when restricting attention to this set of households.

For the threeway weighting (to try to ensure balance between each of the two treatment arms and the control), the variables selected were: whether a bride price was paid, the reported age at

 $<sup>^{12}</sup>$ The one variable not selected is whether a bride price was paid for the girl.

which boys should marry and, separately, at which girls should marry, whether respondents know of any marriages below age 15 in their area and, separately, below age 18, whether respondents think influential community members perceive child marriage favourably, and how respondents think marriages below age 15 are perceived in their community, with C=0.17.

# Appendix B: Additional Tables and Figures





Responses are taken from the father's survey, the mother's survey, and the girl's survey, respectively, and are conditional on a child being married. Only girls under 18 were asked to answer this question, so their responses are censored.

Item	Max per Beneficiary	Frequency of Provision
Exercise Books	16	Once per semester
Pen	10	Once per semester
Pencil	4	Once per semester
Eraser	2	Once per semester
Ruler	2	Once per semester
School Bag	1	Once per year
Sanitary Towels	12	Once per semester
Soap	12	Once per semester
Pencil sharpener	2	Once per semester

Table 12: Schedule of Material Transfers to School Girls and Re-Enrolled Out-of-School Girls

	Pre-Weighting				Post-Weig			
	Control	Treatment	Difference	p-value	Control	Treatment	Difference	p-value
Age married (F)	13.58	13.62	-0.04	0.93	13.83	13.94	-0.12	0.81
Age married (M)	14.03	13.24	0.79	0.04	13.79	13.65	0.14	0.80
Age married (G)	12.95	11.66	1.28	0.06	13.03	11.74	1.29	0.03
Marriage below age 15 exists (F) $(2 = No, 1 = Yes)$	1.70	1.72	-0.02	0.58	1.73	1.71	0.03	0.72
Marriage below age 15 exists (M) $(2 = No, 1 = Yes)$	1.73	1.70	0.03	0.32	1.78	1.69	0.09	0.32
Marriage below age 15 common (F) (3 = Very common, 2 = common, 1 = rare)	1.26	1.32	-0.05	0.40	1.25	1.31	-0.06	0.50
Marriage below age 15 common (M) (3 = Very common, 2 = common, 1 = rare)	1.24	1.30	-0.06	0.32	1.27	1.25	0.02	0.82
Marriage below age 18 exists (F) $(2 = No, 1 = Yes$	1.33	1.50	-0.17	0.00	1.38	1.49	-0.11	0.18
Marriage below age 18 exists (F) $(2 = No, 1 = Yes$	1.43	1.49	-0.06	0.06	1.51	1.44	0.07	0.53
Marriage below age 18 common (F) (3 = Very common, 2 = common, 1 = rare)	1.42	1.35	0.07	0.18	1.46	1.33	0.12	0.25
Marriage below age 18 common (M) (3 = Very common, 2 = common, 1 = rare)	1.30	1.36	-0.06	0.23	1.34	1.39	-0.06	0.69
Age girls should marry (F)	17.75	17.98	-0.24	0.16	17.90	17.96	-0.06	0.85
Age girls should marry (M)	17.70	17.80	-0.10	0.56	17.82	17.81	0.01	0.98
Age girls should marry (B)	17.92	18.14	-0.23	0.33	18.04	18.31	-0.27	0.51
Age girls should marry (G)	17.89	18.20	-0.30	0.01	18.08	18.04	0.04	0.91
Age boys should marry (F)	21.14	20.36	0.78	0.00	21.17	20.39	0.78	0.10
Age boys should marry (M)	21.02	20.57	0.46	0.04	21.23	20.34	0.89	0.08
Age boys should marry (B)	20.61	20.15	0.45	0.16	20.66	20.66	0.00	1.00
Age boys should marry (G)	20.52	20.39	0.13	0.43	20.55	20.25	0.30	0.44
How is marriage below age 15 perceived (F) $(2 = Negatively, 1 = positively)$	1.88	1.90	-0.02	0.44	1.88	1.91	-0.03	0.45
How is marriage below age 15 perceived (M) $(2 = \text{Negatively}, 1 = \text{positively})$	1.87	1.85	0.02	0.42	1.87	1.86	0.00	0.98
How do religious leaders perceive it (F) $(2 = Do not support, 1 = support)$	1.94	1.89	0.05	0.02	1.93	1.91	0.02	0.62
How do religious leaders perceive it $(M)$ (2 = Do not support, 1 = support)	1.88	1.86	0.02	0.41	1.88	1.87	0.02	0.75
How do influential community members view early marriage? (F) $(3 = \text{Bad}, 2 = \text{normal}, 1 = \text{good})$	2.74	2.77	-0.03	0.46	2.74	2.79	-0.05	0.56
How do influential community members view early marriage? (M) $(3 = \text{Bad}, 2 = \text{normal}, 1 = \text{good})$	2.58	2.68	-0.11	0.02	2.55	2.69	-0.14	0.29
Attends school (G) $(2 = No, 1 = Yes)$	1.28	1.16	0.13	0.00	1.22	1.20	0.02	0.68
What is the highest grade completed? (H)	5.23	5.14	0.10	0.67	5.75	4.80	0.95	0.04
At what age did [Name] discontinue schooling? (H)	14.58	15.90	-1.32	0.00	14.84	15.66	-0.82	0.11
How old were you when you stopped schooling? (G)	12.32	12.91	-0.59	0.11	12.45	12.90	-0.45	0.35
Share of time spent on work (H)	0.43	0.38	0.05	0.00	0.39	0.40	-0.01	0.86
Share of time spent on school (H)	0.34	0.40	-0.05	0.00	0.38	0.37	0.02	0.74
Share of time spent on leisure (H)	0.23	0.22	0.00	0.73	0.22	0.23	-0.01	0.69
Was there a bride price for the girl? (F) $(2 = No, 1 = Yes)$	1.47	1.33	0.14	0.01	1.51	1.33	0.18	0.10
Was there a bride price for the girl? (M) $(2 = No, 1 = Yes)$	1.47	1.37	0.10	0.04	1.56	1.34	0.22	0.10
Was there a bride price for the girl? (G) $(2 = No, 1 = Yes)$	1.40	1.54	-0.14	0.06	1.48	1.49	-0.01	0.94
Total consumption (H)	24835.23	31852.31	-7017.08	0.05	26126.86	29868.74	-3741.88	0.45
TV ownership (H)	0.05	0.04	0.02	0.20	0.07	0.03	0.04	0.28
Decision-making index (F)	0.82	0.70	0.12	0.00	0.81	0.72	0.09	0.27
Decision-making index (M)	0.19	0.24	-0.05	0.30	0.15	0.25	-0.10	0.20
Sex coercion index (F)	0.86	0.81	0.06	0.00	0.84	0.82	0.02	0.65
Sex coercion index (M)	0.62	0.63	-0.01	0.60	0.57	0.64	-0.06	0.24
Violence index (M)	0.43	0.47	-0.04	0.07	0.41	0.46	-0.05	0.42
Voice index (M)	1.37	1.60	-0.23	0.00	1.38	1.58	-0.20	0.05
Have you heard of the new criminal code (F) $(2 = No, 1 = Yes)$	1.68	1.70	-0.01	0.71	1.62	1.73	-0.11	0.33
Age law states for girls to marry (F)	17.73	17.98	-0.25	0.34	17.65	17.97	-0.32	0.32

#### Table 13: Sample Characteristics, Pre- and Post-Weighting, Alternative Weights

Table 14:	Sample	Characteristics.	Pre- and	Post-W	eighting	Using	Variables	Selected b	v Lasso	Regression
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	Pre-Weigh	ting			Post-Weighting				
	Control	Treatment	Difference	p-value	Control	Treatment	Difference	p-value	
Age married (F)	13.58	13.62	-0.04	0.93	13.49	13.81	-0.32	0.53	
Age married (M)	14.03	13.24	0.79	0.04	13.93	13.49	0.44	0.43	
Age married (G)	12.95	11.66	1.28	0.06	13.44	11.45	1.99	0.00	
Marriage below age 15 exists (F) $(2 = No, 1 = Yes)$	1.70	1.72	-0.02	0.58	1.74	1.69	0.04	0.52	
Marriage below age 15 exists (M) $(2 = No, 1 = Yes)$	1.73	1.70	0.03	0.32	1.72	1.68	0.04	0.66	
Marriage below age 15 common (F) (3 = Very common, 2 = common, 1 = rare)	1.26	1.32	-0.05	0.40	1.24	1.41	-0.17	0.15	
Marriage below age 15 common (M) (3 = Very common, 2 = common, 1 = rare)	1.24	1.30	-0.06	0.32	1.25	1.31	-0.06	0.46	
Marriage below age 18 exists (F) $(2 = N_0, 1 = Y_{es})$	1.33	1.50	-0.17	0.00	1.31	1.44	-0.14	0.08	
Marriage below age 18 exists (F) $(2 = No, 1 = Yes$	1.43	1.49	-0.06	0.06	1.43	1.41	0.02	0.82	
Marriage below age 18 common (F) (3 = Very common, 2 = common, 1 = rare)	1.42	1.35	0.07	0.18	1.34	1.35	-0.01	0.91	
Marriage below age 18 common (M) (3 = Very common, 2 = common, 1 = rare)	1.30	1.36	-0.06	0.23	1.23	1.37	-0.14	0.15	
Age girls should marry (F)	17.75	17.98	-0.24	0.16	17.97	17.95	0.02	0.94	
Age girls should marry (M)	17.70	17.80	-0.10	0.56	17.50	17.82	-0.31	0.43	
Age girls should marry (B)	17.92	18.14	-0.23	0.33	17.97	18.15	-0.19	0.69	
Age girls should marry (G)	17.89	18.20	-0.30	0.01	17.85	18.04	-0.19	0.59	
Age boys should marry (F)	21.14	20.36	0.78	0.00	21.32	20.42	0.90	0.08	
Age boys should marry (M)	21.02	20.57	0.46	0.04	21.01	20.49	0.52	0.14	
Age boys should marry (B)	20.61	20.15	0.45	0.16	20.16	20.39	-0.22	0.81	
Age boys should marry (G)	20.52	20.39	0.13	0.43	20.35	20.29	0.06	0.85	
How is marriage below age 15 perceived (F) $(2 = Negatively, 1 = positively)$	1.88	1.90	-0.02	0.44	1.90	1.87	0.03	0.65	
How is marriage below age 15 perceived (M) $(2 = \text{Negatively}, 1 = \text{positively})$	1.87	1.85	0.02	0.42	1.81	1.85	-0.04	0.67	
How do religious leaders perceive it (F) $(2 = Do not support, 1 = support)$	1.94	1.89	0.05	0.02	1.95	1.87	0.09	0.17	
How do religious leaders perceive it $(M)$ (2 = Do not support, 1 = support)	1.88	1.86	0.02	0.41	1.92	1.83	0.09	0.25	
How do influential community members view early marriage? (F) $(3 = \text{Bad}, 2 = \text{normal}, 1 = \text{good})$	2.74	2.77	-0.03	0.46	2.77	2.73	0.04	0.75	
How do influential community members view early marriage? (M) $(3 = \text{Bad}, 2 = \text{normal}, 1 = \text{good})$	2.58	2.68	-0.11	0.02	2.57	2.70	-0.13	0.23	
Attends school (G) $(2 = No, 1 = Yes)$	1.28	1.16	0.13	0.00	1.33	1.18	0.14	0.07	
What is the highest grade completed? (H)	5.23	5.14	0.10	0.67	5.20	4.97	0.24	0.66	
At what age did [Name] discontinue schooling? (H)	14.58	15.90	-1.32	0.00	14.22	15.55	-1.33	0.06	
How old were you when you stopped schooling? (G)	12.32	12.91	-0.59	0.11	12.33	12.92	-0.59	0.24	
Share of time spent on work (H)	0.43	0.38	0.05	0.00	0.43	0.38	0.05	0.29	
Share of time spent on school (H)	0.34	0.40	-0.05	0.00	0.35	0.39	-0.04	0.44	
Share of time spent on leisure (H)	0.23	0.22	0.00	0.73	0.22	0.24	-0.01	0.54	
Was there a bride price for the girl? (F) $(2 = No, 1 = Yes)$	1.47	1.33	0.14	0.01	1.54	1.31	0.23	0.06	
Was there a bride price for the girl? (M) $(2 = No, 1 = Yes)$	1.47	1.37	0.10	0.04	1.56	1.35	0.21	0.09	
Was there a bride price for the girl? (G) $(2 = No, 1 = Yes)$	1.40	1.54	-0.14	0.06	1.50	1.47	0.03	0.86	
Total consumption (H)	24835.23	31852.31	-7017.08	0.05	27492.11	28317.31	-825.20	0.84	
TV ownership (H)	0.05	0.04	0.02	0.20	0.06	0.03	0.03	0.48	
Decision-making index (F)	0.82	0.70	0.12	0.00	0.85	0.72	0.13	0.04	
Decision-making index (M)	0.19	0.24	-0.05	0.30	0.23	0.20	0.03	0.76	
Sex coercion index (F)	0.86	0.81	0.06	0.00	0.87	0.83	0.04	0.38	
Sex coercion index (M)	0.62	0.63	-0.01	0.60	0.54	0.62	-0.08	0.26	
Violence index (M)	0.43	0.47	-0.04	0.07	0.34	0.47	-0.13	0.08	
Voice index (M)	1.37	1.60	-0.23	0.00	1.29	1.59	-0.29	0.01	
Have you heard of the new criminal code (F) $(2 = No, 1 = Yes)$	1.68	1.70	-0.01	0.71	1.51	1.76	-0.25	0.08	
Age law states for girls to marry (F)	17.73	17.98	-0.25	0.34	17.64	17.98	-0.34	0.16	

