

# Like father, like son, like mother, like daughter: Intergenerational transmission of intrahousehold gender norms in Ethiopia\*

Jessica Leight

May 1, 2020

## Abstract

This paper draws on a novel large-scale dataset from rural Ethiopia to analyze the intergenerational transmission of male dominance in decision-making. More specifically, I analyze whether male dominance in decision-making, male engagement in household tasks and intimate partner violence in currently formed marital households is correlated with the patterns of male dominance reported in the natal households of both the husband and wife, an analysis conducted for the first time in a developing country context. The empirical results suggest that patterns of male dominance have shifted rapidly in a single generation, and there is very little evidence of any intergenerational transmission. More specifically, the estimated relationships between male dominance in the natal and marital households are varying in sign and statistically insignificant. I present further evidence that this pattern may reflect a very weak intrahousehold correlation in gender norms between husband and wife: male dominance in the natal household is predictive of individual gender norms, but gender norms are on average not similar comparing across spouses.

## 1 Introduction

A large literature primarily in psychology and sociology has established that patterns in spousal relationships, including intimate partner violence, can be transmitted from

---

\*International Food Policy Research Institute, 1210 Eye St. NW. Washington, D.C. 20005. Email: J.Leight@cgiar.org. Thanks to Negussie Deyessa and Vandana Sharma for their collaboration on the Unite for a Better Life randomized controlled trial, and to Samuel Tewolde, Nikita Arora, Kefyalew Asmara, Nikita Aurora, Arsema Solomon, and Muluken Walle for their management of the data collection. I would also like to thank the members of the community advisory board for their oversight of the trial and the support we received from partners including the Ethiopian Public Health Association, Addis Ababa University, EngenderHealth, the Ethiopian Ministry of Health, the Ethiopian National HIV/AIDS Prevention and Control Office (HAPCO) as well as the leadership within the study districts at all administrative levels and the village leaders of the study communities. Funding was provided by the Fondation de France and an anonymous donor.

parents to children, and accordingly adults who were exposed to certain intrahousehold dynamics in childhood face an increased probability of replicating those dynamics in their own relationships later in life. However, this literature is primarily drawn from developed countries where detailed longitudinal data around intrafamilial relationships is more commonly available. Evidence from the United States, for example, suggests that intergenerational transmission of gender norms and gender attitudes has been significant over the last fifty years, a period of rapid shifts in women's roles and status (Moen et al., 1997; Min et al., 2012; Liefbroer and Elzinga, 2012).

In developing countries, by contrast, much less is known about how broader patterns of male dominance in decision-making, in addition to the explicit use of violence, are reproduced across generations. Gender gaps favoring men in the developing world are dramatic, persistent, and seemingly undergirded by deeply rooted attitudes (Jayachandran, 2015). Accordingly, understanding whether and how these gender-discriminatory norms and practices transmit across generations is important both for a deeper understanding of women's welfare and because of the substantial economic consequences of these norms (Duflo, 2012). Given the evidence from the developed world, it is plausible to hypothesize that the cross-generational correlation in gender norms will be strong even in developing country contexts characterized by rapid social transformation.

This paper draws on a novel large-scale dataset from rural Ethiopia to describe the intergenerational transmission of male dominance in decision-making, seeking to analyze two relatively simple questions for the first time. First, is the pattern of male dominance in decision-making observed in currently formed marital households, as well as male engagement in household work, correlated with the pattern of male dominance in decision-making reported in the husband's or wife's natal household? Second, is the pattern of intimate partner violence (IPV) in the marital household correlated with male dominance in the natal households? In addition, the analysis draws on reports of male dominance and engagement provided by both spouses, enabling an additional analysis of the concordance of spousal relationship patterns as perceived by the husband and wife.

Using a sample of 11,835 individuals (5945 men and 5890 women) surveyed in four rural districts in Ethiopia in 2017, I present some novel stylized facts. First, patterns of male dominance in household decision-making in this context have shifted rapidly in a single generation: current adult respondents, both male and female, generally state that their own fathers dominated decision-making in their natal households, but report a much more heterogeneous pattern of male dominance in decision-making in their current, marital households. Interestingly, as these patterns shift, it seems that decision-making is not necessarily perceived to be consistent comparing across husband and wife. When contemporaneous reports of male dominance in decision-making in the same households

provided by the husband and wife separately are matched, only between 30% and 40% of spousal pairs report agreement.

Second, there is very little evidence of any intergenerational transmission of male dominance in decision-making. In other words, men and women who report their natal households were characterized by (atypically) more equitable patterns of decision-making do not exhibit more equitable patterns of decision-making or reduced levels of IPV in their own marital households. This pattern is consistent across domains of decision-making and male engagement; it is consistent when examining transmission from either the husband's or wife's natal household; and it is consistent when examining decision-making reported by either the husband or the wife. Similarly, in a context characterized by generally high levels of IPV (nearly 60% of women report experience of emotional violence in the last year, and over 40% report experience of physical and/or sexual violence), there is no evidence of intergenerational transmission between patterns of decision-making in the natal household and current reported IPV in the marital household.

To sum up, this paper provides the first evidence of the dependence across generations of gender dynamics within marriages in a developing country context. The findings suggest there is little intergenerational persistence in intrahousehold decision-making patterns. Similarly, gender dynamics in the natal household do not predict patterns of intimate partner violence in the marital household. These results stand in dramatic contrast to the literature from the developed world, and suggest that the intergenerational reproduction of norms in Ethiopia has followed a very different pattern.

This evidence adds to an extremely limited literature around intergenerational transmission of intrahousehold norms in a developing country context. There is a large literature around intergenerational transmission of intimate partner violence in psychology and sociology, generally concluding that individuals exposed to violence as children have a moderately higher risk of engagement in a violent relationship (as perpetrator or victim) as adults; a useful meta-analysis is provided in Stith et al. (2000). However, the vast majority of this literature analyzes data from developed countries, primarily the U.S. There is a more limited body of evidence from developing countries, including Nicaragua (Ellsberg et al., 1999), India (Burton et al., 2000), South Africa (Abrahams and Jewkes, 2005; Gass et al., 2011), Thailand (Kerley et al., 2010), Bangladesh (Islam et al., 2014), and Burundi (Crombach and Bambonyé, 2015).

Similarly, there is a large literature analyzing intergenerational transmission of marriage and family norms, gender norms, and marriage and partnering practices (broadly defined) in the U.S.; relevant recent papers include Liefbroer and Elzinga (2012), Min et al. (2012), Cunningham and Thornton (2006), Schofield and Abraham (2017) and Dush et al. (2018). However, the literature on intergenerational transmission of gender

norms in developing countries is minimal. One recent paper analyzes the transmission of norms around gender equity from parents to adolescent girls in Haryana, India, and finds that parents (especially mothers) have a substantial influence on their children’s reported gender discriminatory attitudes (Dhar et al., 2019). A second paper finds evidence that parents transmit their beliefs about the relative ability of girl vis-a-vis boys in mathematics to their children, and via children to their peers, in China (Eble and Hu, 2019). To my knowledge, however, there is no evidence around the transmission of gender norms from adults’ natal households to their marital households in a developing country context.

This paper also contributes to a broader literature analyzing transmission of economic attitudes across generations, including attitudes toward risk, trust, work, patience and fertility. Fernández (2017) provides a useful overview. However, this literature is substantially theoretical (Doepke and Zilibotti, 2005, 2008), and those papers that do analyze empirical evidence primarily draw on data from Germany (Dohmen et al., 2011) or the U.S. (Fernández and Fogli, 2009; Farré and Vella, 2013). However, one recent paper analyzes the intergenerational transmission of attitudes toward risk in Burkina Faso (Wolff, 2019), and a second provides evidence of differential transmission of risk norms in matriarchal and patriarchal communities in China (Liu and Zuo, 2019).

A particularly relevant strand of this literature examines intergenerational transmission in attitudes toward women’s roles and women’s work: e.g. Farré and Vella (2013) provide evidence of a statistically significant relationship between attitudes toward women’s roles reported by mothers in the U.S. and the attitudes of their adult children, in addition to some correlation with children’s labor market outcomes in adulthood.<sup>1</sup> In a rare analysis using developing country data, Li and Liu (2019) analyze the intergenerational transmission of women’s labor force engagement in China. However, again none of these papers analyze data around household decision-making or equity within a marriage.

Finally, this paper contributes to a growing recent literature noting that there can be substantial discrepancies in reported decision-making within a household when comparing reports provided by husband and wife; however, the pattern of disagreement seems heterogeneous across contexts. Ambler et al. (2019) documents that women in Bangladesh are systematically more likely than their spouses to report that they own assets and are involved in decision-making within the household. This is consistent with evidence from Ecuador where women report a systematically higher level of engagement in farm management, vis-a-vis their husband’s reports (Twyman et al., 2015). In India and Guatemala, men report generally higher levels of autonomy for their wives than women themselves report, a pattern potentially suggestive of social desirability bias in men’s

---

<sup>1</sup>Fernández et al. (2004) similarly provides evidence of a correlation between exposure to a working mother in childhood among men and their wives’ participation in the labor force, albeit without utilizing any variable directly capturing gender attitudes.

responses (Jejeebhoy, 2002; Becker and Schenck-Yglesias, 2006). Other papers simply note frequent disagreement in perceived decision-making and female autonomy, without a substantial bias in favor of either spouse, in Nepal, Tanzania and a cross-country sample of Asian communities (Allendorf, 2007; Anderson and Gugerty, 2017; Ghuman and Smith, 2006). Most recently, Annan et al. (2019) examine women’s empowerment using data from the Demographic and Health Surveys in 23 sub-Saharan African countries and find that a measure of women’s “taking power” — i.e., when the woman reports a certain level of power and her husband does not concur — is positively correlated with child and reproductive health outcomes.

Relative to the existing literature, this paper makes several contributions. It provides the first evidence around (the absence of) intergenerational transmission of intrahousehold dynamics in a developing country context, and the first evidence of (the absence of) intergenerational transmission between intrahousehold dynamics and intimate partner violence. Accordingly, this paper points to an important direction for the literature to explore further the channels through which gender dynamics can evolve across generations in developing country contexts.

## 2 Empirical strategy

### 2.1 Context and data

This paper draws on two large-scale surveys focused on intimate partner violence and gender norms collected in four districts in rural Ethiopia as part of a broader randomized controlled trial evaluating a culturally appropriate intervention (Unite for a Better Life) targeting intimate partner violence. The sample included sixty-four villages (kebeles) in four districts (Mareko, Meskan, Silte and Sodo) in the Gurague zone of the Southern Nations, Nationalities and People’s Region (SNNPR), randomly selected for inclusion from the sampling frame of all villages within these districts.<sup>2</sup>

All households including a married or cohabiting couple in which the woman was between 18 and 49 years were eligible for inclusion in the sample, and households were selected via simple random sampling. In polygamous households, one woman was selected via simple random sampling. All individuals provided informed oral consent.

The full sample was surveyed twice, in 2014 and 2017. The baseline survey conducted in 2014 included 6670 individuals, 3384 men and 3386 women; only one respondent was surveyed in each household, and the identity of the respondent surveyed (husband or wife)

---

<sup>2</sup>One subvillage (gotte) was selected via simple random sampling within each kebele; subvillages without health extension workers (HEWs) were excluded from the sampling frame. If a subvillage did not have an adequate sample size, the most proximate subvillage was added to create one sampling unit.

was determined based on a within-kebele household-level randomization to the “female survey” or “male survey” subarm. For the endline survey conducted in 2017, all baseline respondents were re-visited, and their spouses were additionally included. This yields a sample of 11,835 individuals, 5945 men and 5890 women. (88% of baseline respondents were surveyed again at endline, and 87% of baseline respondents’ spouses.) The outcomes of interest reported in each survey are described in more detail in the next section.

Analysis of the randomized controlled trial itself is reported in a separate manuscript (Sharma et al., 2019). Unite for a Better Life is a gender-transformative intervention delivered within the context of the Ethiopian coffee ceremony, a culturally established forum for community discussion and conflict resolution. Curricula designed for women, men and couples were developed together with EngenderHealth, and then delivered by Addis Ababa University and the Ethiopian Public Health Association in a series of 14 biweekly sessions facilitated by trained community members.

Ethical approval for the surveys and the associated trial was provided by the Committee on the Use of Humans as Experimental Subjects (COUHES) at the Massachusetts Institute of Technology (protocol number 1211005333) and by the Institutional Review Board at the Addis Ababa University College of Health Sciences (protocol number 044/12/SPH). In addition, a community advisory board comprising key stakeholders and representatives from study districts convened regularly for supervision of all research activities.

## 2.2 Variables of interest

The analysis draws on three primary sets of variables, primarily reported in the endline survey. First, at endline, both male and female respondents were posed a series of questions about male dominance in intrahousehold decision-making and male engagement in household tasks. Second, female respondents reported their experience of intimate partner violence. Our primary analysis links these household-level outcomes to the third set of outcomes of interest: reported male dominance of decision-making in the natal household.

First, I will summarize the available data about male dominance in intrahousehold decision-making. Both spouses are posed an identical set of three questions querying who is primarily responsible for decision-making around three topics: spending decisions for food and clothing, spending decisions for large purchases, and allocation of time to spend with friends, family, or relatives. The available options include yourself only, spouse only, jointly self and spouse, someone else, or jointly self and someone else. For each category, I construct a binary variable for male dominance in the decision equal to one

if the decision is reported to be made by the husband alone.<sup>3</sup> I also construct an index that is the mean of these three binary variables, summarizing whether male dominance is evident in no domains, one or two out of three reported domains, or all domains. In rare cases, a response for one decision-making variable is missing; in that case, the index is constructed as the mean of any binary variables that are reported.

In addition, both spouses are posed an identical set of four questions querying the level of the husband's engagement in four dimensions of household work traditionally performed by women: cooking, cleaning, laundry and care of children. The available options for both spouses include: "I do everything," "usually me", "shared equally", "usually partner", "partner does everything", or "someone else." For each category, I construct a binary variable for male engagement in this domain equal to one if the husband is reported to share equally in or usually manage this task. Again, I construct an index that is the mean of these four binary variables; or, if one of the binary variables is missing, the mean of those variables reported.

Second, female respondents report their experience of intimate partner violence over the preceding 12 months. The module employed is the standard set of questions developed by the World Health Organization querying the respondent as to whether she has experienced a series of specific acts in the domains of emotional, physical and sexual violence. I utilize the standard binary variables identifying whether the respondent has experienced any of the specified forms of IPV in the reference period.

Third, both female and male respondents are posed a nearly identical series of questions around male dominance in intrahousehold decision-making with reference to their natal household. More specifically, they are asked to identify the decision-making pattern that prevailed in decisions around spending for food and clothing, spending for large purchases, and choices around education and activities for children. The variables constructed are parallel to those constructed for decision-making in the current marital household: three binary variables for male decision-making, and a summary index.<sup>4</sup>

One important point to note is that due to constraints on survey length, the questions about decision-making in the natal home were posed in the baseline survey, rather than the endline survey. This has two implications. The sample for analysis of intergenerational transmission must be restricted to the respondents observed at both baseline and endline. Intergenerational transmission of norms from the husband's natal family is analyzed in the first subsample (household assigned to "male survey at baseline"), and

---

<sup>3</sup>Reports of decision-making by an individual other than the spouses were very rare; on average only .5% of respondents across these three questions chose any response other than self, spouse or joint decision-making.

<sup>4</sup>Similar to the question about the current marital household, respondents could also respond "other" to the question about who primarily made decisions in their natal home, and again the binary variable for male dominance is coded as zero for these respondents.

intergenerational transmission of norms from the wife’s natal family is analyzed in the second subsample (household assigned to “female survey at baseline”). Given that assignment to the male or female baseline survey subarm is random, however, these subsamples can be assumed to be similar on both observable and unobservable characteristics.

In addition, patterns of decision-making in the natal and marital homes are not reported contemporaneously. However, since the reports of decision-making in the natal home are retrospective (referring to a period at least thirty years prior, given the average respondent’s age), it is not obvious that the timing of the report is meaningful.

It is also important to note that given the structure of the data, the analysis of intergenerational transmission is constrained to rely on reports by adults of patterns of behavior they observed from their parents in their own natal home. There was no separate survey of the elderly parents; the parents’ age is not reported, but given that male spouses are on average 41 and female spouses on average 34, the estimated age of these respondents’ parents is presumably 55 to 60, and they are generally not co-resident in the same household (and not necessarily living at the point of the survey). Clearly, relying on indirect reports is suboptimal, but the cost implications of separate surveys of natal households was substantial.

However, it is important to note that there is no existing data source to my knowledge that allows for linking of surveys comparing across adults and their elderly parents in a developing country context. Dhar et al. (2019) compares data reported by adolescent girls and their parents in India, and similar data is analyzed in Edmonds et al. (2019). Eble and Hu (2019) also utilize data reported by both middle school children and parents in China. However, these are all examples in which the children were still resident at home and presumably under their parents’ care. Even in the developed country literature, separate linked surveys of adults and their parents are relatively rare. Dohmen et al. (2011) analyzes data on economic attitudes collected directly from young adults and their parents in Germany, but the data on young adults is collected immediately after entry into adulthood (approximately age 18); Farré and Vella (2013) analyze data collected from mothers and adult children in the U.S. at parallel ages (15–22 years).