	Pre-Weighting				Post-Weighting				
	Control	Intensive	Difference	p-value	Control	Intensive	Difference	p-value	
Age married (F)	13.58	13.41	0.16	0.75	13.72	13.45	0.27	0.60	
Age married (M)	14.03	12.94	1.09	0.01	14.01	13.08	0.94	0.11	
Age married (G)	12.95	11.40	1.55	0.04	13.05	11.37	1.67	0.01	
Marriage below age 15 exists (F) $(2 = No, 1 = Yes)$	1.70	1.70	0.00	0.97	1.73	1.73	-0.01	0.94	
Marriage below age 15 exists (M) $(2 = No, 1 = Yes)$	1.73	1.64	0.09	0.01	1.76	1.68	0.08	0.39	
Marriage below age 15 common (F) (3 = Very common, 2 = common, 1 = rare)	1.26	1.28	-0.02	0.80	1.21	1.27	-0.06	0.54	
Marriage below age 15 common (M) $(3 = \text{Very common}, 2 = \text{common}, 1 = \text{rare})$	1.24	1.27	-0.03	0.63	1.22	1.24	-0.02	0.80	
Marriage below age 18 exists (F) $(2 = No, 1 = Yes)$	1.33	1.50	-0.17	0.00	1.36	1.53	-0.16	0.07	
Marriage below age 18 exists $(M)$ (2 = No, 1 = Yes)	1.43	1.57	-0.13	0.00	1.45	1.60	-0.16	0.16	
Marriage below age 18 common (F) $(3 = \text{Very common}, 2 = \text{common}, 1 = \text{rare})$	1.42	1.37	0.06	0.35	1.39	1.31	0.08	0.40	
Marriage below age 18 common (M) (3 = Very common, 2 = common, 1 = rare)	1.30	1.43	-0.13	0.03	1.29	1.41	-0.13	0.38	
Age girls should marry (F)	17.75	17.81	-0.06	0.74	17.96	17.95	0.00	0.99	
Age girls should marry (M)	17.70	17.91	-0.21	0.29	17.83	18.09	-0.26	0.56	
Age girls should marry (B)	17.92	17.89	0.02	0.94	18.24	18.06	0.19	0.71	
Age girls should marry (G)	17.89	18.44	-0.55	0.00	18.07	18.59	-0.52	0.10	
Age boys should marry (F)	21.14	20.15	0.99	0.00	21.09	20.15	0.94	0.03	
Age boys should marry (M)	21.02	20.84	0.18	0.51	20.96	20.94	0.02	0.98	
Age boys should marry (B)	20.61	19.83	0.78	0.03	20.92	20.01	0.91	0.17	
Age boys should marry (G)	20.52	20.61	-0.10	0.59	20.53	20.75	-0.22	0.48	
How is marriage below age 15 perceived (F) $(2 = \text{Negatively}, 1 = \text{positively})$	1.88	1.90	-0.02	0.37	1.88	1.92	-0.04	0.34	
How is marriage below age 15 perceived (M) $(2 = \text{Negatively}, 1 = \text{positively})$	1.87	1.86	0.01	0.68	1.88	1.88	0.00	0.96	
How do religious leaders perceive it (F) (2 = Do not support, 1 = support)	1.94	1.92	0.03	0.19	1.93	1.92	0.01	0.81	
How do religious leaders perceive it (M) (2 = Do not support, 1 = support)	1.88	1.92	-0.04	0.06	1.90	1.92	-0.02	0.61	
How do influential community members view early marriage? (F) $(3 = \text{Bad}, 2 = \text{normal}, 1 = \text{good})$	2.74	2.86	-0.12	0.01	2.72	2.88	-0.15	0.06	
How do influential community members view early marriage? (M) (3 = Bad, 2 = normal, 1 = good)	2.58	2.73	-0.15	0.00	2.57	2.76	-0.19	0.13	
Attends school (G) (2 = No. 1 = Yes)	1.28	1.15	0.13	0.00	1.27	1.14	0.13	0.03	
What is the highest grade completed? (H)	5.23	5.08	0.15	0.56	5.58	5.22	0.37	0.48	
At what age did <name>discontinue schooling? (H)</name>	14.58	15.63	-1.05	0.00	14.82	15.90	-1.08	0.17	
How old were you when you stopped school? (G)	12.32	12.76	-0.44	0.36	12.54	12.85	-0.31	0.64	
Share of time spent on work (H)	0.43	0.39	0.04	0.00	0.40	0.38	0.01	0.71	
Share of time spent on school (H)	0.34	0.41	-0.07	0.00	0.37	0.42	-0.05	0.29	
Share of time spent on leisure (H)	0.23	0.20	0.03	0.01	0.24	0.20	0.04	0.09	
Was there a bride price for the girl? (F) $(2 = N_0, 1 = Y_{es})$	1.47	1.30	0.17	0.01	1.50	1.30	0.20	0.12	
Was there a bride price for the girl? (M) $(2 = N_0, 1 = Y_{es})$	1.47	1.40	0.07	0.21	1.50	1.38	0.12	0.34	
Was there a bride price for the girl? (G) $(2 = N_0, 1 = Y_{es})$	1.40	1.59	-0.19	0.03	1.39	1.55	-0.16	0.43	
Total consumption (H)	24835 23	35280.85	-10445.62	0.02	27916.20	33845 89	-5929.69	0.36	
Decision-making index (F)	0.82	0.74	0.08	0.03	0.85	0.74	0.11	0.06	
Decision-making index (M)	0.19	0.19	0.00	0.94	0.16	0.23	-0.06	0.55	
Sex coercion index (F)	0.86	0.81	0.05	0.02	0.85	0.83	0.03	0.66	
Sex coercion index (I)	0.62	0.63	-0.01	0.62	0.57	0.64	-0.07	0.00	
Violence index (M)	0.43	0.44	-0.01	0.74	0.39	0.46	-0.07	0.33	
Voice index (M)	1.37	1.65	-0.28	0.00	1 42	1.68	-0.26	0.02	
Have you heard of the new criminal code (F) $(2 - N_0, 1 - V_{es})$	1.68	1.62	0.06	0.12	1.42	1.63	0.01	0.95	
Age law states for given by the matrix $(F)$	17.73	17.85	-0.12	0.68	17 75	17.95	-0.20	0.58	
The raw brance for Sine to many (1)	±1.10	±1.00	0.14	0.00	±1.10	±1.00	0.40	0.00	

Table 15: Sample Characteristics, Pre- and Post-Weighting, Main Threeway Weights, Comparing Intensive Treatment vs. Control

Table 16: Sample Characteristics, Pre- and Post-Weighting, Alternative Threeway Weights, Comparing Intensive Treatment vs. Control

	Pre-Weighting				Post-Weighting				
	Control	Intensive	Difference	p-value	Control	Intensive	Difference	p-value	
Age married (F)	13.58	13.85	-0.28	0.58	13.73	13.55	0.18	0.73	
Age married (M)	14.03	13.58	0.46	0.25	13.72	12.95	0.77	0.13	
Age married (G)	12.95	12.00	0.95	0.20	12.93	11.56	1.37	0.06	
Marriage below age 15 exists (F) $(2 = No, 1 = Yes)$	1.70	1.73	-0.03	0.34	1.75	1.74	0.01	0.89	
Marriage below age 15 exists (M) $(2 = No, 1 = Yes)$	1.73	1.77	-0.04	0.26	1.81	1.66	0.15	0.08	
Marriage below age 15 common (F) $(3 = \text{Very common}, 2 = \text{common}, 1 = \text{rare})$	1.26	1.36	-0.10	0.19	1.20	1.25	-0.05	0.56	
Marriage below age 15 common (M) (3 = Very common, 2 = common, 1 = rare)	1.24	1.35	-0.11	0.13	1.25	1.23	0.02	0.85	
Marriage below age 18 exists (F) $(2 = No, 1 = Yes$	1.33	1.50	-0.17	0.00	1.39	1.55	-0.16	0.10	
Marriage below age 18 exists $(F)$ (2 = No, 1 = Yes	1.43	1.42	0.02	0.64	1.51	1.56	-0.05	0.63	
Marriage below age 18 common (F) (3 = Very common, 2 = common, 1 = rare)	1.42	1.34	0.08	0.16	1.41	1.35	0.06	0.56	
Marriage below age 18 common (M) (3 = Very common, 2 = common, 1 = rare)	1.30	1.30	0.00	0.95	1.29	1.49	-0.20	0.25	
Age girls should marry (F)	17.75	18.16	-0.41	0.03	18.03	17.64	0.39	0.29	
Age girls should marry (M)	17.70	17.69	0.02	0.92	17.86	17.62	0.24	0.60	
Age girls should marry (B)	17.92	18.35	-0.43	0.09	18.18	18.00	0.17	0.70	
Age girls should marry (G)	17.89	17.90	0.00	0.99	18.18	18.33	-0.15	0.70	
Age boys should marry (F)	21.14	20.57	0.57	0.02	21.09	19.91	1.19	0.02	
Age boys should marry (M)	21.02	20.28	0.74	0.00	21.21	20.40	0.82	0.19	
Age boys should marry (B)	20.61	20.43	0.18	0.63	20.82	19.99	0.83	0.12	
Age boys should marry (G)	20.52	20.10	0.42	0.04	20.53	20.33	0.20	0.71	
How is marriage below age 15 perceived (F) $(2 = Negatively, 1 = positively)$	1.88	1.89	-0.01	0.64	1.88	1.93	-0.05	0.29	
How is marriage below age 15 perceived (M) $(2 = Negatively, 1 = positively)$	1.87	1.84	0.03	0.29	1.89	1.87	0.02	0.70	
How do religious leaders perceive it (F) (2 = Do not support, $1 = $ support)	1.94	1.87	0.08	0.00	1.92	1.92	0.01	0.92	
How do religious leaders perceive it $(M)$ (2 = Do not support, 1 = support)	1.88	1.79	0.09	0.00	1.90	1.90	0.00	0.93	
How do influential community members view early marriage? (F) $(3 = \text{Bad}, 2 = \text{normal}, 1 = \text{good})$	2.74	2.69	0.05	0.36	2.72	2.84	-0.12	0.15	
How do influential community members view early marriage? (M) $(3 = \text{Bad}, 2 = \text{normal}, 1 = \text{good})$	2.58	2.63	-0.06	0.29	2.58	2.67	-0.09	0.52	
Attends school (G) $(2 = No, 1 = Yes)$	1.28	1.16	0.12	0.00	1.22	1.19	0.03	0.69	
What is the highest grade completed? (H)	5.23	5.18	0.05	0.85	5.81	4.94	0.87	0.13	
At what age did [Name] discontinue schooling? (H)	14.58	16.15	-1.57	0.00	14.87	15.50	-0.63	0.39	
How old were you when you stopped schooling? (G)	12.32	13.03	-0.71	0.10	12.60	12.49	0.11	0.86	
Share of time spent on work (H)	0.43	0.38	0.05	0.00	0.38	0.41	-0.02	0.62	
Share of time spent on school (H)	0.34	0.37	-0.03	0.01	0.38	0.39	0.00	0.94	
Share of time spent on leisure (H)	0.23	0.25	-0.02	0.03	0.23	0.21	0.03	0.22	
Was there a bride price for the girl? (F) $(2 = No, 1 = Yes)$	1.47	1.36	0.11	0.08	1.54	1.29	0.25	0.05	
Was there a bride price for the girl? (M) $(2 = No, 1 = Yes)$	1.47	1.33	0.13	0.01	1.57	1.38	0.18	0.15	
Was there a bride price for the girl? (G) $(2 = No, 1 = Yes)$	1.40	1.47	-0.07	0.42	1.47	1.51	-0.03	0.85	
Total consumption (H)	24835.23	28252.75	-3417.52	0.20	27297.65	36894.00	-9596.35	0.13	
TV ownership (H)	0.05	0.02	0.03	0.03	0.07	0.04	0.02	0.54	
Decision-making index (F)	0.82	0.66	0.16	0.00	0.84	0.70	0.13	0.05	
Decision-making index (M)	0.19	0.27	-0.08	0.13	0.14	0.24	-0.11	0.29	
Sex coercion index (F)	0.86	0.80	0.06	0.00	0.85	0.82	0.03	0.64	
Sex coercion index (M)	0.62	0.63	-0.01	0.61	0.57	0.64	-0.07	0.19	
Violence index (M)	0.43	0.50	-0.08	0.00	0.41	0.42	-0.02	0.83	
Voice index (M)	1.37	1.55	-0.18	0.00	1.41	1.64	-0.23	0.06	
Have you heard of the new criminal code (F) $(2 = No, 1 = Yes)$	1.68	1.77	-0.09	0.02	1.62	1.58	0.04	0.71	
Age law states for girls to marry (F)	17.73	18.24	-0.51	0.16	17.74	17.82	-0.08	0.78	

Table 17: Sample Characteristics, Pre- and Post-Weighting, Threeway Weighting Using Variables Selected by Lasso Regression, Comparing Intensive Treatment vs. Control