Given that the focus of this analysis is intergenerational transmission, it seems plausible that relying on adults’ reports of parental decision-making in their natal household will generate bias away from zero: adults are more likely to report that decision-making patterns in their natal households were similar to the patterns that they themselves exhibit, under the hypothesis that they view these patterns as normatively desirable (or simply normal). Accordingly, any evidence of intergenerational transmission that is observed may be plausibly considered to be an upper bound.

## 2.3 Sample size

As previously noted, the core analysis for this sample is restricted to men and women who were surveyed at baseline and endline. For the male sample, this includes 2931 respondents, and 2919 of those individuals reported information about male dominance in the natal households. This is thus the maximum sample for analysis of transmission from the husband’s natal family; the sample in individual regressions may be lower, if certain covariates are missing for some respondents. For the female sample, those respondents surveyed at baseline and endline include 3060 women, and 3053 report information about male dominance in the natal households. Again, this is the maximum sample for analysis of transmission from the wife’s natal family. The number of respondents represented in the full analysis of transmission from the natal family is 5972.

## 2.4 Specification

The base empirical strategy is simple. Variables capturing household decision-making or intimate partner violence reported by individual  $i$  in village  $v$   $Y_{iv}$  are regressed on the index of male dominance in the natal home for the same respondent,  $Natal_{iv}$ . The specification is estimated both with and without additional demographic controls  $\chi_i$  and village fixed effects  $\lambda_v$ . The demographic controls include binary variables for whether the husband and wife reports any education, the age of both spouses, the number of living children reported for the couple, and a dummy equal to one if the household is polygamous.

$$Y_{iv} = Natal_{iv} + \chi_i + \lambda_v + \epsilon_{iv} \quad (1)$$

The richness of the data allows for a number of cross-cutting comparisons. I can analyze transmission of decision-making norms from both the husband’s and the wife’s natal family, to decision-making (and male involvement) as reported by both the husband and the wife. This also allows for an analysis of the alignment in decision-making as reported by both husband and wife. A similar analysis is then conducted analyzing transmission of male dominance in decision-making to intimate partner violence in the current, marital household, as reported by the female spouse.

## 3 Results

### 3.1 Summary statistics

Given the relative novelty of the data employed, it may be useful to first explore some detailed summary statistics. Table 1 provides an overview of the sample’s demographic characteristics, focusing on the sample represented in the analysis of transmission of norms from the husband’s or wife’s natal household; as noted above, this is a total of 5972 observations. Only 56% of men and 27% of women report any education; their average ages are 39 and 32, respectively, and 11% of households are polygamous. The overwhelming majority of households are primarily engaged in subsistence farming. Only 14% of households report electricity, 46% own a radio, 6% own a television, 55% own a mobile phone, and 64% own an ox.

Turning to intrahousehold dynamics, the average index of male dominance in decision-making is around 0.5, and slightly higher when reported by men than for women. Similarly, the average index of male engagement in household chores is 0.19 when reported by men, but 0.09 when reported by women. Intimate partner violence in all its forms is extremely common: nearly 60% of women report experience of past-year emotional IPV, and 42% report experience of past-year physical and/or sexual IPV.

Figure 1 summarizes the key patterns of interest graphically comparing reported decision-making in the natal home and current marital home, for male and female respondents. Both male and female respondents are most likely to report that decision-making in their natal homes was characterized by a pattern of male dominance: around 60% of women and 70% of men report that in their natal home, their fathers were dominant in all three decision-making domains. (Again, the decision-making domains highlighted were spending on food and clothing, spending on large purchases, and decision-making around children.) Around 30% of women and 25% of men report that their fathers were dominant in none of these domains, while very few male or female respondents report any intermediate pattern of shared decision-making.<sup>5</sup>

By contrast, there is much more variation in reported patterns of decision-making in the current marital household, as summarized in Figure 2a. Among female respondents, 39% report that their spouses are not dominant in any of these three domains; 26% report an intermediate pattern in which the husband is dominant in one or two domains; and 34% report that their spouses are dominant in all three domains. Male respondents’ reports are broadly similar, but skewed more to report an intermediate level of dominance

---

<sup>5</sup>Given that only three decision-making domains were highlighted, a pattern of shared decision-making would generally correspond to dominance in one or two out of three domains. However, some respondents did not respond to all three questions, yielding a result of male dominance in one out of two domains.

rather than sole female decision-making (or even, to a limited extent, sole male decision-making). Only 29% of men report they are not dominant in any of the three enumerated domains; 40% of men report an intermediate pattern in which they are dominant in one or two domains, and 30% report that they are dominant in all three. Thus comparing across the natal and marital households as described by both men and women, the share of households reported to be characterized by full male dominance in decision-making was reduced by roughly half in a single generation.

Male involvement in household tasks is reported only for the current marital household and not for the natal household of either spouse, and these reports are summarized in Figure 2b. Among female respondents, 80% report that their husband has no engagement in any of the four traditionally female domains of household tasks (again, these are cooking, cleaning, laundry and childcare). 13% report engagement in one domain, and less than 7% report engagement in more than one domain. Among those female respondents who report engagement in a particular domain, the most common is care of children, followed by laundry.

Among male respondents, by contrast, only 50% report that they have no engagement in any of these household domains. 30% report engagement in one domain, and 10% report engagement in half. Accordingly, men are much more likely to perceive meaningful own-engagement in traditionally female domestic work. Among men who report such engagement, again care of children is the most common task reported. (Both male and female respondents concur that men are least likely to be engaged in cooking.)

To sum up, there are two clear patterns that emerge from this analysis. First, patterns of male dominance in household decision-making in this context have shifted dramatically in only a single generation. Current adult respondents overwhelmingly concur that their own fathers dominated decision-making in their natal households, but report a much more heterogeneous pattern of male dominance in decision-making in their current, marital households. This is true for both male and female respondents. Second, concordance between male and female respondents around current patterns of decision-making and time allocation in the same household is relatively low. Focusing simply on the summary indices of decision-making, only 27% of couples concur on the mean level of male dominance in decision-making. Women are more likely to report no male dominance in any domains, while men are more likely to report that they have dominance in some domains and not others. 41% of couples concur on the mean level of male involvement in traditionally female domains, but this higher level of concordance primarily reflects mutual recognition that the husband has no involvement.

## 3.2 Intergenerational transmission

Table 2 presents the primary evidence around intergenerational transmission, estimating equation (1). The dependent variables are the summary indices of male dominance in decision-making and male engagement in household tasks as previously defined, reported by the husband (in Columns (1), (3), (5) and (7)) or the wife (in Columns (2), (4), (6), and (8)). The independent variables are the summary indices of male dominance in decision-making in the natal household, as reported by the husband or the wife. Again, the analysis of decision-making in the husband’s and wife’s natal households is conducted in two separate subsamples, corresponding to households in the “husband baseline” and “wife baseline” subarms.

It is clear that there is relatively little evidence of intergenerational transmission in male dominance in decision-making. The coefficients of interest are small in magnitude, varying in sign and generally statistically insignificant, and this pattern is consistent when the regressions are estimated both unconditional on covariates (in Panel A) and conditional on covariates, including village fixed effects (in Panel B). The only coefficient that is significant when estimated conditional on covariates is a weakly positive correlation between male dominance in the husband’s natal family and current male dominance as reported by the wife (Column (2) of Panel B). I also report at the bottom of each panel joint test that  $\beta = 0$  estimating across Columns (1) through (4), for the husband’s natal family, and Columns (5) through (8), for the wife’s natal family. The joint tests generally fail to reject the hypothesis that the effects are equal to zero, particularly conditional on covariates. Intuitively, around 30% to 40% of male and female respondents report that their natal household was not characterized by male dominance in all three domains of decision-making, but there is no evidence that these respondents report current patterns of decision-making or time engagement in their marital households that are relatively more equitable vis-a-vis other respondents who report that their natal household was characterized by full male dominance.