	Pre-Weighting				Post-Weighting				
	Control	Intensive	Difference	p-value	Control	Intensive	Difference	p-value	
Age married (F)	13.58	13.85	-0.28	0.58	13.28	12.55	0.73	0.20	
Age married (M)	14.03	13.58	0.46	0.25	14.50	13.53	0.97	0.40	
Age married (G)	12.95	12.00	0.95	0.20	12.60	11.65	0.95	0.44	
Marriage below age 15 exists (F) $(2 = No, 1 = Yes)$	1.70	1.73	-0.03	0.34	1.78	1.49	0.29	0.02	
Marriage below age 15 exists (M) $(2 = No, 1 = Yes)$	1.73	1.77	-0.04	0.26	1.80	1.54	0.26	0.00	
Marriage below age 15 common (F) $(3 = \text{Very common}, 2 = \text{common}, 1 = \text{rare})$	1.26	1.36	-0.10	0.19	1.26	1.15	0.11	0.36	
Marriage below age 15 common (M) (3 = Very common, 2 = common, 1 = rare)	1.24	1.35	-0.11	0.13	1.25	1.26	-0.01	0.94	
Marriage below age 18 exists (F) $(2 = No, 1 = Yes)$	1.33	1.50	-0.17	0.00	1.43	1.37	0.06	0.56	
Marriage below age 18 exists (F) $(2 = No, 1 = Yes$	1.43	1.42	0.02	0.64	1.54	1.44	0.10	0.36	
Marriage below age 18 common (F) (3 = Very common, 2 = common, 1 = rare)	1.42	1.34	0.08	0.16	1.37	1.34	0.03	0.78	
Marriage below age 18 common (M) (3 = Very common, 2 = common, 1 = rare)	1.30	1.30	0.00	0.95	1.27	1.36	-0.09	0.22	
Age girls should marry (F)	17.75	18.16	-0.41	0.03	17.88	18.10	-0.22	0.47	
Age girls should marry (M)	17.70	17.69	0.02	0.92	18.08	18.04	0.05	0.88	
Age girls should marry (B)	17.92	18.35	-0.43	0.09	18.59	17.75	0.84	0.15	
Age girls should marry (G)	17.89	17.90	0.00	0.99	18.17	18.34	-0.16	0.55	
Age boys should marry (F)	21.14	20.57	0.57	0.02	20.87	20.57	0.31	0.29	
Age boys should marry (M)	21.02	20.28	0.74	0.00	20.68	21.34	-0.66	0.31	
Age boys should marry (B)	20.61	20.43	0.18	0.63	21.08	20.20	0.87	0.20	
Age boys should marry (G)	20.52	20.10	0.42	0.04	20.63	21.08	-0.44	0.42	
How is marriage below age 15 perceived (F) $(2 = Negatively, 1 = positively)$	1.88	1.89	-0.01	0.64	1.80	1.90	-0.10	0.12	
How is marriage below age 15 perceived (M) $(2 = Negatively, 1 = positively)$	1.87	1.84	0.03	0.29	1.91	1.88	0.03	0.51	
How do religious leaders perceive it (F) $(2 = \text{Do not support}, 1 = \text{support})$	1.94	1.87	0.08	0.00	1.84	1.94	-0.10	0.17	
How do religious leaders perceive it (M) $(2 = \text{Do not support}, 1 = \text{support})$	1.88	1.79	0.09	0.00	1.91	1.94	-0.03	0.32	
How do influential community members view early marriage? (F) $(3 = \text{Bad}, 2 = \text{normal}, 1 = \text{good})$	2.74	2.69	0.05	0.36	2.60	2.91	-0.31	0.00	
How do influential community members view early marriage? (M) $(3 = \text{Bad}, 2 = \text{normal}, 1 = \text{good})$	2.58	2.63	-0.06	0.29	2.63	2.78	-0.15	0.17	
Attends school (G) $(2 = No, 1 = Yes)$	1.28	1.16	0.12	0.00	1.26	1.15	0.11	0.09	
What is the highest grade completed? (H)	5.23	5.18	0.05	0.85	5.69	4.38	1.31	0.00	
At what age did [Name] discontinue schooling? (H)	14.58	16.15	-1.57	0.00	15.16	15.87	-0.71	0.12	
How old were you when you stopped schooling? (G)	12.32	13.03	-0.71	0.10	12.45	13.49	-1.04	0.05	
Share of time spent on work (H)	0.43	0.38	0.05	0.00	0.36	0.41	-0.04	0.38	
Share of time spent on school (H)	0.34	0.37	-0.03	0.01	0.40	0.36	0.04	0.40	
Share of time spent on leisure (H)	0.23	0.25	-0.02	0.03	0.24	0.24	0.00	0.98	
Was there a bride price for the girl? (F) $(2 = No, 1 = Yes)$	1.47	1.36	0.11	0.08	1.33	1.33	0.00	0.99	
Was there a bride price for the girl? (M) $(2 = No, 1 = Yes)$	1.47	1.33	0.13	0.01	1.53	1.38	0.14	0.29	
Was there a bride price for the girl? (G) $(2 = No, 1 = Yes)$	1.40	1.47	-0.07	0.42	1.35	1.88	-0.52	0.00	
Total consumption (H)	24835.23	28252.75	-3417.52	0.20	28473.41	32226.86	-3753.45	0.30	
TV ownership (H)	0.05	0.02	0.03	0.03	0.03	0.14	-0.11	0.05	
Decision-making index (F)	0.82	0.66	0.16	0.00	0.87	0.73	0.14	0.00	
Decision-making index (M)	0.19	0.27	-0.08	0.13	0.17	0.39	-0.22	0.05	
Sex coercion index (F)	0.86	0.80	0.06	0.00	0.88	0.86	0.02	0.74	
Sex coercion index (M)	0.62	0.63	-0.01	0.61	0.61	0.60	0.00	0.97	
Violence index (M)	0.43	0.50	-0.08	0.00	0.43	0.50	-0.07	0.18	
Voice index (M)	1.37	1.55	-0.18	0.00	1.55	1.64	-0.09	0.47	
Have you heard of the new criminal code (F) $(2 = No, 1 = Yes)$	1.68	1.77	-0.09	0.02	1.71	1.76	-0.05	0.62	
Age law states for girls to marry (F)	17.73	18.24	-0.51	0.16	17.80	17.90	-0.10	0.63	

Table 18: Sa	mple (	Characteristics.	Pre- and	l Post-Weighting,	Main Threeway	Weights,	Comparing	g Expansio	n Treatment	vs.	$\operatorname{Control}$
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	Pre-Weighting				Post-Weighting			
	Control	Expansion	Difference	p-value	Control	Expansion	Difference	p-value
Age married (F)	13.58	13.85	-0.28	0.58	13.72	14.13	-0.41	0.51
Age married (M)	14.03	13.58	0.46	0.25	14.01	13.86	0.15	0.83
Age married (G)	12.95	12.00	0.95	0.20	13.05	12.31	0.73	0.36
Marriage below age 15 exists (F) $(2 = No, 1 = Yes)$	1.70	1.73	-0.03	0.34	1.73	1.75	-0.02	0.73
Marriage below age 15 exists (M) $(2 = No, 1 = Yes)$	1.73	1.77	-0.04	0.26	1.76	1.81	-0.05	0.54
Marriage below age 15 common (F) (3 = Very common, 2 = common, 1 = rare)	1.26	1.36	-0.10	0.19	1.21	1.27	-0.06	0.53
Marriage below age 15 common (M) $(3 = \text{Very common}, 2 = \text{common}, 1 = \text{rare})$	1.24	1.35	-0.11	0.13	1.22	1.22	0.00	0.99
Marriage below age 18 exists (F) $(2 = No, 1 = Yes$	1.33	1.50	-0.17	0.00	1.36	1.51	-0.15	0.07
Marriage below age 18 exists (F) $(2 = No, 1 = Yes)$	1.43	1.42	0.02	0.64	1.45	1.42	0.03	0.83
Marriage below age 18 common (F) (3 = Very common, 2 = common, 1 = rare)	1.42	1.34	0.08	0.16	1.39	1.26	0.14	0.16
Marriage below age 18 common (M) (3 = Very common, 2 = common, 1 = rare)	1.30	1.30	0.00	0.95	1.29	1.26	0.03	0.79
Age girls should marry (F)	17.75	18.16	-0.41	0.03	17.96	18.17	-0.21	0.53
Age girls should marry (M)	17.70	17.69	0.02	0.92	17.83	17.97	-0.14	0.64
Age girls should marry (B)	17.92	18.35	-0.43	0.09	18.24	18.51	-0.26	0.58
Age girls should marry (G)	17.89	17.90	0.00	0.99	18.07	18.04	0.03	0.93
Age boys should marry (F)	21.14	20.57	0.57	0.02	21.09	20.66	0.43	0.40
Age boys should marry (M)	21.02	20.28	0.74	0.00	20.96	20.40	0.56	0.17
Age boys should marry (B)	20.61	20.43	0.18	0.63	20.92	20.68	0.24	0.79
Age boys should marry (G)	20.52	20.10	0.42	0.04	20.53	20.37	0.16	0.68
How is marriage below age 15 perceived (F) $(2 = Negatively, 1 = positively)$	1.88	1.89	-0.01	0.64	1.88	1.93	-0.05	0.31
How is marriage below age 15 perceived (M) $(2 = \text{Negatively}, 1 = \text{positively})$	1.87	1.84	0.03	0.29	1.88	1.90	-0.02	0.67
How do religious leaders perceive it (F) $(2 = \text{Do not support}, 1 = \text{support})$	1.94	1.87	0.08	0.00	1.93	1.90	0.03	0.65
How do religious leaders perceive it $(M)$ (2 = Do not support, 1 = support)	1.88	1.79	0.09	0.00	1.90	1.86	0.04	0.54
How do influential community members view early marriage? (F) $(3 = \text{Bad}, 2 = \text{normal}, 1 = \text{good})$	2.74	2.69	0.05	0.36	2.72	2.77	-0.05	0.61
How do influential community members view early marriage? (M) $(3 = \text{Bad}, 2 = \text{normal}, 1 = \text{good})$	2.58	2.63	-0.06	0.29	2.57	2.74	-0.18	0.18
Attends school (G) $(2 = No, 1 = Yes)$	1.28	1.16	0.12	0.00	1.27	1.16	0.12	0.06
What is the highest grade completed? (H)	5.23	5.18	0.05	0.85	5.58	5.15	0.44	0.37
At what age did [Name] discontinue schooling? (H)	14.58	16.15	-1.57	0.00	14.82	16.19	-1.37	0.01
How old were you when you stopped schooling? (G)	12.32	13.03	-0.71	0.10	12.54	13.29	-0.74	0.15
Share of time spent on work (H)	0.43	0.38	0.05	0.00	0.40	0.38	0.02	0.64
Share of time spent on school (H)	0.34	0.37	-0.03	0.01	0.37	0.37	0.00	0.98
Share of time spent on leisure (H)	0.23	0.25	-0.02	0.03	0.24	0.25	-0.02	0.57
Was there a bride price for the girl? (F) $(2 = No, 1 = Yes)$	1.47	1.36	0.11	0.08	1.50	1.34	0.16	0.24
Was there a bride price for the girl? (M) $(2 = No, 1 = Yes)$	1.47	1.33	0.13	0.01	1.50	1.29	0.21	0.13
Was there a bride price for the girl? (G) $(2 = No, 1 = Yes)$	1.40	1.47	-0.07	0.42	1.39	1.45	-0.06	0.66
Total consumption (H)	24835.23	28252.75	-3417.52	0.20	27916.20	28232.36	-316.16	0.97
TV ownership (H)	0.05	0.02	0.03	0.03	0.06	0.02	0.04	0.19
Decision-making index (F)	0.82	0.66	0.16	0.00	0.85	0.66	0.19	0.03
Decision-making index (M)	0.19	0.27	-0.08	0.13	0.16	0.27	-0.11	0.30
Sex coercion index (F)	0.86	0.80	0.06	0.00	0.85	0.81	0.04	0.48
Sex coercion index (M)	0.62	0.63	-0.01	0.61	0.57	0.68	-0.11	0.12
Violence index (M)	0.43	0.50	-0.08	0.00	0.39	0.52	-0.13	0.09
Voice index (M)	1.37	1.55	-0.18	0.00	1.42	1.55	-0.13	0.23
Have you heard of the new criminal code (F) $(2 = No, 1 = Yes)$	1.68	1.77	-0.09	0.02	1.64	1.79	-0.15	0.16
Age law states for girls to marry (F)	17.73	18.24	-0.51	0.16	17.75	18.43	-0.68	0.08

Table 19: Sample Characteristics, Pre- and Post-Weighting, Alternative Threeway Weights, Comparing Expansion Treatment vs. Control

	Pre-Weighting				Post-Weighting				
	Control	Expansion	Difference	p-value	Control	Expansion	Difference	p-value	
Age married (F)	13.58	13.85	-0.28	0.58	13.73	14.26	-0.54	0.37	
Age married (M)	14.03	13.58	0.46	0.25	13.72	14.05	-0.33	0.62	
Age married (G)	12.95	12.00	0.95	0.20	12.93	12.23	0.70	0.44	
Marriage below age 15 exists (F) $(2 = No, 1 = Yes)$	1.70	1.73	-0.03	0.34	1.75	1.74	0.01	0.87	
Marriage below age 15 exists (M) $(2 = N_0, 1 = Y_{es})$	1.73	1.77	-0.04	0.26	1.81	1.80	0.00	0.96	
Marriage below age 15 common (F) (3 = Very common, 2 = common, 1 = rare)	1.26	1.36	-0.10	0.19	1.20	1.27	-0.07	0.48	
Marriage below age 15 common (M) (3 = Very common, 2 = common, 1 = rare)	1.24	1.35	-0.11	0.13	1.25	1.21	0.04	0.70	
Marriage below age 18 exists (F) $(2 = No, 1 = Yes)$	1.33	1.50	-0.17	0.00	1.39	1.49	-0.11	0.23	
Marriage below age 18 exists (F) $(2 = No, 1 = Yes)$	1.43	1.42	0.02	0.64	1.51	1.40	0.12	0.34	
Marriage below age 18 common $(F)$ (3 = Very common, 2 = common, 1 = rare)	1.42	1.34	0.08	0.16	1.41	1.25	0.16	0.10	
Marriage below age 18 common (M) (3 = Very common, 2 = common, 1 = rare)	1.30	1.30	0.00	0.95	1.29	1.27	0.02	0.85	
Age girls should marry (F)	17.75	18.16	-0.41	0.03	18.03	18.15	-0.12	0.69	
Age girls should marry (M)	17.70	17.69	0.02	0.92	17.86	18.00	-0.14	0.68	
Age girls should marry (B)	17.92	18.35	-0.43	0.09	18.18	18.55	-0.37	0.36	
Age girls should marry (G)	17.89	17.90	0.00	0.99	18.18	18.01	0.17	0.62	
Age boys should marry (F)	21.14	20.57	0.57	0.02	21.09	20.72	0.38	0.50	
Age boys should marry (M)	21.02	20.28	0.74	0.00	21.21	20.36	0.86	0.05	
Age boys should marry (B)	20.61	20.43	0.18	0.63	20.82	20.86	-0.04	0.96	
Age boys should marry (G)	20.52	20.10	0.42	0.04	20.53	20.40	0.13	0.72	
How is marriage below age 15 perceived (F) $(2 = Negatively, 1 = positively)$	1.88	1.89	-0.01	0.64	1.88	1.93	-0.06	0.25	
How is marriage below age 15 perceived (M) $(2 = \text{Negatively}, 1 = \text{positively})$	1.87	1.84	0.03	0.29	1.89	1.91	-0.02	0.68	
How do religious leaders perceive it (F) $(2 = Do not support, 1 = support)$	1.94	1.87	0.08	0.00	1.92	1.91	0.02	0.79	
How do religious leaders perceive it (M) $(2 = \text{Do not support}, 1 = \text{support})$	1.88	1.79	0.09	0.00	1.90	1.86	0.05	0.44	
How do influential community members view early marriage? (F) $(3 = \text{Bad}, 2 = \text{normal}, 1 = \text{good})$	2.74	2.69	0.05	0.36	2.72	2.79	-0.06	0.51	
How do influential community members view early marriage? (M) $(3 = \text{Bad}, 2 = \text{normal}, 1 = \text{good})$	2.58	2.63	-0.06	0.29	2.58	2.75	-0.17	0.22	
Attends school (G) $(2 = No, 1 = Yes)$	1.28	1.16	0.12	0.00	1.22	1.16	0.06	0.35	
What is the highest grade completed? (H)	5.23	5.18	0.05	0.85	5.81	5.03	0.77	0.14	
At what age did [Name] discontinue schooling? (H)	14.58	16.15	-1.57	0.00	14.87	16.11	-1.24	0.02	
How old were you when you stopped schooling? (G)	12.32	13.03	-0.71	0.10	12.60	13.36	-0.76	0.20	
Share of time spent on work (H)	0.43	0.38	0.05	0.00	0.38	0.38	0.00	0.99	
Share of time spent on school (H)	0.34	0.37	-0.03	0.01	0.38	0.36	0.02	0.70	
Share of time spent on leisure (H)	0.23	0.25	-0.02	0.03	0.23	0.26	-0.02	0.42	
Was there a bride price for the girl? (F) $(2 = No, 1 = Yes)$	1.47	1.36	0.11	0.08	1.54	1.32	0.22	0.11	
Was there a bride price for the girl? (M) $(2 = No, 1 = Yes)$	1.47	1.33	0.13	0.01	1.57	1.27	0.30	0.02	
Was there a bride price for the girl? (G) $(2 = No, 1 = Yes)$	1.40	1.47	-0.07	0.42	1.47	1.42	0.05	0.72	
Total consumption (H)	24835.23	28252.75	-3417.52	0.20	27297.65	28993.19	-1695.54	0.85	
TV ownership (H)	0.05	0.02	0.03	0.03	0.07	0.02	0.05	0.17	
Decision-making index (F)	0.82	0.66	0.16	0.00	0.84	0.67	0.17	0.09	
Decision-making index (M)	0.19	0.27	-0.08	0.13	0.14	0.27	-0.13	0.18	
Sex coercion index (F)	0.86	0.80	0.06	0.00	0.85	0.82	0.03	0.69	
Sex coercion index (M)	0.62	0.63	-0.01	0.61	0.57	0.68	-0.11	0.10	
Violence index (M)	0.43	0.50	-0.08	0.00	0.41	0.52	-0.12	0.12	
Voice index (M)	1.37	1.55	-0.18	0.00	1.41	1.54	-0.13	0.30	
Have you heard of the new criminal code (F) $(2 = No, 1 = Yes)$	1.68	1.77	-0.09	0.02	1.62	1.80	-0.18	0.11	
Age law states for girls to marry (F)	17.73	18.24	-0.51	0.16	17.74	18.44	-0.70	0.06	

Table 20: Sample Characteristics, Pre- and Post-Weighting, Threeway Weighting Using Variables Selected by Lasso Regression, Comparing Expansion Treatment vs. Control

	Pre-Weighting				Post-Weig	hting		
	Control	Expansion	Difference	p-value	Control	Expansion	Difference	p-value
Age married (F)	13.58	13.85	-0.28	0.58	13.28	14.21	-0.93	0.14
Age married (M)	14.03	13.58	0.46	0.25	14.50	13.92	0.58	0.53
Age married (G)	12.95	12.00	0.95	0.20	12.60	11.74	0.86	0.35
Marriage below age 15 exists (F) $(2 = No, 1 = Yes)$	1.70	1.73	-0.03	0.34	1.78	1.73	0.05	0.53
Marriage below age 15 exists (M) $(2 = No, 1 = Yes)$	1.73	1.77	-0.04	0.26	1.80	1.80	0.01	0.95
Marriage below age 15 common (F) ( $3 = \text{Very common}, 2 = \text{common}, 1 = \text{rare}$ )	1.26	1.36	-0.10	0.19	1.26	1.31	-0.05	0.58
Marriage below age 15 common (M) (3 = Very common, 2 = common, 1 = rare)	1.24	1.35	-0.11	0.13	1.25	1.22	0.03	0.76
Marriage below age 18 exists (F) $(2 = No, 1 = Yes$	1.33	1.50	-0.17	0.00	1.43	1.52	-0.09	0.40
Marriage below age 18 exists (F) $(2 = No, 1 = Yes$	1.43	1.42	0.02	0.64	1.54	1.46	0.08	0.61
Marriage below age 18 common (F) (3 = Very common, 2 = common, 1 = rare)	1.42	1.34	0.08	0.16	1.37	1.31	0.06	0.59
Marriage below age 18 common (M) (3 = Very common, 2 = common, 1 = rare)	1.30	1.30	0.00	0.95	1.27	1.32	-0.05	0.61
Age girls should marry (F)	17.75	18.16	-0.41	0.03	17.88	18.36	-0.48	0.19
Age girls should marry (M)	17.70	17.69	0.02	0.92	18.08	18.03	0.06	0.87
Age girls should marry (B)	17.92	18.35	-0.43	0.09	18.59	18.63	-0.04	0.95
Age girls should marry (G)	17.89	17.90	0.00	0.99	18.17	17.89	0.28	0.42
Age boys should marry (F)	21.14	20.57	0.57	0.02	20.87	20.80	0.08	0.86
Age boys should marry (M)	21.02	20.28	0.74	0.00	20.68	20.48	0.20	0.76
Age boys should marry (B)	20.61	20.43	0.18	0.63	21.08	20.98	0.10	0.91
Age boys should marry (G)	20.52	20.10	0.42	0.04	20.63	20.32	0.31	0.45
How is marriage below age 15 perceived (F) $(2 = Negatively, 1 = positively)$	1.88	1.89	-0.01	0.64	1.80	1.91	-0.11	0.07
How is marriage below age 15 perceived (M) (2 = Negatively, 1 = positively)	1.87	1.84	0.03	0.29	1.91	1.91	0.00	0.99
How do religious leaders perceive it (F) $(2 = \text{Do not support}, 1 = \text{support})$	1.94	1.87	0.08	0.00	1.84	1.91	-0.07	0.43
How do religious leaders perceive it (M) $(2 = Do not support, 1 = support)$	1.88	1.79	0.09	0.00	1.91	1.86	0.04	0.52
How do influential community members view early marriage? (F) $(3 = \text{Bad}, 2 = \text{normal}, 1 = \text{good})$	2.74	2.69	0.05	0.36	2.60	2.76	-0.17	0.18
How do influential community members view early marriage? (M) $(3 = \text{Bad}, 2 = \text{normal}, 1 = \text{good})$	2.58	2.63	-0.06	0.29	2.63	2.78	-0.15	0.25
Attends school (G) $(2 = No, 1 = Yes)$	1.28	1.16	0.12	0.00	1.26	1.16	0.10	0.19
What is the highest grade completed? (H)	5.23	5.18	0.05	0.85	5.69	5.23	0.45	0.44
At what age did [Name] discontinue schooling? (H)	14.58	16.15	-1.57	0.00	15.16	16.42	-1.26	0.06
How old were you when you stopped schooling? (G)	12.32	13.03	-0.71	0.10	12.45	13.19	-0.74	0.16
Share of time spent on work (H)	0.43	0.38	0.05	0.00	0.36	0.39	-0.03	0.53
Share of time spent on school (H)	0.34	0.37	-0.03	0.01	0.40	0.36	0.04	0.51
Share of time spent on leisure (H)	0.23	0.25	-0.02	0.03	0.24	0.25	-0.01	0.76
Was there a bride price for the girl? (F) $(2 = No, 1 = Yes)$	1.47	1.36	0.11	0.08	1.33	1.41	-0.08	0.60
Was there a bride price for the girl? (M) $(2 = No, 1 = Yes)$	1.47	1.33	0.13	0.01	1.53	1.37	0.16	0.29
Was there a bride price for the girl? (G) $(2 = No, 1 = Yes)$	1.40	1.47	-0.07	0.42	1.35	1.45	-0.10	0.53
Total consumption (H)	24835.23	28252.75	-3417.52	0.20	28473.41	23746.13	4727.28	0.37
TV ownership (H)	0.05	0.02	0.03	0.03	0.03	0.01	0.02	0.34
Decision-making index (F)	0.82	0.66	0.16	0.00	0.87	0.71	0.17	0.04
Decision-making index (M)	0.19	0.27	-0.08	0.13	0.17	0.30	-0.14	0.12
Sex coercion index (F)	0.86	0.80	0.06	0.00	0.88	0.82	0.06	0.28
Sex coercion index (M)	0.62	0.63	-0.01	0.61	0.61	0.65	-0.04	0.40
Violence index (M)	0.43	0.50	-0.08	0.00	0.43	0.53	-0.10	0.08
Voice index (M)	1.37	1.55	-0.18	0.00	1.55	1.62	-0.07	0.59
Have you heard of the new criminal code (F) $(2 = No, 1 = Yes)$	1.68	1.77	-0.09	0.02	1.71	1.80	-0.09	0.37
Age law states for girls to marry (F)	17.73	18.24	-0.51	0.16	17.80	18.48	-0.68	0.17

Table 21: Sample Characteristics, Pre- and Post-Weighting, Main Threeway Weights, Comparing Intensive Treatment vs. Expansion Treatment

	Pre-Weighting				Post-Weighting				
	Expansion	Intensive	Difference	p-value	Expansion	Intensive	Difference	p-value	
Age married (F)	13.85	13.41	0.44	0.39	14.13	13.45	0.68	0.26	
Age married (M)	13.58	12.94	0.63	0.15	13.86	13.08	0.79	0.25	
Age married (G)	12.00	11.40	0.60	0.47	12.31	11.37	0.94	0.28	
Marriage below age 15 exists (F) $(2 = No, 1 = Yes)$	1.73	1.70	0.03	0.32	1.75	1.73	0.02	0.83	
Marriage below age 15 exists (M) $(2 = No, 1 = Yes)$	1.77	1.64	0.12	0.00	1.81	1.68	0.13	0.17	
Marriage below age 15 common (F) (3 = Very common, 2 = common, 1 = rare)	1.36	1.28	0.08	0.30	1.27	1.27	0.00	0.96	
Marriage below age 15 common (M) $(3 = \text{Very common}, 2 = \text{common}, 1 = \text{rare})$	1.35	1.27	0.08	0.26	1.22	1.24	-0.02	0.85	
Marriage below age 18 exists (F) $(2 = No, 1 = Yes)$	1.50	1.50	0.00	0.97	1.51	1.53	-0.02	0.85	
Marriage below age 18 exists (M) $(2 = No, 1 = Yes)$	1.42	1.57	-0.15	0.00	1.42	1.60	-0.18	0.15	
Marriage below age 18 common (F) $(3 = \text{Very common}, 2 = \text{common}, 1 = \text{rare})$	1.34	1.37	-0.03	0.66	1.26	1.31	-0.05	0.56	
Marriage below age 18 common (M) (3 = Very common, 2 = common, 1 = rare)	1.30	1.43	-0.12	0.02	1.26	1.41	-0.16	0.34	
Age girls should marry (F)	18.16	17.81	0.35	0.05	18.17	17.95	0.22	0.63	
Age girls should marry (M)	17.69	17.91	-0.23	0.21	17.97	18.09	-0.12	0.77	
Age girls should marry (B)	18.35	17.89	0.46	0.04	18.51	18.06	0.45	0.21	
Age girls should marry (G)	17.90	18.44	-0.54	0.00	18.04	18.59	-0.55	0.12	
Age boys should marry (F)	20.57	20.15	0.42	0.04	20.66	20.15	0.51	0.21	
Age boys should marry (M)	20.28	20.84	-0.56	0.02	20.40	20.94	-0.54	0.27	
Age boys should marry (B)	20.43	19.83	0.60	0.06	20.68	20.01	0.68	0.36	
Age boys should marry (G)	20.10	20.61	-0.52	0.01	20.37	20.75	-0.38	0.41	
How is marriage below age 15 perceived (F) $(2 = Negatively, 1 = positively)$	1.89	1.90	-0.01	0.65	1.93	1.92	0.00	0.90	
How is marriage below age 15 perceived (M) (2 = Negatively, 1 = positively)	1.84	1.86	-0.02	0.48	1.90	1.88	0.02	0.74	
How do religious leaders perceive it (F) $(2 = Do not support, 1 = support)$	1.87	1.92	-0.05	0.04	1.90	1.92	-0.01	0.77	
How do religious leaders perceive it $(M)$ (2 = Do not support, 1 = support)	1.79	1.92	-0.13	0.00	1.86	1.92	-0.06	0.38	
How do influential community members view early marriage? (F) $(3 = \text{Bad}, 2 = \text{normal}, 1 = \text{good})$	2.69	2.86	-0.17	0.00	2.77	2.88	-0.11	0.21	
How do influential community members view early marriage? (M) $(3 = \text{Bad}, 2 = \text{normal}, 1 = \text{good})$	2.63	2.73	-0.09	0.04	2.74	2.76	-0.01	0.91	
Attends school (G) $(2 = No, 1 = Yes)$	1.16	1.15	0.01	0.62	1.16	1.14	0.02	0.74	
What is the highest grade completed? (H)	5.18	5.08	0.10	0.68	5.15	5.22	-0.07	0.90	
At what age did [Name] discontinue schooling? (H)	16.15	15.63	0.52	0.19	16.19	15.90	0.28	0.74	
How old were you when you stopped school? (G)	13.03	12.76	0.27	0.59	13.29	12.85	0.44	0.48	
Share of time spent on work (H)	0.38	0.39	-0.01	0.46	0.38	0.38	0.00	0.94	
Share of time spent on school (H)	0.37	0.41	-0.04	0.00	0.37	0.42	-0.05	0.35	
Share of time spent on leisure (H)	0.25	0.20	0.05	0.00	0.25	0.20	0.06	0.11	
Was there a bride price for the girl? (F) $(2 = No, 1 = Yes)$	1.36	1.30	0.06	0.29	1.34	1.30	0.04	0.74	
Was there a bride price for the girl? (M) $(2 = No, 1 = Yes)$	1.33	1.40	-0.06	0.21	1.29	1.38	-0.09	0.52	
Was there a bride price for the girl? (G) $(2 = No, 1 = Yes)$	1.47	1.59	-0.11	0.20	1.45	1.55	-0.09	0.66	
Total consumption (H)	28252.75	35280.85	-7028.10	0.08	28232.36	33845.89	-5613.53	0.52	
Decision-making index (F)	0.66	0.74	-0.08	0.01	0.66	0.74	-0.08	0.32	
Decision-making index (M)	0.27	0.19	0.08	0.18	0.27	0.23	0.04	0.73	
Sex coercion index (F)	0.80	0.81	-0.01	0.48	0.81	0.83	-0.02	0.73	
Sex coercion index (M)	0.63	0.63	0.00	0.90	0.68	0.64	0.04	0.53	
Violence index (M)	0.50	0.44	0.07	0.01	0.52	0.46	0.05	0.48	
Voice index (M)	1.55	1.65	-0.10	0.00	1.55	1.68	-0.13	0.21	
Have you heard of the new criminal code (F) $(2 = No, 1 = Yes)$	1.77	1.62	0.15	0.00	1.79	1.63	0.16	0.17	
Age law states for girls to marry (F)	18.24	17.85	0.39	0.18	18.43	17.95	0.48	0.30	