Table 3 reports similar evidence around the relationship between male dominance in decision-making in the natal home and current patterns of intimate partner violence as reported by the wife. Again, the coefficients of interest are small and generally statistically insignificant, suggesting that patterns of decision-making in the natal home do not predict IPV. The only coefficient that is significant when estimated conditional on covariates is a weakly positive coefficient suggesting that male dominance in the wife’s natal home predicts experience of sexual intimate partner violence (Column (7) of Panel B), but again the joint tests generally fail to reject the hypothesis that effects are equal to zero, particularly conditional on covariates. Respondents who were exposed to a more equitable pattern of decision-making in their natal home (or whose husbands were exposed to a

more equitable pattern of decision-making) do not show any evidence of a decreased probability of experiencing IPV.

One possible critique of these results is that they may partially reflect the effects of the educational interventions implemented as part of the randomized controlled trial; given evidence presented separately that these interventions were effective in generating some shifts in intrahousehold decision-making and a reduction in IPV, this may have attenuated the correlation between characteristics of the natal household and characteristics of the marital household. In order to evaluate this hypothesis, I re-estimate the primary specification (1) using only the sample of households assigned to the control arm, who were not exposed to any interventions. The results as reported in Table 4 show broadly the same pattern; for concision, only the results estimated conditional on covariates are reported. Parallel to the main sample, there is some weak evidence that reported male dominance in decision-making in the husband's natal family increases male dominance in current decision-making, but again only as reported by the wife (Column (2) of Panel A).

Thus to sum up, there is very little evidence that patterns of decision-making in the spouses' natal households predict patterns of decision-making, male engagement and intimate partner violence in current households in rural Ethiopia. Insofar as there is any evidence of this relationship, it is observed only for male dominance in decision-making as reported by the wife, and sexual IPV. Interestingly, this evidence is in contrast to evidence from developed countries, primarily the U.S., where previous work in the social sciences has suggested that intergenerational transmission of gender norms and gender attitudes remained significant even in periods of rapid social change, e.g. between the 1950s and the 1980s (Moen et al., 1997), and the 1970s and 2000s (Min et al., 2012; Liefbroer and Elzinga, 2012). While speculative, the different pattern observed in this sample would be consistent with the hypothesis that the pace of change in gender roles in developing countries has been much more rapid vis-a-vis what was observed in developed countries over the last half-century.

It is also interesting to note that this absence of intergenerational transmission is observed in a context where major channels for transformation of gender norms (particularly education, exposure to media, and engagement in outside labor) are relatively limited, particularly for women. As previously noted, only 56% of men and 27% of women ever attended school; only 22% of men and 8% of women report completing primary school (six years of education). Exposure to media for men is non-trivial, as 27% report reading a newspaper at least once a week, 31% report watching television at least once a week, and 65% report listening to radio at least once a week. For women, however, exposure is much more limited: only 4% regularly access a newspaper, 31% radio, and 4% televi-

sion. (Given that ownership rates of radio and television are relatively low, this pattern is consistent with the hypothesis that men are accessing media outside the home or in public spaces that are not readily accessible to women.) For outside labor, 18% of men and 25% of women report ever working outside the home, but of this subsample, 89% of men and 94% of women report working for a family member, suggesting likely engagement in a household enterprise that may not necessarily imply significant interaction with non-household members.

However, despite these low levels of exposure to important channels for the transformation of gender norms, this transformation appears to have been substantial over the last two generations. This evidence is also consistent with a broader literature arguing that major social and economic reforms including the reform of the family code in 2000 and the initiation of community-based land registration in 2003 have stimulated a broader shift toward enhanced gender equity in Ethiopia (Holden et al., 2011; Kumar and Quisumbing, 2015).

**Alternate specifications** To further explore the robustness of these results, I estimate several other specifications. First, I re-estimate the primary results using only the sample of monogamous households, given that patterns of decision-making in the small minority (approximately 10%) of polygamous households may be more complex. These results are reported in Table A1. Again, for concision, the table includes only the specifications estimated conditional on covariates. The evidence is generally consistent with the primary results and suggests there is no robust evidence of intergenerational transmission. (The coefficient on sexual IPV remains weakly significant, in Column (7) of Panel B.)

Second, I re-estimate the primary results excluding respondents who report that one of their biological parents was never present in their home when they were growing up. 10% of women and 7% of men report that one parent was never present in the natal home (usually the father); these respondents are posed the same questions around decision-making, but unsurprisingly, they usually report that decision-making was primarily managed by the parent who was present in the home. (There are cases, however, where respondents report both that their father was physically absent and that he dominated decision-making, suggestive perhaps of a migrant worker or otherwise mobile head of household who nonetheless remained influential within the household.) The results reported in Table A2 suggest that the same pattern is observed when the sample is restricted to those who reported that both parents were present.

Third, it may be useful to examine the robustness of the primary results to re-defining the variables capturing male dominance in decision-making. In the primary analysis, male dominance is identified only when the decision is reported to be made by the husband

alone. An alternate definition would identify male dominance when the decision is reported to be made by the husband or by both spouses jointly, implying that women have significant influence only when they are solely responsible for a particular decision; previous work has identified that women’s estimated decision-making power can be extremely sensitive to the precise indicator used in a diverse set of developing country contexts (Peterman et al., 2015). Accordingly, I re-estimate the male dominance variables for both the natal and the marital households using this alternate definition, and then re-estimate the primary specifications as reported in Table A3. The results are again entirely consistent, suggesting that there is no evidence of intergenerational transmission for male dominance in decision-making or intimate partner violence.

**Correlations with socioeconomic status** Another possible relevant channel is a correlation between decision-making in the natal household and current socioeconomic status. If male dominance in the male or female natal household is associated with socioeconomic status in that household and there is some intergenerational transmission of wealth, then households in which spouses have different patterns of exposure to decision-making in childhood may also be characterized by different current socioeconomic status.

Available relevant information to assess socioeconomic status includes an asset index constructed from reports of durable goods owned, a housing index constructed from reports of the house’s physical characteristics, the amount of land reported owned, and a dummy variable for whether the husband’s primary occupation is farming.<sup>6</sup> These variables are reported in parallel by both spouses in the baseline survey, with the exception of the dummy variable for the husband’s primary occupation; due to an error in survey design, this variable is reported only by the wife.

I then estimate the primary specification (1) using measures of household socioeconomic status as dependent variables, and the results are reported in Table 5; again, these estimates are conditional on household demographic variables. In general, the coefficients of interest are statistically insignificant. A joint test across Columns (1) to (3) fails to reject the hypothesis that there is a null effect of the husband’s natal family’s decision-making characteristics on socioeconomic status on average, and a similar joint test across Columns (4) to (7) fails to reject the hypothesis of a null effect of the wife’s natal family’s characteristics. Clearly, this analysis does not allow us to rule out the hypothesis that there is a meaningful correlation between natal family characteristics and the natal family’s contemporaneous socioeconomic status. However, variation in current

---

<sup>6</sup>The asset index is the sum of thirteen binary variables: whether the household reports ownership of the following items: a watch, a radio, a television, a mobile phone, an electric connection, an ox, a cow, a table, a chair, a bed, and a mattress. The housing index is the sum of four binary variables: whether the house has a cement floor, a latrine, a solid roof, and solid walls.

socioeconomic status does not seem to be a meaningful source of bias.

### 3.3 Measurement error in reports of the natal household

One possible interpretation of these results is that they primarily reflect a significant degree of measurement error in reports of decision-making in the natal household. These reports are retrospective following the lapse of a considerable period of time in some cases. Respondents may not have had very precise perceptions of their parents' decision-making processes as children, and it is also clear from the absence of concordance in reports around current household decision-making that these perceptions can differ dramatically within the same family. If there is limited informational signal in these reports, then the pattern of nulls observed may simply reflect this noise.

Here, I present some evidence that there is in fact informational content in the reports of decision-making in the natal home that predicts individual-level variables reported by the current spouses: in particular, age at marriage (presumably directly determined by the natal family), and the spouses' individually reported gender attitudes (as distinct from their reports of decision-making and intimate partner violence in the household). This raises the puzzle as to why patterns in the natal home can be predictive of individual households, but not joint household outcomes. I further demonstrate that assortative matching with respect to spouses' stated views on gender equity and gender norms is low: accordingly, while natal characteristics predict own spouses' characteristics, spouses' characteristics are weakly correlated with each other, and actual patterns of decision-making within the household do not strongly reflect the natal background of either spouse.

First, I analyze whether decision-making characteristics of the natal family predict age at marriage, particularly for the wife. Child marriage (defined as marriage prior to the age of eighteen) remains common in Ethiopia, though its prevalence has declined rapidly over the last ten years. The women in this sample are on average 32 years at the point of survey, and report a median age at marriage of 17; 67% report that they married prior to the age of 18.<sup>7</sup> (By contrast, men report a median age at marriage of 22, and only 10% married prior to age eighteen.) This is broadly consistent with nationwide evidence: Demographic and Health Survey data suggests that women born between the years of 1980 and 1985 (corresponding to the average age in this sample) face an average probability of child marriage of over 70%. DHS data similarly suggests that around 40% of spouses report an average age gap of 2–5 years, and 50% report an average age gap of more than five years (United Nations Children's Fund, 2018).

If male dominance in decision-making in the natal home is a plausible proxy for more

---

<sup>7</sup>The respondents did not report whether the marriage was arranged, though given the early reported marital timing, it is plausible to hypothesize that these were primarily arranged marriages.

traditional gender norms that are favorable to early marriage, it may be plausible to expect a correlation, especially given that age of marriage is presumably determined almost solely by the natal family. To evaluate this relationship, age at marriage for the husband and wife is regressed on decision-making in the natal family, and the results are reported in Panels A and B of Table 6 for estimates unconditional and conditional on covariates respectively. The evidence presented in Columns (1) and (2) suggests that the husband's age at marriage is generally positively correlated with male dominance in the natal household, but that women raised in households with more male dominance in decision-making are younger at marriage: in a household characterized by full male dominance vis-a-vis no male dominance, a daughter marries around .4 years earlier, on average. This is consistent with the hypothesis that traditional and non-equitable gender norms strongly favor early marriage for women, and later marriage for men (consistent with a larger age gap between spouses that would plausibly favor male dominance in decision-making).

Second, I analyze the effects of the natal family's patterns on individual gender attitudes. To measure individual attitudes, each respondent was posed a series of questions about justifications for intimate partner violence and can choose to concur or fail to concur with each justification. The IPV justification index is the sum of all cases in which the respondent concurred that IPV is justified. In addition, each respondent is posed a series of statements summarizing traditional or non-equitable views about gender norms, and can choose to concur or fail to concur; the gender equity index is the sum of a series of binary variables for concurrence. Thus for both indices, a higher value can be interpreted as evidence of less gender-equitable attitudes.

Note that these variables are distinct from the previously examined outcomes linked to household decision-making and intimate partner violence in that they capture individually stated views that are not necessarily shared. Of course it is plausible that spouses' views within a household would be correlated, but it is also perfectly possible for spouses to simply disagree. By contrast, intrahousehold decision-making is assumed to have some objective characteristics, though those characteristics may be (and frequently are) perceived or reported differently by the two spouses.

Table 6 presents the results in Columns (3) through (6). Here, by contrast to the previous results, we generally observe coefficients that are positive and statistically significant, particularly for the male respondents (for the female respondents, significant correlations are observed only unconditional on covariates). The joint tests evaluating whether the coefficients across these specifications in both cases reject this hypothesis at the one percent level, suggesting there is significant transmission between the natal family's patterns of decision-making and individual gender norms.

This returns us to the previously mentioned puzzle. If natal family characteristics predict individual gender-related attitudes, why is there no relationship between these characteristics and patterns of decision-making and intimate partner violence in the marital household? If there was assortative mating (and spouses matched on gender norms), this would be implausible: natal family characteristics would predict individual gender norms, gender norms would match across spouses, and then spouses would presumably converge on a pattern of behavior reflecting these norms that would be shared with (both) natal households.

By contrast, the pattern here seems to be consistent with very limited assortative matching on the dimension of gender norms, and this can be directly confirmed: the within-household correlation in the IPV justification index is only .08, and the within-household correlation in the gender equity index is only .03. Accordingly, spouses who are shaped by their natal family's patterns of gendered decision-making enter a marriage with gender norms that are correlated with this natal family pattern, but cohabit with a spouse who is not necessarily similar. Moreover, they do not seem to exhibit views on gender equity that converge with their spouse's views over time. The realized pattern of decision-making (and IPV) then presumably reflects an unobserved process of bargaining, yielding a weak or null correlation between actual marital patterns and natal family characteristics.

The question of why there is so little assortative matching along the dimension of gender norms is itself an interesting one, though only speculative hypotheses can be identified. Considerable evidence suggests that assortative matching with respect to wealth and/or assets is substantial in Ethiopia (Fafchamps and Quisumbing, 2005a,b), suggesting that other characteristics may be paramount in the marriage market; in addition, spouses' views around gender norms may be hard to observe prior to marriage. Alternatively, there may be specific patterns in the marriage market that generate this divergence: i.e., if women raised in more traditional (gender-inequitable households) are viewed as more attractive partners, they may attract higher status partners who are more educated, but these men themselves may have less traditional gender attitudes (or may evolve less traditional gender attitudes over time) due to their educational or socioeconomic trajectory. These hypotheses remain an interesting direction for future research.

## 4 Conclusion

This paper provides evidence around patterns of intergenerational transmission of gender norms and intimate partner violence in rural Ethiopia, drawing on a novel large-scale dataset in which both male and female respondents report on patterns of decision-making

and male engagement in their marital household as well as their natal households. Several key stylized facts emerge from the analysis. First, patterns of male dominance in intrahousehold decision-making have shifted dramatically in a generation. While at least 60% of both male and female respondents report that their fathers dominated decision-making in their natal households, patterns of male dominance in current marital households are more balanced, with the average household reporting male dominance in around half of the key domains explored. Levels of male engagement in female housework are relatively low. Second, there are non-trivial differences in the perception of decision-making and male engagement as reported by husband and wife.

In the analysis of intergenerational transmission, evidence suggests that there is no correlation between patterns of male dominance in decision-making in the natal household and patterns of decision-making in the current, marital household. Similarly, there is no correlation between male dominance in the natal households and current reports of intimate partner violence in the marital household. The rapid transformation in self-reported decision-making patterns seems to have broken the intergenerational transmission link for intrahousehold decision-making patterns. Further research may benefit from exploring in more detail the processes that shape this evolution.

## References

- Abrahams, Naeemah and Rachel Jewkes**, “Effects of South African Men’s Having Witnessed Abuse of Their Mothers During Childhood on Their Levels of Violence in Adulthood,” *American Journal of Public Health*, 2005, 95 (10), 1811–1816.
- Allendorf, Keera**, “Couples’ Reports of Women’s Autonomy and Health-care Use in Nepal,” *Studies in Family Planning*, 2007, 38 (1), 35–46.
- Ambler, Kate, Cheryl Doss, Caitlin Kieran, and Simone Passarelli**, “He Says, She Says: Spousal Disagreement in Survey Measures of Bargaining Power,” *Economic Development and Cultural Change*, 2019.
- Annan, Jeannie, Aletheia Donald, Markus Goldstein, Paula Gonzalez Martinez, and Gayatri Koolwal**, “Taking Power: Women’s Empowerment and Household Well-being in sub-Saharan Africa,” 2019. World Bank Policy Research Working Paper 9034.
- Burton, Barbara, Nata Duvvury, and Nisha Varia**, “Domestic Violence in India: A Summary Report of a Multi-site Household Survey,” 2000. International Center for Research on Women - INCLEN.
- Crombach, Anselm and Manassé Bambonyé**, “Intergenerational Violence in Burundi: Experienced Childhood Maltreatment Increases the Risk of Abusive Child Rearing and Intimate Partner Violence,” *European Journal of Psychotraumatology*, 2015, 6, 26995.
- Cunningham, Mick and Arland Thornton**, “The Influence of Parents’ Marital Quality on Adult Children’s Attitudes Toward Marriage and its Alternatives: Main and Moderating Effects,” *Demography*, Nov 2006, 43 (4), 659–672.
- Dhar, Diva, Tarun Jain, and Seema Jayachandran**, “Intergenerational Transmission of Gender Attitudes: Evidence from India,” *The Journal of Development Studies*, 2019, 55 (12), 2572–2592.
- Doepke, Matthias and Fabrizio Zilibotti**, “Social Class and the Spirit of Capitalism,” *Journal of the European Economic Association*, 05 2005, 3 (2-3), 516–524.
- and –, “Occupational Choice and the Spirit of Capitalism\*,” *The Quarterly Journal of Economics*, 05 2008, 123 (2), 747–793.