# Table 22: Sample Characteristics, Pre- and Post-Weighting, Alternative Threeway Weights, Comparing Intensive Treatment vs. Expansion Treatment

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Age married (F)13.8513.410.440.3914.2613.550.720.26Age married (M)13.5812.940.630.1514.2613.550.720.26Marriage below age 15 exists (P) (2 = No, 1 = Yes)1.731.700.030.321.741.740.000.99Marriage below age 15 exists (M) (2 = No, 1 = Yes)1.771.640.120.001.801.660.150.020.84Marriage below age 15 common (P) (3 = Very common, 2 = common, 1 = rare)1.351.270.080.301.271.23-0.020.84Marriage below age 15 common (M) (3 = Very common, 2 = common, 1 = rare)1.351.270.080.261.211.23-0.020.82Marriage below age 18 exists (F) (2 = No, 1 = Yes)1.421.57-0.150.001.401.56-0.170.15Marriage below age 18 common (F) (3 = Very common, 2 = common, 1 = rare)1.341.37-0.020.221.240.39-0.020.28Marriage below age 18 common (F) (3 = Very common, 2 = common, 1 = rare)1.341.37-0.030.661.251.35-0.100.30Marriage below age 18 common (F) (3 = Very common, 2 = common, 1 = rare)1.341.37-0.021.271.49-0.220.24Age girls should marry (M)17.6917.91-0.230.21118.0017.620.380.37Age girls should marry (M)20.25720.150.460.0418.55 </th
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Age boys should marry (B) $20.43$ $19.83$ $0.60$ $0.06$ $20.86$ $19.99$ $0.87$ $0.30$ Age boys should marry (G) $20.10$ $20.61$ $-0.52$ $0.01$ $20.40$ $20.33$ $0.07$ $0.91$ How is marriage below age 15 perceived (F) (2 = Negatively, 1 = positively) $1.89$ $1.90$ $-0.01$ $0.65$ $1.93$ $1.93$ $0.01$ $0.83$ How is marriage below age 15 perceived (M) (2 = Negatively, 1 = positively) $1.84$ $1.86$ $-0.02$ $0.48$ $1.91$ $1.87$ $0.04$ $0.43$ How do religious leaders perceive it (F) (2 = Do not support, 1 = support) $1.87$ $1.92$ $-0.05$ $0.04$ $1.91$ $1.92$ $-0.01$ $0.81$ How do religious leaders perceive it (M) (2 = Do not support, 1 = support) $1.79$ $1.92$ $-0.13$ $0.00$ $1.86$ $1.90$ $-0.04$ $0.57$ How do influential community members view early marriage? (F) (3 = Bad, 2 = normal, 1 = good) $2.63$ $2.73$ $-0.09$ $0.04$ $2.75$ $2.67$ $0.08$ $0.48$ How do influential community members view early marriage? (M) (3 = Bad, 2 = normal, 1 = good) $2.63$ $2.73$ $-0.09$ $0.04$ $2.75$ $2.67$ $0.08$ $0.53$ Attends school (G) (2 = No, 1 = Yes) $1.16$ $1.15$ $0.01$ $0.62$ $1.16$ $1.19$ $-0.03$ $0.63$
Age boys should marry (G) $20.10$ $20.61$ $-0.52$ $0.01$ $20.40$ $20.33$ $0.07$ $0.91$ How is marriage below age 15 perceived (F) (2 = Negatively, 1 = positively) $1.89$ $1.90$ $-0.01$ $0.65$ $1.93$ $1.93$ $0.01$ $0.83$ How is marriage below age 15 perceived (M) (2 = Negatively, 1 = positively) $1.84$ $1.86$ $-0.02$ $0.48$ $1.91$ $1.87$ $0.04$ $0.44$ How do religious leaders perceive it (F) (2 = Do not support, 1 = support) $1.87$ $1.92$ $-0.05$ $0.04$ $1.91$ $1.92$ $-0.01$ $0.81$ How do religious leaders perceive it (M) (2 = Do not support, 1 = support) $1.79$ $1.92$ $-0.13$ $0.00$ $1.86$ $1.90$ $-0.04$ $0.57$ How do influential community members view early marriage? (F) (3 = Bad, 2 = normal, 1 = good) $2.63$ $2.73$ $-0.09$ $0.42$ $2.75$ $2.67$ $0.08$ $0.53$ Attends school (G) (2 = No, 1 = Yes) $1.16$ $1.15$ $0.01$ $0.62$ $1.16$ $1.19$ $-0.03$ $0.63$
How is marriage below age 15 perceived (F) $(2 = Negatively, 1 = positively)$ 1.891.90-0.010.651.931.930.010.83How is marriage below age 15 perceived (M) $(2 = Negatively, 1 = positively)$ 1.841.86-0.020.481.911.870.040.44How do religious leaders perceive it (F) $(2 = Do not support, 1 = support)$ 1.871.92-0.050.041.911.92-0.010.81How do religious leaders perceive it (M) $(2 = Do not support, 1 = support)$ 1.791.92-0.130.001.861.90-0.040.57How do religious leaders perceive it (M) $(2 = Do not support, 1 = support)$ 2.692.86-0.170.002.792.84-0.060.48How do influential community members view early marriage? (F) $(3 = Bad, 2 = normal, 1 = good)$ 2.632.73-0.090.042.752.670.080.53Attends school (G) $(2 = No, 1 = Yes)$ 1.161.150.010.621.161.19-0.030.63
How is marriage below age 15 perceived (M) (2 = Negatively, 1 = positively)1.841.86 $-0.02$ 0.481.911.870.040.44How do religious leaders perceive it (F) (2 = Do not support, 1 = support)1.871.92 $-0.05$ 0.041.911.92 $-0.01$ 0.81How do religious leaders perceive it (M) (2 = Do not support, 1 = support)1.791.92 $-0.13$ 0.001.861.90 $-0.04$ 0.57How do influential community members view early marriage? (F) (3 = Bad, 2 = normal, 1 = good)2.692.86 $-0.17$ 0.002.752.84 $-0.06$ 0.48How do influential community members view early marriage? (M) (3 = Bad, 2 = normal, 1 = good)2.632.73 $-0.09$ 0.042.752.670.080.53Attends school (G) (2 = No, 1 = Yes)1.161.150.010.621.161.19 $-0.03$ 0.63
How do religious leaders perceive it (F) (2 = Do not support, 1 = support) $1.87$ $1.92$ $-0.05$ $0.04$ $1.91$ $1.92$ $-0.01$ $0.81$ How do religious leaders perceive it (M) (2 = Do not support, 1 = support) $1.79$ $1.92$ $-0.13$ $0.00$ $1.86$ $1.90$ $-0.04$ $0.57$ How do influential community members view early marriage? (F) (3 = Bad, 2 = normal, 1 = good) $2.69$ $2.86$ $-0.17$ $0.00$ $2.79$ $2.84$ $-0.06$ $0.48$ How do influential community members view early marriage? (M) (3 = Bad, 2 = normal, 1 = good) $2.63$ $2.73$ $-0.09$ $0.04$ $2.75$ $2.67$ $0.08$ $0.53$ Attends school (G) (2 = No, 1 = Yes) $1.16$ $1.15$ $0.01$ $0.62$ $1.16$ $1.19$ $-0.03$ $0.63$
How do religious leaders perceive it (M) (2 = Do not support, 1 = support)1.791.92-0.130.001.861.90-0.040.57How do influential community members view early marriage? (F) (3 = Bad, 2 = normal, 1 = good)2.692.86-0.170.002.792.84-0.060.48How do influential community members view early marriage? (M) (3 = Bad, 2 = normal, 1 = good)2.632.73-0.090.042.752.670.080.53Attends school (G) (2 = No, 1 = Yes)1.161.150.010.621.161.19-0.030.63
How do influential community members view early marriage?(F) (3 = Bad, 2 = normal, 1 = good) $2.69$ $2.86$ $-0.17$ $0.00$ $2.79$ $2.84$ $-0.06$ $0.48$ How do influential community members view early marriage?(M) (3 = Bad, 2 = normal, 1 = good) $2.63$ $2.73$ $-0.09$ $0.04$ $2.75$ $2.67$ $0.08$ $0.53$ Attends school (G) (2 = No, 1 = Yes)1.161.15 $0.01$ $0.62$ 1.161.19 $-0.03$ $0.63$
How do influential community members view early marriage? (M) $(3 = \text{Bad}, 2 = \text{normal}, 1 = \text{good})$ 2.63 2.73 -0.09 0.04 2.75 2.67 0.08 0.53   Attends school (G) $(2 = \text{No}, 1 = \text{Yes})$ 1.16 1.15 0.01 0.62 1.16 1.19 -0.03 0.63
Attends school (G) $(2 = No, 1 = Yes)$ 1.16 1.15 0.01 0.62 1.16 1.19 -0.03 0.63
What is the highest grade completed? (H)   5.18   5.08   0.10   0.68   5.03   4.94   0.10   0.87
At what age did [Name] discontinue schooling? (H) 16.15 15.63 0.52 0.19 16.11 15.50 0.61 0.45
How old were you when you stopped school? (G) 13.03 12.76 0.27 0.59 13.36 12.49 0.87 0.07
Share of time spent on work (H)   0.38   0.39   -0.01   0.46   0.38   0.41   -0.02   0.51
Share of time spent on school (H) 0.37 0.41 -0.04 0.00 0.36 0.39 -0.02 0.64
Share of time spent on leisure (H) 0.25 0.20 0.05 0.00 0.26 0.21 0.05 0.13
Was there a bride price for the girl? (F) $(2 = No, 1 = Yes)$ 1.36 1.30 0.06 0.29 1.32 1.29 0.03 0.76
Was there a bride price for the girl? (M) $(2 = No, 1 = Yes)$ 1.33 1.40 -0.06 0.21 1.27 1.38 -0.11 0.39
Was there a bride price for the girl? (G) $(2 = No, 1 = Yes)$ 1.47 1.59 -0.11 0.20 1.42 1.51 -0.09 0.66
Total consumption (H)   28252.75   35280.85   -7028.10   0.08   28993.19   36894.00   -7900.81   0.39
Decision-making index (F) 0.66 0.74 -0.08 0.01 0.67 0.70 -0.03 0.74
Decision-making index (M) 0.27 0.19 0.08 0.18 0.27 0.24 0.02 0.85
Sex coercion index (F) 0.80 0.81 -0.01 0.48 0.82 0.82 0.00 0.93
Sex coercion index (M) 0.63 0.63 0.00 0.90 0.68 0.64 0.04 0.44
Violence index (M)   0.50   0.44   0.07   0.01   0.52   0.42   0.10   0.17
Voice index (M) 1.55 1.65 -0.10 0.00 1.54 1.64 -0.10 0.27
Have you heard of the new criminal code (F) (2 = No, 1 = Yes) 1.77 1.62 0.15 0.00 1.80 1.58 0.22 0.04
Age law states for girls to marry (F) 18.24 17.85 0.39 0.18 18.44 17.82 0.62 0.11

Table 23: Sample Characteristics, Pre- and Post-Weighting, Threeway Weighting Using Variables Selected by Lasso Regression, Comparing Intensive Treatment vs. Expansion Treatment

Age married (F)ExpansionIntensiveDifferencep-valueExpansionIntensiveDifferencep-valueAge married (M)13.8513.410.440.3914.2112.551.670.01Age married (G)13.5812.940.630.1513.9213.530.390.74Age married (G)11.400.600.4711.7411.650.090.95Marriage below age 15 exists (M) (2 = No, 1 = Yes)1.731.700.030.321.731.490.240.05Marriage below age 15 common (P) (3 = Very common, 2 = common, 1 = rare)1.361.280.080.301.311.150.160.16Marriage below age 18 exists (F) (2 = No, 1 = Yes)1.351.270.080.261.221.26-0.040.67Marriage below age 18 exists (F) (2 = No, 1 = Yes)1.421.57-0.150.000.971.521.370.150.15Marriage below age 18 exists (W) (2 = No, 1 = Yes)1.421.57-0.050.000.971.521.370.150.15Marriage below age 18 common (M) (3 = Very common, 2 = common, 1 = rare)1.341.37-0.030.661.311.34-0.030.65Marriage below age 18 common (M) (3 = Very common, 2 = common, 1 = rare)1.341.37-0.030.661.311.34-0.030.65Age girls should marry (M)1 = Vary common, 2 = common, 1 = rare)1.341.37-0.020.211.82
Age married (F)13.8513.410.440.3914.2112.551.670.01Age married (M)13.5812.940.630.1513.9213.530.390.74Age married (G)12.0011.400.600.4711.7411.650.090.95Marriage below age 15 exists (F) (2 = No, 1 = Yes)1.731.700.030.321.731.490.240.05Marriage below age 15 exists (M) (2 = No, 1 = Yes)1.771.640.120.001.801.540.250.00Marriage below age 15 common (F) (3 = Very common, 2 = common, 1 = rare)1.361.280.080.301.311.150.160.16Marriage below age 18 exists (F) (2 = No, 1 = Yes)1.501.500.000.971.521.370.150.15Marriage below age 18 exists (M) (2 = No, 1 = Yes)1.501.500.000.971.521.370.150.15Marriage below age 18 common (M) (3 = Very common, 2 = common, 1 = rare)1.341.37-0.030.661.311.34-0.030.65Marriage below age 18 common (M) (3 = Very common, 2 = common, 1 = rare)1.341.37-0.030.661.311.34-0.030.65Marriage below age 18 common (M) (3 = Very common, 2 = common, 1 = rare)1.301.43-0.120.021.321.36-0.040.65Age girls should marry (F)1.7617.7617.810.350.0518.3618.100.25 </th
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Marriage below age 18 exists (F) $(2 = No, 1 = Yes)$ 1.501.500.000.971.521.370.150.15Marriage below age 18 exists (M) $(2 = No, 1 = Yes)$ 1.421.57-0.150.001.461.440.020.89Marriage below age 18 common (F) $(3 = Very common, 2 = common, 1 = rare)$ 1.341.37-0.030.661.311.34-0.030.65Marriage below age 18 common (M) $(3 = Very common, 2 = common, 1 = rare)$ 1.301.43-0.021.321.36-0.040.65Age girls should marry (F)18.1617.810.350.0518.3618.100.250.49Age girls should marry (B)17.6917.91-0.230.2118.6317.750.880.00Age girls should marry (G)17.9018.44-0.540.0017.8918.34-0.450.13Age boys should marry (M)20.2820.84-0.560.0220.4821.34-0.860.02Age boys should marry (G)20.2820.84-0.560.0220.4821.34-0.860.02Age boys should marry (G)20.1020.61-0.520.0120.3221.08-0.750.26Age boys should marry (G)20.1020.61-0.520.0120.3221.08-0.750.26How is marriage below age 15 perceived (F) (2 = Negatively, 1 = positively)1.891.90-0.010.651.911.900.01How is marriage below age 15 perceived (M
Marriage below age 18 exists (M) $(2 = No, 1 = Yes)$ 1.421.57-0.150.001.461.440.020.89Marriage below age 18 common (F) $(3 = Very common, 2 = common, 1 = rare)$ 1.341.37-0.030.661.311.34-0.030.65Marriage below age 18 common (M) $(3 = Very common, 2 = common, 1 = rare)$ 1.301.43-0.120.021.321.36-0.040.65Age girls should marry (F)18.1617.810.320.2118.3618.100.250.49Age girls should marry (B)17.6917.91-0.230.2118.0318.04-0.010.97Age girls should marry (G)18.3517.890.460.0418.6317.750.880.00Age boys should marry (B)20.5720.150.420.0017.8918.34-0.450.13Age boys should marry (G)20.2820.84-0.560.0220.4821.34-0.860.02Age boys should marry (G)20.1020.61-0.520.0120.3221.08-0.750.26Age boys should marry (G)20.1020.61-0.520.0120.3221.08-0.750.26How is marriage below age 15 perceived (F) (2 = Negatively, 1 = positively)1.891.90-0.010.651.911.900.010.77How is marriage below age 15 perceived (M) (2 = Negatively, 1 = positively)1.841.86-0.020.481.911.880.030.59<
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How is marriage below age 15 perceived (M) (2 = Negatively, 1 = positively) 1.84 1.86 -0.02 0.48 1.91 1.88 0.03 0.59
How do religious leaders perceive it (F) (2 = Do not support, 1 = support) $1.87$ $1.92$ -0.05 $0.04$ $1.91$ $1.94$ -0.04 $0.46$
How do religious leaders perceive it (M) (2 = Do not support, 1 = support) $1.79$ $1.92$ -0.13 0.00 $1.86$ $1.94$ -0.07 0.28
How do influential community members view early marriage? (F) (3 = Bad, 2 = normal, 1 = good) 2.69 2.86 -0.17 0.00 2.76 2.91 -0.14 0.10
How do influential community members view early marriage? (M) $(3 = \text{Bad}, 2 = \text{normal}, 1 = \text{good})$ 2.63 2.73 -0.09 0.04 2.78 2.78 0.00 0.97
Attends school (G) (2 = No, 1 = Yes) 1.16 1.15 0.01 0.62 1.16 1.15 0.01 0.75
What is the highest grade completed? (H)   5.18   5.08   0.10   0.68   5.23   4.38   0.85   0.17
At what age did [Name] discontinue schooling? (H) 16.15 15.63 0.52 0.19 16.42 15.87 0.55 0.40
How old were you when you stopped school? (G) 13.03 12.76 0.27 0.59 13.19 13.49 -0.30 0.54
Share of time spent on work (H)   0.38   0.39   -0.01   0.46   0.39   0.41   -0.02   0.64
Share of time spent on school (H) 0.37 0.41 -0.04 0.00 0.36 0.36 0.01 0.90
Share of time spent on leisure (H) 0.25 0.20 0.05 0.00 0.25 0.24 0.01 0.78
Was there a bride price for the girl? (F) $(2 = No, 1 = Yes)$ 1.36 1.30 0.06 0.29 1.41 1.33 0.08 0.48
Was there a bride price for the girl? (M) (2 = No, 1 = Yes)   1.33   1.40   -0.06   0.21   1.37   1.38   -0.02   0.93
Was there a bride price for the girl? (G) (2 = No, 1 = Yes) 1.47 1.59 -0.11 0.20 1.45 1.88 -0.43 0.02
Total consumption (H) 28252.75 35280.85 -7028.10 0.08 23746.13 32226.86 -8480.74 0.09
Decision-making index (F) 0.66 0.74 -0.08 0.01 0.71 0.73 -0.02 0.74
Decision-making index (M) 0.27 0.19 0.08 0.18 0.30 0.39 -0.08 0.47
Sex coercion index (F) 0.80 0.81 -0.01 0.48 0.82 0.86 -0.04 0.32
Sex coercion index (M) 0.63 0.63 0.00 0.90 0.65 0.60 0.05 0.31
Violence index (M) 0.50 0.44 0.07 0.01 0.53 0.50 0.03 0.50
Voice index (M) $1.55                                    $
Have you heard of the new criminal code (F) $(2 = N_0, 1 = Yes)$ 1.77 1.62 0.15 0.00 1.80 1.76 0.04 0.71
Age law states for girls to marry (F) 18.24 17.85 0.39 0.18 18.48 17.90 0.58 0.25

Figure 7: Hazard Rate for Being Unmarried at Baseline and Follow-Up, Weighting on Alternative Variables



The figure on the left shows the hazard plot at baseline; the figure on the right, at follow-up. "Treatment" pools the intensive and expansion treatment arms.

Figure 8: Hazard Rate for Being Unmarried at Baseline and Follow-Up, Weighting on Lasso-Selected Variables



The figure on the left shows the hazard plot at baseline; the figure on the right, at follow-up. "Treatment" pools the intensive and expansion treatment arms.

Figure 9: Hazard Plots for Being Unmarried at Baseline and Follow-Up by Different Treatments, Weighted Using Main Weights



The figure on the left shows the hazard plot at baseline; the figure on the right, at follow-up.

	All Hou	iseholds	House with You	eholds ıng Girls
	(1) Ever married	(2) Ever married	(3) Ever married	(4) Ever married
Follow-Up	0.002	0.005	0.006	-0.001
Treatment	(0.01) 0.033 (0.02)	(0.01) 0.008 (0.03)	(0.03) 0.005 (0.04)	(0.03) -0.022 (0.05)
Treatment *	-0.044***	-0.030*	-0.050	-0.017
Follow-Up	(0.02)	(0.02)	(0.03)	(0.03)
Age	$0.021^{***}$	0.020***	0.020***	$0.019^{***}$
Intensive Treatment	(0.00)	(0.00) 0.051 (0.03)	(0.00)	(0.00) 0.029 (0.04)
Intensive Treatment *		-0.024		-0.036
Follow-Up		(0.02)		(0.03)
Constant	-0.207***	-0.197***	$-0.167^{***}$	-0.156***
	(0.04)	(0.04)	(0.05)	(0.06)
Control Mean	0.069	0.067	0.081	0.086
Observations	4254	4254	1586	1586
$R^2$	0.05	0.06	0.05	0.05

Table 24: Regressions of Treatment on Marriage Outcomes, Alternative Weights

This table shows the outcome of regressions of the treatment on whether girls were ever married, on the full sample as well as on the sample of households with young girls at baseline. The alternative weights are used, and standard errors are clustered by kebele. "Treatment" pools the intensive and expansion treatment arms. These results use the household roster data supplemented by the mothers' survey for girls who have left the household.

	All Hou	iseholds	House with You	holds ing Girls
	(1)	(2)	(3)	(4)
	Ever	Ever	Ever	Ever
	married	married	married	married
Follow-Up	0.035	0.013	0.027	0.014
	(0.03)	(0.01)	(0.03)	(0.03)
Treatment	0.018	0.011	0.001	0.004
	(0.02)	(0.03)	(0.03)	(0.04)
Treatment *	-0.078**	-0.040***	-0.058*	-0.040
Follow-Up	(0.03)	(0.01)	(0.03)	(0.03)
Age	$0.024^{***}$	$0.015^{***}$	$0.021^{***}$	$0.014^{***}$
	(0.00)	(0.00)	(0.00)	(0.00)
Intensive Treatment		0.029		0.042
		(0.03)		(0.04)
Intensive Treatment $*$		-0.003		-0.015
Follow-Up		(0.02)		(0.02)
Constant	-0.233***	-0.140**	-0.186***	-0.112*
	(0.05)	(0.06)	(0.05)	(0.06)
Control Mean	0.091	0.063	0.083	0.069
Observations	4254	4254	1586	1586
$R^2$	0.06	0.03	0.06	0.03

Table 25: Regressions of Treatment on Marriage Outcomes, Weighting on Lasso-Selected Variables

This table shows the outcome of regressions of the treatment on whether girls were ever married, on the full sample as well as on the sample of households with young girls at baseline. The lasso-selected variables are used for weighting, and standard errors are clustered by kebele. "Treatment" pools the intensive and expansion treatment arms. These results use the household roster data supplemented by the mothers' survey for girls who have left the household.

	All Households Households with Young Girls			
	(1) Married or promised	(2) Married or promised	(3) Married or promised	(4) Married or promised
Follow-Up	0.021	0.020	0.016	0.013
Treatment	(0.01) -0.012 (0.02)	(0.01) -0.028 (0.02)	(0.03) -0.044* (0.03)	(0.03) - $0.059^{**}$ (0.03)
Treatment *	-0.033	-0.006	-0.022	0.006
Follow-Up	(0.02)	(0.02)	(0.03)	(0.04)
Age	0.010***	0.009***	0.010***	0.009***
Intensive Treatment	(0.00)	(0.00) $0.031^{*}$ (0.02)	(0.00)	$(0.00) \\ 0.024 \\ (0.02)$
Intensive Treatment $*$		-0.036		-0.036
Follow-Up		(0.03)		(0.03)
Constant	-0.083***	-0.069***	-0.052	-0.044
	(0.02)	(0.02)	(0.03)	(0.03)
Control Mean	0.062	0.056	0.077	0.076
Observations	4254	4254	1586	1586
$R^2$	0.02	0.02	0.03	0.04

Table 26: Regressions of Treatment on Marriage Outcomes Using Weighting, Main Weights

This table shows the outcome of regressions of the treatment on whether girls were currently married or promised, on the full sample as well as on the sample of households with young girls at baseline. The main weights are used, and standard errors are clustered by kebele. "Treatment" pools the intensive and expansion treatment arms. These results use the household roster data supplemented by the mothers' survey for girls who have left the household.

	All Households	Households with Young Girls
	(1)	(2)
	Ever	Ever
	married	married
Treatment	-0.028*	-0.051**
	(0.01)	(0.02)
Control Mean	0.086	0.092
Observations	1177	502

Table 27: Regressions of Treatment on Marriage Outcomes Using Augmented Inverse Probability Weighting

This table shows the outcome of regressions of the treatment on whether girls were ever married, on the full sample as well as on the sample of households with young girls at baseline. The main weights are used, and standard errors are corrected to account for the fact the weights were estimated. "Treatment" pools the intensive and expansion treatment arms. These results use the household roster data supplemented by the mothers' survey for girls who have left the household.