- Dohmen, Thomas, Armin Falk, David Huffman, and Uwe Sunde**, “The Intergenerational Transmission of Risk and Trust Attitudes,” *The Review of Economic Studies*, 11 2011, 79 (2), 645–677.
- Duflo, Esther**, “Women Empowerment and Economic Development,” *Journal of Economic Literature*, December 2012, 50 (4), 1051–79.
- Dush, Claire M. Kamp, Rachel Arocho, Sara Mernitz, and Kyle Bartholomew**, “The Intergenerational Transmission of Partnering,” *PLoS ONE*, 2018, 13 (11), e0205732.
- Eble, Alex and Feng Hu**, “The Sins of the Parents: Persistence of Gender Bias Across Generations and the Gender Gap in Math Performance,” 2019. Columbia SIPA CDEP-CGEG WP No. 53.
- Edmonds, Eric, Benjamin Feigenberg, and Jessica Leight**, “Can a Girl Influence Her Own Schooling in Early Adolescence? Evidence from Rajasthan,” 2019.
- Ellsberg, M C, R Peña, A Herrera, J Liljestrand, and A Winkvist**, “Wife abuse among women of childbearing age in Nicaragua.,” *American Journal of Public Health*, 1999, 89 (2), 241–244. PMID: 9949757.
- Fafchamps, Marcel and Agnes Quisumbing**, “Assets at marriage in rural Ethiopia,” *Journal of Development Economics*, 2005, 77 (1), 1 – 25.
- **and Agnes R. Quisumbing**, “Marriage, Bequest, and Assortative Matching in Rural Ethiopia,” *Economic Development and Cultural Change*, 2005, 53 (2), 347–380.
- Farré, Lúdia and Francis Vella**, “The Intergenerational Transmission of Gender Role Attitudes and its Implications for Female Labour Force Participation,” *Economica*, 2013, 80 (318), 219–247.
- Fernández, Rachel**, “Culture and Economics,” in Steven N. Durlauf and Lawrence E. Blume, eds., *Steven N. Durlauf and Lawrence E. Blume, eds.*, The New Palgrave Dictionary of Economics, Palgrave MacMillan, 2017, pp. 1229–1236.
- Fernández, Raquel, Alessandra Fogli, and Claudia Olivetti**, “Mothers and Sons: Preference Formation and Female Labor Force Dynamics\*,” *The Quarterly Journal of Economics*, 11 2004, 119 (4), 1249–1299.
- **and** – , “Culture: An Empirical Investigation of Beliefs, Work, and Fertility,” *American Economic Journal: Macroeconomics*, January 2009, 1 (1), 146–77.

- Gass, Jesse D., Dan J. Stein, David R. Williams, and Soraya Seedat**, “Gender Differences in Risk for Intimate Partner Violence Among South African Adults,” *Journal of Interpersonal Violence*, 2011, *26* (14), 2764–2789. PMID: 21156693.
- Holden, Stein T., Klaus Deininger, and Hosaena Ghebru**, “Tenure Insecurity, Gender, Low-cost Land Certification and Land Rental Market Participation in Ethiopia,” *The Journal of Development Studies*, 2011, *47* (1), 31–47.
- Islam, Towfiqua Mahfuza, Ismail Tareque, Andrew D. Tiedt, and Nazrul Hoque**, “The Intergenerational Transmission of Intimate Partner Violence in Bangladesh,” *Global Health Action*, 2014, *7*.
- J., Helen J. Lee Ghuman Sharon and Herbert L. Smith**, “Measurement of Women’s Autonomy According to Women and Their Husbands: Results from Five Asian Countries,” *Social Science Research*, 2006, *35* (1), 1 – 28.
- Jayachandran, Seema**, “The Roots of Gender Inequality in Developing Countries,” *Annual Review of Economics*, 2015, *7* (1), 63–88.
- Jejeebhoy, Shireen J.**, “Convergence and Divergence in Spouses’ Perspectives on Women’s Autonomy in Rural India,” *Studies in Family Planning*, 2002, *33* (4), 299–308.
- Kerley, Kent R., Xiaohe Xu, Bangon Sirisunyaluck, and Joseph M. Alley**, “Exposure to Family Violence in Childhood and Intimate Partner Perpetration or Victimization in Adulthood: Exploring Intergenerational Transmission in Urban Thailand,” *Journal of Family Violence*, Apr 2010, *25* (3), 337–347.
- Kumar, Neha and Agnes R. Quisumbing**, “Policy Reform toward Gender Equality in Ethiopia: Little by Little the Egg Begins to Walk,” *World Development*, 2015, *67*, 406 – 423.
- Leigh, Travis W. Reynolds Anderson C. and Mary Kay Gugerty**, “Husband and Wife Perspectives on Farm Household Decision-making Authority and Evidence on Intra-household Accord in Rural Tanzania,” *World Development*, 2017, *90*, 169 – 183.
- Li, Zhongda and Lu Liu**, “Preference or Endowment? Intergenerational Transmission of Women’s Work Behavior and the Underlying Mechanisms,” *Journal of Population Economics*, Oct 2019, *32* (4), 1401–1435.
- Liefbroer, Aart C. and Cees H. Elzinga**, “Intergenerational Transmission of Behavioural Patterns: How Similar are Parents’ and Children’s Demographic Trajectories?,” *Advances in Life Course Research*, 2012, *17* (1), 1 – 10.

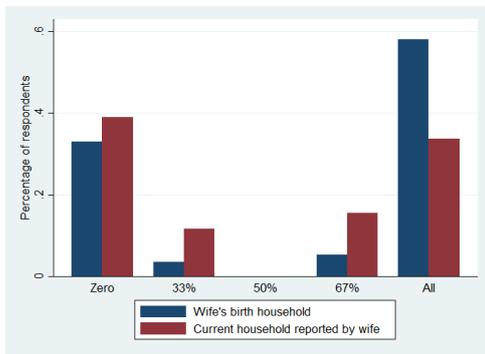
- Liu, Elaine M. and Sharon Xuejing Zuo**, “Measuring the Impact of Interaction Between Children of a Matrilineal and Patriarchal Culture on Gender Differences in Risk Aversion,” *Proceedings of the National Academy of Sciences*, 2019, *116* (14), 6713–6719.
- Min, Joohong, Merrill Silverstein, and Jessica P. Lendon**, “Intergenerational Transmission of Values over the Family Life Course,” *Advances in Life Course Research*, 2012, *17* (3), 112 – 120. Special issue on Intergenerational Relations.
- Moen, Phyllis, Mary Ann Erickson, and Donna Dempster-McClain**, “Their Mother’s Daughters? The Intergenerational Transmission of Gender Attitudes in a World of Changing Roles,” *Journal of Marriage and Family*, 1997, *59* (2), 281–293.
- Peterman, Amber, Benjamin Schwab, Shalini Roy, Melissa Hidrobo, and Daniel Gilligan**, “Measuring Women’s Decisionmaking: Indicator Choice and Survey Design Experiments from Cash and Food Transfer Evaluations in Ecuador, Uganda and Yemen,” 2015. IFPRI Discussion Paper 01453.
- Schofield, T.J. and W.T. Abraham**, “Intergenerational Continuity in Attitudes: A Latent Variable Family Fixed-effects Approach,” *Journal of Family Psychology*, 2017, *31* (8), 1005—1016.
- Sharma, Vandana, Jessica Leight, Fabio Verani, Samuel Tewelde, and Negussie Deyessa**, “Effectiveness of a Culturally Appropriate Intervention to Prevent Intimate Partner Violence and HIV Transmission Among Men, Women and Couples in Rural Ethiopia: Findings from a Cluster Randomized Trial,” 2019. Currently unpublished manuscript.
- Stan, Fannie Fonseca-Becker Becker and Catherine Schenck-Yglesias**, “Husbands’ and Wives’ Reports of Women’s Decision-Making Power in Western Guatemala and Their Effects on Preventive Health Behaviors,” *Social Science and Medicine*, 2006, *62* (9), 2313 – 2326.
- Stith, Sandra, Karen Rosen, and Kimberly Middleton**, “The Intergenerational Transmission of Spouse Abuse: A Meta-analysis,” *Journal of Marriage and the Family*, 2000, *62*, 640–654.
- Twyman, Jennifer, Pilar Useche, and Carmen Diana Deere**, “Gendered Perceptions of Land Ownership and Agricultural Decision-making in Ecuador: Who Are the Farm Managers?,” *Land Economics*, 2015, *91* (3), 479–500.

**United Nations Children’s Fund**, “Ending Child Marriage: A profile of progress in Ethiopia,” 2018. UNICEF, New York.

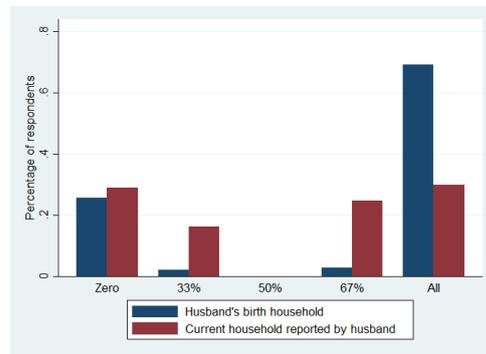
**Wolff, François-Charles**, “The Intergenerational Transmission of Risk Attitudes: Evidence from Burkina Faso,” *Review of Economics of the Household*, Apr 2019.