	All Hou	ıseholds	House with You	eholds 1ng Girls
	(1)	(2)	(3)	(4)
	Ever	Ever	Ever	Ever
	married	married	married	married
Follow-Up	-0.040*	-0.038*	-0.043*	-0.039
	(0.02)	(0.02)	(0.02)	(0.02)
Treatment	0.022	0.020	-0.008	-0.004
	(0.03)	(0.03)	(0.04)	(0.05)
Treatment *	-0.046*	-0.037	-0.058	-0.029
Follow-Up	(0.03)	(0.02)	(0.03)	(0.03)
Age	$0.028^{***}$	$0.027^{***}$	$0.027^{***}$	$0.026^{***}$
	(0.00)	(0.00)	(0.01)	(0.01)
Intensive Treatment		0.007		0.001
		(0.04)		(0.05)
Intensive Treatment $*$		-0.013		-0.048
Follow-Up		(0.03)		(0.04)
Constant	-0.275***	$-0.261^{***}$	-0.219***	-0.214***
	(0.05)	(0.05)	(0.07)	(0.06)
Control Mean	0.076	0.073	0.081	0.076
Observations	2884	2884	943	943
$R^2$	0.08	0.07	0.09	0.09

Table 28: Regressions of Treatment on Marriage Outcomes Using Weighting, Girls' Survey

This table shows the outcome of regressions of the treatment on whether girls were ever married, on the full sample as well as on the sample of households with young girls at baseline. The main weights are used, and standard errors are clustered by kebele. "Treatment" pools the intensive and expansion treatment arms. These results use the girls' survey data.

	All Hou	ıseholds	House with You	eholds ıng Girls
	(1)	(2)	(3)	(4)
	Ever	Ever	Ever	Ever
	married	married	married	married
Follow-Up	0.030	0.034	0.042	0.047
	(0.02)	(0.02)	(0.04)	(0.05)
Treatment	0.011	0.017	-0.019	-0.011
	(0.03)	(0.04)	(0.04)	(0.05)
Treatment *	-0.057**	-0.080***	-0.065	-0.079
Follow-Up	(0.02)	(0.03)	(0.04)	(0.05)
Age	0.018***	$0.017^{***}$	0.016***	0.017***
	(0.00)	(0.00)	(0.00)	(0.00)
Intensive Treatment		-0.019		-0.020
		(0.04)		(0.04)
Intensive Treatment $*$		$0.037^{*}$		0.016
Follow-Up		(0.02)		(0.04)
Constant	-0.166***	-0.154***	$-0.129^{**}$	-0.130**
	(0.04)	(0.04)	(0.05)	(0.06)
Control Mean	0.082	0.089	0.095	0.107
Observations	2891	2891	1111	1111
$R^2$	0.04	0.04	0.05	0.05

Table 29: Regressions of Treatment on Marriage Outcomes Using Weighting, Restricted Sample, Main Weights

This table shows the outcome of regressions of the treatment on whether girls were ever married, on the full sample as well as on the sample of households with young girls at baseline. The main weights are used, and standard errors are clustered by kebele. "Treatment" pools the intensive and expansion treatment arms. These results use the household roster data supplemented by the mothers' survey for girls who have left the household, and the data are restricted to those households that were present in both baseline and follow-up (recalling that the baseline survey was much larger).

Table 30: Marginal Effects for Ordered Logit Using Alternative Weights: Who Do You Think Should Have a Greater Say in Each of the Following Decisions? (1 = Husband, 2 = Both Jointly, 3 = Wife)

		All Households		Households with Young Girls			
Question	Treatment Status	Odds Ratio	Confidence Interval	p-value	Odds Ratio	Confidence Interval	p-value
Fathers' survey							
Large HH	Control	1.49	0.41 - 5.35		2.31	0.57 - 9.47	
purchases	Treatment	1.10	0.50 - 2.40		1.03	0.42 - 2.51	
Small HH	Control	0.34	0.11 - 1.06		0.37	0.13 - 1.01	
purchases	Treatment	0.64	0.37 - 1.09		0.56	0.29 - 1.07	
When to visit	Control	0.50	0.15 - 1.64		1.99	0.36 - 11.02	
family/friends	Treatment	1.41	0.57 - 3.50		0.92	0.21 - 4.01	
Use of wife's	Control	0.31	0.15 - 0.65		0.37	0.15 - 0.88	
earnings	Treatment	0.49	0.33 - 0.74		0.39	0.14 - 1.05	
Daughter's	Control	0.39	0.11 - 1.40		1.29	0.19 - 8.84	
marriage	Treatment	1.33	0.49 - 3.62		0.69	0.10 - 4.50	
Son's	Control	0.41	0.12 - 1.33	(0.060)	1.05	0.16 - 6.90	
marriage	Treatment	1.61	0.67 - 3.84		1.64	0.17 - 15.63	
Mothers' survey							
Children's	Control	1.67	1.28 - 2.18		3.30	1.41 - 7.75	
education	Treatment	1.93	1.16 - 3.21		3.39	1.66 - 6.91	
Children's	Control	1.55	1.22 - 1.98		2.52	1.24 - 5.11	
marriage	Treatment	2.50	1.42 - 4.43		4.63	2.00 - 10.69	
Use of family	Control	1.34	1.03 - 1.73		1.49	0.71 - 3.14	
planning	Treatment	1.56	1.06 - 2.30		2.10	1.23 - 3.60	
When to visit	Control	1.47	1.17 - 1.85		1.96	0.89 - 4.31	
family/friends	Treatment	1.80	1.25 - 2.61		2.82	1.57 - 5.08	
HH budget	Control	1.40	1.14 - 1.71	(0.000)	1.80	0.95 - 3.40	(0.011)
	Treatment	4.13	2.54 - 6.71		6.37	3.17 - 12.78	
Lending/	Control	1.48	1.13 - 1.93	(0.003)	2.21	0.94 - 5.16	(0.046)
borrowing	Treatment	3.48	2.18 - 5.55		6.85	3.07 - 15.31	

Table 31: Marginal Effects for Ordered Logit Weighting on Lasso-Selected Variables: Who Do You Think Should Have a Greater Say in Each of the Following Decisions? (1 = Husband, 2 = Both Jointly, 3 = Wife)

		All Households		Households with Young Girls			
Question	Treatment Status	Odds Ratio	Confidence Interval	p-value	Odds Ratio	Confidence Interval	p-value
Fathers' survey							
Large HH	Control	1.27	0.50 - 3.22		1.87	0.58 - 6.05	
purchases	Treatment	1.45	0.67 - 3.14		1.27	0.60 - 2.68	
Small HH	Control	0.26	0.11 - 0.59		0.22	0.07 - 0.68	
purchases	Treatment	0.50	0.28 - 0.88		0.42	0.23 - 0.78	
When to visit	Control	0.81	0.26 - 2.47		1.98	0.43 - 9.02	
family/friends	Treatment	1.15	0.49 - 2.74		0.77	0.19 - 3.06	
Use of wife's	Control	0.27	0.14 - 0.54		0.25	0.12 - 0.53	
earnings	Treatment	0.47	0.31 - 0.72		0.31	0.12 - 0.84	
Daughter's	Control	0.47	0.13 - 1.71		1.32	0.19 - 9.19	
marriage	Treatment	1.83	0.61 - 5.48		0.60	0.09 - 3.98	
Son's	Control	0.44	0.13 - 1.56	(0.081)	1.00	0.14 - 7.19	
marriage	Treatment	1.85	0.65 - 5.26		0.83	0.12 - 5.60	
Mothers' survey							
Children's	Control	1.81	1.45 - 2.26		3.77	2.02 - 7.03	
education	Treatment	1.78	1.01 - 3.14		3.44	1.73 - 6.87	
Children's	Control	1.55	1.25 - 1.92		2.53	1.48 - 4.35	
marriage	Treatment	2.43	1.44 - 4.10		4.12	1.77 - 9.61	
Use of family	Control	1.49	1.09 - 2.04		2.38	1.06 - 5.35	
planning	Treatment	1.42	0.90 - 2.25		2.02	1.18 - 3.45	
When to visit	Control	1.49	1.24 - 1.80		2.18	1.32 - 3.60	
family/friends	Treatment	1.63	1.05 - 2.53		2.77	1.52 - 5.07	
HH budget	Control	1.43	1.23 - 1.65	(0.000)	1.97	1.34 - 2.90	(0.007)
	Treatment	3.85	2.35 - 6.31		5.74	2.85 - 11.57	
Lending/	Control	1.51	1.20 - 1.91	(0.090)	2.38	1.25 - 4.54	(0.095)
borrowing	Treatment	2.76	1.41 - 5.39		5.38	2.26 - 12.82	

		All Households			House	nolds with You	ung Girls
	Treatment	Odds	Confidence		Odds	Confidence	
Question	Status	Ratio	Interval	p-value	$\operatorname{Ratio}$	Interval	p-value
Earns money	Control	3.06	1.34 - 7.01		3.28	1.29 - 8.34	
	Treatment	2.98	1.10 - 8.11		4.70	0.88 - 25.09	
Wife decides	Control	0.72	0.28 - 1.85		0.54	0.24 - 1.21	
how money is spent	Treatment	7.29	2.16 - 24.65	(0.004)	2.56	0.28 - 23.75	
Wife and husband jointly	Control	1.81	0.58 - 5.66		2.26	0.81 - 6.29	
decide how money is spent	Treatment	0.10	0.02 - 0.44	(0.004)	0.20	0.01 - 2.74	(0.088)

Table 32: Marginal Effects Using Alternative Weights, Mothers' Survey: Logistic Regressions on Earning and Spending

This table presents the average marginal effects of moving from the pre-treatment (baseline) to post-treatment (follow-up) period, for the treatment and control group, pooling the intensive and expansion treatment arms. Odds ratios and 95% confidence intervals are provided. The final column indicates the significance of any differences between the treatment and control group between baseline and follow-up (i.e. the p-value on the interaction between treatment and follow-up, if significant).

Table 33: Marginal Effects Weighting on Lasso-Selected Variables, Mothers' Survey: Logistic Regressions on Earning and Spending

		All Households			Housel	nolds with You	ung Girls
	Treatment	Odds	Confidence		Odds	Confidence	
Question	Status	Ratio	Interval	p-value	Ratio	Interval	p-value
Earns money	Control	3.29	1.71 - 6.30		4.02	2.14 - 7.56	
	Treatment	1.93	1.04 - 3.58		2.82	0.98 - 8.12	
Wife decides	Control	0.57	0.18 - 1.80		0.35	0.08 - 1.53	
how money is spent	Treatment	5.66	1.85 - 17.31	(0.006)	1.94	0.16 - 23.33	
Wife and husband jointly	Control	2.16	0.66 - 7.12		3.03	0.71 - 12.99	
decide how money is spent	Treatment	0.15	0.04 - 0.54	(0.004)	0.32	0.02 - 5.27	

This table presents the average marginal effects of moving from the pre-treatment (baseline) to post-treatment (follow-up) period, for the treatment and control group, pooling the intensive and expansion treatment arms. Odds ratios and 95% confidence intervals are provided. The final column indicates the significance of any differences between the treatment and control group between baseline and follow-up (i.e. the p-value on the interaction between treatment and follow-up, if significant).

Table 34:	Marginal	Effects fo	r Logit	Using	Alterna	ative '	Weights:	Do	You	Think	That	if a	Won	nan
Refuses to	Have Sex	k with Her	Husbar	nd Wh	en He	Wants	Her to,	He I	Has the	he Rigl	nt to	.? (0	) = Y	Yes,
1 = No														

		All Households			Housel	nolds with You	ung Girls
	Treatment	Odds Confidence			Odds	Confidence	
Question	Status	Ratio	Interval	p-value	Ratio	Interval	p-value
Fathers' survey							
Get angry and	Control	2.16	0.68 - 6.82	(0.027)	2.25	0.68 - 7.40	(0.014)
reprimand her	Treatment	0.51	0.29 - 0.88		0.39	0.19 - 0.78	
Refuse to give	Control	2.90	1.00 - 8.43	(0.004)	3.94	0.70 - 22.22	(0.043)
her money	Treatment	0.47	0.28 - 0.80		0.56	0.26 - 1.19	
Use force	Control	1.37	0.47 - 4.01		1.67	0.52 - 5.38	
to have sex	Treatment	0.55	0.34 - 0.88		0.70	0.37 - 1.33	
Have sex with	Control	4.76	1.20 - 18.92	(0.001)	5.16	1.05 - 25.45	(0.006)
another woman	Treatment	0.34	0.20 - 0.57		0.40	0.19 - 0.86	
Mothers' survey							
Get angry and	Control	1.91	1.01 - 3.59		2.50	1.18 - 5.29	
reprimand her	Treatment	1.19	0.67 - 2.12		1.68	1.04 - 2.70	
Refuse to give	Control	2.97	1.41 - 6.25	(0.004)	2.75	1.32 - 5.73	(0.015)
her money	Treatment	0.75	0.45 - 1.25		0.69	0.31 - 1.55	
Use force	Control	2.04	1.05 - 3.97		1.76	0.93 - 3.34	
to have sex	Treatment	1.59	0.87 - 2.91		1.98	1.15 - 3.41	
Have sex with	Control	3.11	1.35 - 7.19	(0.083)	3.32	1.59 - 6.95	(0.003)
another woman	Treatment	1.11	0.49 - 2.52		0.57	0.25 - 1.30	

Table 35:	Marginal Effects for Logit	Weighting on	Lasso-Selected	Variables:	Do You	Think That i	f
a Woman	Refuses to Have Sex with	Her Husband	When He Want	s Her to, I	He Has th	ne Right to'	?
(0 = Yes,	1 = No						

		All Households			Housel	nolds with You	ung Girls
	Treatment	Odds	Odds Confidence		Odds	Confidence	
Question	Status	Ratio	Interval	p-value	Ratio	Interval	p-value
Fathers' survey							
Get angry and	Control	2.70	0.94 - 7.71	(0.007)	2.83	0.78 - 10.19	(0.009)
reprimand her	Treatment	0.46	0.24 - 0.89		0.39	0.19 - 0.78	
Refuse to give	Control	2.81	0.96 - 8.25	(0.005)	4.51	0.68 - 29.92	(0.029)
her money	Treatment	0.42	0.22 - 0.82		0.43	0.18 - 1.05	
Use force	Control	1.88	0.69 - 5.08	(0.034)	2.97	0.64 - 13.87	(0.057)
to have sex	Treatment	0.49	0.23 - 1.02		0.56	0.26 - 1.20	
Have sex with	Control	3.88	1.05 - 14.28	(0.001)	4.46	0.88 - 22.64	(0.011)
another woman	Treatment	0.32	0.20 - 0.53		0.40	0.18 - 0.91	
Mothers' survey							
Get angry and	Control	2.57	1.32 - 4.98		3.10	1.61 - 5.99	(0.071)
reprimand her	Treatment	1.17	0.57 - 2.40		1.51	0.98 - 2.32	
Refuse to give	Control	5.15	1.67 - 15.86	(0.005)	5.54	1.69 - 18.16	(0.007)
her money	Treatment	0.79	0.44 - 1.40		0.73	0.32 - 1.64	
Use force	Control	2.51	1.33 - 4.71		2.05	0.95 - 4.43	
to have sex	Treatment	1.63	0.76 - 3.51		1.92	1.11 - 3.35	
Have sex with	Control	5.16	2.25 - 11.83	(0.040)	5.83	2.40 - 14.18	(0.000)
another woman	Treatment	1.27	0.45 - 3.61		0.57	0.26 - 1.26	

Table 36: Marginal Effects for Logit Using Main Weights, Mothers' Survey: Sometimes a Husband is Annoyed and Angry by Things that his Wife Does. In Your Opinion, is a Husband Justified in Hitting and Beating his Wife in the Following Situation? (0 = Yes, 1 = No)

			All Househole	ds	House	nolds with You	ung Girls
	Treatment	Odds	Confidence		Odds	Confidence	
Question	Status	Ratio	Interval	p-value	Ratio	Interval	p-value
She goes out	Control	3.74	1.87 - 7.50		5.760	2.24 - 14.81	(0.043)
without telling him	Treatment	2.13	1.20 - 3.78		1.840	1.04 - 3.26	
She neglects	Control	2.56	1.31 - 5.03		2.750	1.26 - 6.00	
the children	Treatment	1.55	0.68 - 3.56		1.190	0.43 - 3.28	
She argues	Control	3.42	1.76 - 6.64	(0.020)	3.500	1.42 - 8.62	(0.034)
with him	Treatment	1.22	0.71 - 2.09		1.070	0.58 - 1.97	
She refuses to	Control	3.13	1.92 - 5.11	(0.007)	3.850	2.17 - 6.83	(0.002)
have sex	Treatment	1.11	0.64 - 1.93		0.950	0.50 - 1.81	
She burns	Control	2.84	1.27 - 6.39		2.930	1.37 - 6.24	
the food	Treatment	1.65	0.77 - 3.55		1.600	0.58 - 4.46	

This table presents the average marginal effects of moving from the pre-treatment (baseline) to post-treatment (follow-up) period, for the treatment and control group, pooling the intensive and expansion treatment arms. Odds ratios and 95% confidence intervals are provided. The final column indicates the significance of any differences between the treatment and control group between baseline and follow-up (i.e. the p-value on the interaction between treatment and follow-up, if significant).

Table 37: Marginal Effects for Logit Using Alternative Weights, Mothers' Survey: Sometimes a Husband is Annoyed and Angry by Things that his Wife Does. In Your Opinion, is a Husband Justified in Hitting and Beating his Wife in the Following Situation? (0 = Yes, 1 = No)

			All Househole	ds	Housel	nolds with You	ung Girls
	Treatment	Odds	Confidence		Odds	Confidence	
Question	Status	Ratio	Interval	p-value	Ratio	Interval	p-value
She goes out	Control	3.36	1.58 - 7.15		4.87	1.77 - 13.37	
without telling him	Treatment	2.22	1.09 - 4.52		2.00	0.88 - 4.52	
She neglects	Control	2.55	1.30 - 5.00		2.57	1.03 - 6.38	
the children	Treatment	1.84	0.73 - 4.64		1.35	0.34 - 5.35	
She argues	Control	3.43	1.80 - 6.55	(0.031)	3.77	1.84 - 7.72	(0.069)
with him	Treatment	1.21	0.61 - 2.40		1.24	0.47 - 3.28	
She refuses to	Control	2.97	1.73 - 5.10	(0.021)	3.97	2.17 - 7.26	(0.008)
have sex	Treatment	1.16	0.66 - 2.06		1.08	0.53 - 2.20	
She burns	Control	2.67	1.13 - 6.29		2.28	0.99 - 5.23	
the food	Treatment	1.99	0.85 - 4.65		2.09	0.66 - 6.65	

Table 38: Marginal Effects for Logit Weighting on Lasso-Selected Variables, Mothers' Survey: Sometimes a Husband is Annoyed and Angry by Things that his Wife Does. In Your Opinion, is a Husband Justified in Hitting and Beating his Wife in the Following Situation? (0 = Yes, 1 = No)

			All Household	ls	Households with Young Girls			
	Treatment	Odds	Confidence		Odds	Confidence		
Question	Status	Ratio	Interval	p-value	Ratio	Interval	p-value	
She goes out	Control	6.62	2.61 - 16.77	(0.009)	11.66	3.63 - 37.44	(0.002)	
without telling him	Treatment	1.54	0.90 - 2.64		1.38	0.79 - 2.39		
She neglects	Control	3.66	1.92 - 7.00	(0.078)	4.30	2.38 - 7.77	(0.015)	
the children	Treatment	1.58	0.80 - 3.12		1.01	0.38 - 2.71		
She argues	Control	5.52	2.49 - 12.24	(0.001)	7.67	2.09 - 28.20	(0.006)	
with him	Treatment	1.04	0.61 - 1.77		0.95	0.49 - 1.84		
She refuses to	Control	4.28	2.43 - 7.56	(0.004)	5.32	2.71 - 10.45	(0.001)	
have sex	Treatment	1.12	0.57 - 2.17		0.98	0.49 - 1.97		
She burns	Control	3.49	1.56 - 7.81	(0.090)	4.16	1.91 - 9.05	(0.064)	
the food	Treatment	1.49	0.84 - 2.64		1.51	0.71 - 3.18		

		All	Households		Households with Young Girls					
	(1) School enrollment	(2) School enrollment	(3) Highest grade completed	(4) Highest grade completed	(5) School enrollment	(6) School enrollment	(7) Highest grade completed	(8) Highest grade completed		
Follow-Up	0.191***	0.143***	1.287***	0.994***	0.166***	0.121***	1.385***	1.108***		
Treatment	(0.04) $0.128^{**}$ (0.06)	(0.05) 0.052 (0.06)	(0.26) -0.186 (0.32)	(0.21) -0.399 (0.51)	(0.05) $0.152^{**}$ (0.07)	(0.04) $0.110^{**}$ (0.05)	(0.31) 0.214 (0.36)	(0.30) 0.071 (0.51)		
Treatment *	-0.104**	-0.024	-0.218	0.334	-0.090	-0.073	-0.590	-0.208		
Follow-Up	(0.05)	(0.05)	(0.29)	(0.31)	(0.06)	(0.04)	(0.38)	(0.49)		
Age	-0.035***	-0.034***	$0.596^{***}$	$0.582^{***}$	-0.027***	-0.025***	$0.619^{***}$	$0.597^{***}$		
Intensive Treatment	(0.00)	(0.00) -0.021 (0.06)	(0.04)	(0.05) - $0.439$ (0.53)	(0.01)	(0.01) -0.068 (0.06)	(0.05)	(0.04) -0.502 (0.54)		
Intensive Treatment *		-0.012		-0.060		0.079		0.206		
Follow-Up		(0.05)		(0.26)		(0.06)		(0.40)		
Constant	$1.175^{***}$	1.233***	-4.450***	-3.922***	$1.070^{***}$	1.113***	-4.916***	-4.310***		
	(0.05)	(0.06)	(0.48)	(0.55)	(0.08)	(0.07)	(0.65)	(0.55)		
Control Mean	0.79	0.84	3.95	3.86	0.72	0.79	3.12	3.48		
Observations	2810	2810	2641	2641	904	904	852	852		
$R^2$	0.09	0.08	0.36	0.36	0.08	0.07	0.39	0.37		

Table 39: Regression of Treatment on Education Outcomes Using Weighting, Alternative Weights, Girls' Survey

This table shows the outcome of regressions of the treatment on whether girls were enrolled in school and their highest grade completed. The alternative weights are used, and standard errors are clustered by kebele. "Treatment" pools the intensive and expansion treatment arms.
	All Households				Households with Young Girls			
	(1) School enrollment	(2) School enrollment	(3) Highest grade completed	(4) Highest grade completed	(5) School enrollment	(6) School enrollment	(7) Highest grade completed	(8) Highest grade completed
Follow-Up	0.146***	0.191**	1.254***	1.500**	0.128***	0.155***	1.463***	1.316***
Treatment	(0.05) $0.129^{**}$ (0.06)	(0.07) 0.104 (0.07)	(0.23) -0.186 (0.32)	(0.58) - $0.155$ (0.58)	(0.04) $0.152^{**}$ (0.07)	(0.05) $0.126^{*}$ (0.06)	(0.34) 0.214 (0.36)	(0.43) -0.183 (0.39)
Treatment *	-0.047	-0.078	-0.088	-0.129	-0.055	-0.098*	-0.601	-0.204
Follow-Up	(0.06)	(0.07)	(0.28)	(0.64)	(0.05)	(0.05)	(0.41)	(0.58)
Age	-0.038***	-0.032***	$0.583^{***}$	$0.549^{***}$	-0.030***	-0.025***	$0.617^{***}$	$0.588^{***}$
Intensive Treatment	(0.00)	(0.00) 0.019 (0.04)	(0.04)	(0.03) 0.338 (0.46)	(0.01)	(0.01) -0.032 (0.03)	(0.06)	$(0.03) \\ 0.635^* \\ (0.35)$
Intensive Treatment *		-0.048**		-0.399		0.004		-0.346
Follow-Up		(0.02)		(0.35)		(0.03)		(0.40)
Constant	$1.219^{***}$	1.154***	-4.284***	-3.937***	$1.105^{***}$	1.093***	-4.887***	-4.278***
	(0.05)	(0.06)	(0.52)	(0.64)	(0.08)	(0.09)	(0.75)	(0.47)
Control Mean	0.75	0.81	3.79	3.87	0.72	0.77	3.12	3.26
Observations	2810	2810	2641	2641	904	904	852	852
$R^2$	0.09	0.08	0.32	0.34	0.07	0.06	0.37	0.40

Table 40: Regression of Treatment on Education Outcomes Using Weighting, Weighting on Lasso-Selected Variables, Girls' Survey

This table shows the outcome of regressions of the treatment on whether girls were enrolled in school and their highest grade completed. The lasso-selected variables are used for weighting, and standard errors are clustered by kebele. "Treatment" pools the intensive and expansion treatment arms.

		All Households			Households with Young Girls		
	Treatment	Odds	Confidence		Odds	Confidence	
Question	Status	Ratio	Interval	p-value	Ratio	Interval	p-value
Positively perceived	Control	0.39	0.15 - 0.98		0.42	0.13 - 1.34	
by community	Treatment	2.66	1.35 - 5.24	(0.002)	2.98	1.42 - 6.24	(0.007)
Positively perceived	Control	1.84	0.75 - 4.51		1.16	0.43 - 3.14	
by religion	Treatment	0.35	0.16 - 0.80	(0.009)	0.52	0.22 - 1.19	

Table 41: Marginal Effects for Logit of Treatment on Perceptions of Early Marriage, Alternative Weights

This table presents the average marginal effects of moving from the pre-treatment (baseline) to post-treatment (follow-up) period, for the treatment and control group. "Treatment" pools the intensive and expansion treatment arms. Odds ratios and 95% confidence intervals are provided. The final column indicates the significance of any differences between the treatment and control group between baseline and follow-up (i.e. the p-value on the interaction between treatment and follow-up, if significant).

Table 42: Marginal Effects for Logit of Treatment on Perceptions of Early Marriage, Weighting on Lasso-Selected Variables

		All Households			Households with Young Girls		
	Treatment	Odds	Confidence		Odds	Confidence	
Question	Status	$\operatorname{Ratio}$	Interval	p-value	$\operatorname{Ratio}$	Interval	p-value
Positively perceived	Control	0.53	0.30 - 0.92		0.44	0.21 - 0.92	
by community	Treatment	2.27	1.31 - 3.92	(0.001)	2.54	1.09 - 5.95	(0.003)
Positively perceived	Control	3.11	1.16 - 8.34		2.80	0.74 - 10.54	
by religion	Treatment	0.28	0.09 - 0.86	(0.002)	0.40	0.15 - 1.07	(0.022)

This table presents the average marginal effects of moving from the pre-treatment (baseline) to post-treatment (follow-up) period, for the treatment and control group. "Treatment" pools the intensive and expansion treatment arms. Odds ratios and 95% confidence intervals are provided. The final column indicates the significance of any differences between the treatment and control group between baseline and follow-up (i.e. the p-value on the interaction between treatment and follow-up, if significant).

	All Hou	ıseholds	Households with Young Girls		
	(1) Ever married	(2) Ever married	(3) Ever married	(4) Ever married	
Treatment	-0.052 (0.03)	$-0.065^{*}$ (0.04)	$-0.090^{**}$ (0.04)	$-0.084^{*}$ (0.04)	
Age	$0.022^{***}$ (0.00)	0.022*** (0.00)	$0.024^{***}$ (0.01)	$0.024^{***}$ (0.01)	
Intensive Treatment		0.022 (0.03)	~ /	-0.011 (0.04)	
Constant	$-0.181^{***}$ (0.04)	$-0.181^{***}$ (0.04)	$-0.176^{***}$ (0.06)	-0.178*** (0.06)	
Control Mean Observations $R^2$	$0.096 \\ 1177 \\ 0.06$	$0.096 \\ 1177 \\ 0.06$	$0.110 \\ 502 \\ 0.09$	$0.110 \\ 502 \\ 0.09$	

Table 43: Regressions of Treatment on Marriage Outcomes Using Unweighted Simple Differences

This table shows the outcome of regressions of the treatment on whether girls were ever married. A simple difference is used (comparing treatment and control at follow-up), and standard errors are clustered by kebele. "Treatment" pools the intensive and expansion treatment arms. These results use the household roster data supplemented by the mothers' survey for girls who have left the household.