Figure 1: SUMMARY STATISTICS ON SPOUSAL DECISION-MAKING: NATAL AND MARITAL HOUSEHOLDS

(a) Intergenerational comparison: Women



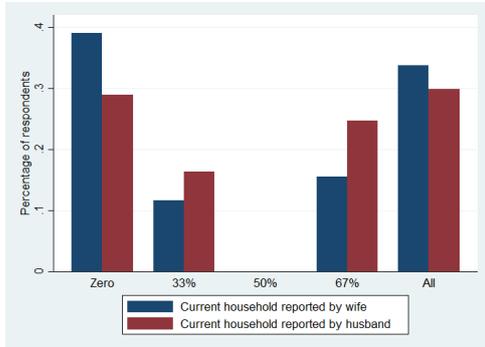
(b) Intergenerational comparison: Men



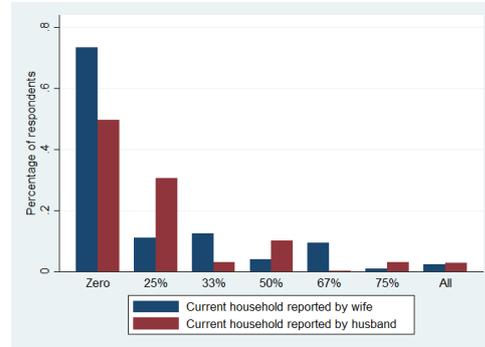
Notes: The graphs summarize reported patterns of male dominance in decision-making as reported by female respondents (in Figure 1a) and male respondents (in Figure 1b) for both their natal home and their current marital home. The x-axis denotes the share of major decisions dominated by the male spouse, with reference to three domains: purchases of food and clothing, large purchases, and time allocation. (In some cases, spouses provide answers to only two questions, and hence men can be reported dominant in one out of two domains.)

Figure 2: SUMMARY STATISTICS ON SPOUSAL DECISION-MAKING: CONCORDANCE BETWEEN SPOUSES

(a) Concordance between spouses: Male dominance in decision-making



(b) Concordance between spouses: Male engagement in household tasks



Notes: The graphs summarize reported patterns of male dominance in decision-making (in Figure 2a) and male engagement in household tasks (in Figure 2b) as reported by female and male respondents. The x-axis in Figure 2a denotes the share of major decisions dominated by the male spouse, with reference to three domains: purchases of food and clothing, large purchases, and time allocation. (In some cases, spouses provide answers to only two questions, and hence men can be reported dominant in one out of two domains.) The x-axis in Figure 2b denotes the share of household tasks in which the male is engaged, with reference to four tasks: cooking, cleaning, laundry and care of children. (Again, in some cases spouses provide answers to a subset of questions, and thus men can be reported engaged in one, two or three out of only three tasks.)

Table 1: Summary statistics

---



---

**Panel A: Demographic variables**

Variable	Mean	Std. dev.	
Any education: husband	.563	.496	5966
Any education: wife	.266	.442	5967
Age: husband	38.675	8.475	5971
Age: wife	31.670	7.060	5969
Polygamous	.108	.311	5972
Primary occupation is agriculture	.88	.325	3049
Household has electricity	.141	.348	5942
Household owns radio	.457	.498	5934
Household owns television	.056	.23	5936
Household owns mobile phone	.549	.498	5923
Household owns ox	.644	.479	5919

**Panel B: Intrahousehold dynamics**

Male dominance in decision-making: Reported by husband	.519	.398	5795
Male dominance in decision-making: Reported by wife	.480	.435	5751
Male engagement in chores: Reported by husband	.194	.244	5700
Male engagement in chores: Reported by wife	.085	.196	5719
Past-year experience of emotional IPV: Reported by wife	.591	.492	5773
Past-year experience of physical IPV: Reported by wife	.210	.407	5748
Past-year experience of sexual IPV: Reported by wife	.369	.483	5743
Past-year experience of physical and/or sexual IPV: Reported by wife	.422	.494	5747

---



---

Notes: This table reports summary statistics for the analysis sample.

# Appendix

Table 2: Intergenerational transmission of household decision-making patterns

	Male dominance decision-making Husband (1)	Male dominance decision-making Wife (2)	Male engagement household domains Husband (3)	Male engagement household domains Wife (4)	Male dominance decision-making Husband (5)	Male dominance decision-making Wife (6)	Male engagement household domains Husband (7)	Male engagement household domains Wife (8)
<b>Panel A: Base estimates</b>								
Male dominance husband's family	-.025 (.019)	.011 (.021)	.020 (.013)	-.006 (.007)				
Male dominance wife's family					.026 (.021)	.010 (.017)	-.023** (.009)	-.010 (.007)
Joint test $\beta = 0$				.220				
Obs.	2919	2809	2902	2813	3001	3039	2910	3003
<b>Panel B: Estimates conditional on covariates</b>								
Male dominance husband's family	-.012 (.019)	.036* (.021)	.002 (.012)	-.002 (.008)				
Male dominance wife's family					-.003 (.021)	-.003 (.016)	-.014 (.009)	-.003 (.007)
Joint test $\beta = 0$				.431				
Obs.	2907	2795	2882	2772	2995	3031	2907	3000
Mean dep. var.	.527	.482	.194	.091	.527	.482	.194	.091

Notes: Each column reports a separate regression. The dependent variable is the summary index of male dominance in decision-making or male engagement in household tasks in the current household, reported by the husband or wife. The independent variables are the summary index of male dominance in the husband's natal family or the wife's natal family, as specified. All regressions in Panel B are estimated conditional on covariates including village fixed effects, binary variables equal to one if the husband and wife reports any education, the age of both spouses, a household wealth index, and a dummy equal to one if the household is polygamous. Asterisks denote significance at the ten, five and one percent level.

Table 3: Intergenerational transmission to intimate partner violence

	Emotional (1)	Physical (2)	Sexual (3)	Physical and/or sexual (4)	Emotional (5)	Physical (6)	Sexual (7)	Physical and/or sexual (8)
<b>Panel A: Base estimates</b>								
Male dominance husband's family	-.056** (.028)	-.003 (.018)	-.013 (.024)	-.024 (.025)				
Male dominance wife's family					.016 (.018)	-.002 (.018)	.041** (.017)	.034* (.018)
Joint test $\beta = 0$				.124				.065
Obs.	2817	2801	2796	2800	3053	3044	3044	3044
<b>Panel B: Estimates conditional on covariates</b>								
Male dominance husband's family	-.013 (.022)	.007 (.017)	.013 (.018)	.003 (.020)				
Male dominance wife's family					-.007 (.017)	-.013 (.018)	.028* (.016)	.018 (.018)
Joint test $\beta = 0$				.117				.227
Obs.	2805	2790	2784	2788	3050	3041	3041	3041
Mean dep. var.	.592	.210	.370	.423	.592	.210	.370	.423

Notes: Each column reports a separate regression. The dependent variables are binary variables equal to one if the wife reports experience of emotional, physical, sexual, or physical and/or sexual intimate partner violence over the last twelve months. The independent variables are the summary index of male dominance in the husband's natal family or the wife's natal family, as specified. All regressions in Panel B are estimated conditional on covariates including village fixed effects, binary variables equal to one if the husband and wife reports any education, the age of both spouses, a household wealth index, and a dummy equal to one if the household is polygamous. Asterisks denote significance at the ten, five and one percent level.

Table 4: Intergenerational transmission: Control arm sample

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Male dominance decision-making Husband Wife	Male engagement household domains Husband	Male engagement household domains Wife	Male dominance decision-making Husband	Male dominance decision-making Wife	Male engagement household domains Husband	Male engagement household domains Wife
<b>Panel A: Intrahousehold dynamics</b>								
Male dominance husband's family	.018 (.043)	.095*** (.033)	.0008 (.020)	-.001 (.012)				
Male dominance wife's family					.074 (.045)	-.004 (.035)	.0009 (.014)	-.002 (.014)
Joint test $\beta = 0$				.432				.567
Obs.	698	679	690	674	746	755	719	751
<b>Panel B: Intimate partner violence</b>								
		Emotional Physical	Sexual	Physical and/or sexual	Emotional Physical	Physical	Sexual	Physical and/or sexual
Male dominance husband's family	.037 (.032)	.034 (.034)	-.008 (.030)	.025 (.030)				
Male dominance wife's family					-.0003 (.030)	.002 (.027)	.034 (.036)	.036 (.036)
Joint test $\beta = 0$				.645				.117
Obs.	681	678	676	678	760	756	756	756

Notes: Each column reports a separate regression, and the sample is restricted to households in the control arm. All specifications are estimated conditional on a set of covariates including village fixed effects, binary variables equal to one if the husband and wife reports any education, the age of both spouses, a household wealth index, and a dummy equal to one if the household is polygamous. The dependent variables in Panel A are the summary index of male dominance in decision-making or male engagement in household tasks in the current household, reported by the husband or wife; the dependent variables in Panel B are indices of experience of intimate partner violence, reported by the wife. The independent variables are the summary index of male dominance in the husband's natal family or the wife's natal family, as specified. Asterisks denote significance at the ten, five and one percent level.

Table 5: Effect of natal family characteristics on current socioeconomic status

	Base estimates			Conditional on covariates			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Land owned	Assets index	Housing index	Land owned	Asset index	Housing index	Farming
Male dominance husband's family	-.063 (.120)	-.008 (.096)	-.011 (.035)				
Male dominance wife's family				-.110 (.084)	.030 (.073)	-.022 (.030)	.005 (.012)
Joint test $\beta = 0$			.897				.255
Obs.	2999	3004	3004	3176	3176	3176	3173

Notes: Each column reports a separate regression, all specifications are estimated conditional on a set of covariates including village fixed effects, binary variables equal to one if the husband and wife reports any education, the age of both spouses, a household wealth index, and a dummy equal to one if the household is polygamous. The dependent variables in Panel A are the summary index of male dominance in decision-making or male engagement in household tasks in the current household, reported by the husband or wife; the dependent variables in Panel B are indices of experience of intimate partner violence, reported by the wife. The independent variables are the summary index of male dominance in the husband's natal family or the wife's natal family, as specified. Asterisks denote significance at the ten, five and one percent level.

Table 6: Intergenerational transmission: individual gender norms

	Age at marriage		IPV justification		Gender equity	
	Husband	Wife	Husband	Wife	Husband	Wife
	(1)	(2)	(3)	(4)	(5)	(6)
<b>Panel A: Base estimates</b>						
Male dominance husband's family	.223 (.185)		.251 (.190)		.218 (.152)	
Male dominance wife's family		-.369*** (.097)		.176** (.076)		.170 (.130)
Joint test $\beta = 0$						.000
Obs.	3005	3149	2919	3053	3016	3179
<b>Panel B: Estimates conditional on covariates</b>						
Male dominance husband's family	.371** (.179)		.402** (.183)		.293** (.126)	
Male dominance wife's family		-.283*** (.098)		.074 (.072)		.163 (.127)
Joint test $\beta = 0$						.005
Obs.	2994	3146	2907	3050	3004	3176

Notes: Each column reports a separate regression. The dependent variables are reported age at marriage for the husband and wife (in Columns 1 and 2) and summary indices of attitudes toward IPV and gender equity (in Columns 3 and 4). The IPV justification index is the sum of all cases in which the respondent concurred that IPV is justified. The gender equity index is the sum of a series of binary variables for concurrence with statements capturing non-equitable gender norms. The independent variables are the summary index of male dominance in the husband's natal family or the wife's natal family, as specified. All regressions in Panel B are estimated conditional on a set of covariates including village fixed effects, binary variables equal to one if the husband and wife reports any education, the age of both spouses, a household wealth index, and a dummy equal to one if the household is polygamous. Asterisks denote significance at the ten, five and one percent level.

Table A1: Intergenerational transmission: Monogamous sample

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Male dominance decision-making Husband Wife	Male engagement household domains Husband	Male engagement household domains Wife	Male dominance decision-making Husband	Male dominance decision-making Wife	Male engagement household domains Husband	Male engagement household domains Wife
<b>Panel A: Intrahousehold dynamics</b>								
Male dominance husband's family	-0.11 (.019)	.042* (.022)	.007 (.013)	-.001 (.009)				
Male dominance wife's family					-.002 (.022)	.003 (.017)	-.013 (.010)	-.003 (.007)
Joint test $\beta = 0$				.341				.678
Obs.	2716	2612	2693	2590	2567	2585	2490	2561
<b>Panel B: Intimate partner violence</b>								
		Emotional	Physical	Sexual	Physical and/or sexual	Emotional	Physical	Sexual
		Physical	Physical and/or sexual	Physical and/or sexual	Physical and/or sexual	Physical	Physical	Physical and/or sexual
Male dominance husband's family	-.008 (.023)	.013 (.017)	.015 (.018)	.002 (.021)				
Male dominance wife's family					-.007 (.019)	-.013 (.020)	.029* (.016)	.020 (.018)
Joint test $\beta = 0$				.334				.159
Obs.	2620	2605	2599	2603	2596	2591	2591	2591

Notes: Each column reports a separate regression, and the sample is restricted to monogamous households. All specifications are estimated conditional on a set of covariates including village fixed effects, binary variables equal to one if the husband and wife reports any education, the age of both spouses, a household wealth index, and a dummy equal to one if the household is polygamous. The dependent variables in Panel A are the summary index of male dominance in decision-making or male engagement in household tasks in the current household, reported by the husband or wife; the dependent variables in Panel B are indices of experience of intimate partner violence, reported by the wife. The independent variables are the summary index of male dominance in the husband's natal family or the wife's natal family, as specified. Asterisks denote significance at the ten, five and one percent level.

Table A2: Intergenerational transmission: Sample reporting both parents present in home

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Male dominance decision-making Husband Wife	Male engagement household domains Husband	Male engagement household domains Wife	Male dominance decision-making Husband	Male dominance decision-making Wife	Male engagement household domains Husband	Male engagement household domains Wife
<b>Panel A: Intrahousehold dynamics</b>								
Male dominance husband's family	-0.10 (.021)	.045** (.022)	.003 (.012)	-.006 (.007)	-.007 (.021)	.0001 (.019)	-.018* (.009)	-.007 (.008)
Male dominance wife's family								
Joint test $\beta = 0$				.250				.315
Obs.	2688	2578	2672	2582	2695	2728	2610	2694
<b>Panel B: Intimate partner violence</b>								
		Emotional Physical	Sexual	Physical and/or sexual	Emotional Physical	Physical	Sexual	Physical and/or sexual
Male dominance husband's family	-.013 (.024)	.001 (.020)	.008 (.021)	-.002 (.024)	-.014 (.018)	-.013 (.020)	.036* (.019)	.028 (.021)
Male dominance wife's family								
Joint test $\beta = 0$				.000				.069
Obs.	2586	2573	2567	2571	2742	2733	2733	2733

Notes: Each column reports a separate regression, and the sample is restricted to monogamous households. All specifications are estimated conditional on a set of covariates including village fixed effects, binary variables equal to one if the husband and wife reports any education, the age of both spouses, a household wealth index, and a dummy equal to one if the household is polygamous. The dependent variables in Panel A are the summary index of male dominance in decision-making or male engagement in household tasks in the current household, reported by the husband or wife; the dependent variables in Panel B are indices of experience of intimate partner violence, reported by the wife. The independent variables are the summary index of male dominance in the husband's natal family or the wife's natal family, as specified. Asterisks denote significance at the ten, five and one percent level.

Table A3: Intergenerational transmission: Alternate definition of male dominance

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Male dominance decision-making Husband	Male dominance decision-making Wife	Male engagement household domains Husband	Male engagement household domains Wife	Male dominance decision-making Husband	Male dominance decision-making Wife	Male engagement household domains Husband	Male engagement household domains Wife
<b>Panel A: Intrahousehold dynamics</b>								
Male dominance husband's family	-.020* (.012)	-.0007 (.013)	.007 (.015)	.009 (.011)				
Male dominance wife's family					-.0005 (.003)	-.005 (.011)	.012 (.010)	-.002 (.008)
Joint test $\beta = 0$				.383				.609
Obs.	2907	2795	2882	2772	2995	3031	2907	3000
<b>Panel B: Intimate partner violence</b>								
	Emotional	Physical	Sexual	Physical and/or sexual	Emotional	Physical	Sexual	Physical and/or sexual
Male dominance husband's family	.012 (.028)	.003 (.027)	.031 (.024)	.034 (.025)				
Male dominance wife's family					-.014 (.021)	-.017 (.019)	.009 (.021)	-.002 (.019)
Joint test $\beta = 0$				.447				.584
Obs.	2805	2790	2784	2788	3050	3041	3041	3041

Notes: Each column reports a separate regression, all specifications are estimated conditional on a set of covariates including village fixed effects, binary variables equal to one if the husband and wife reports any education, the age of both spouses, a household wealth index, and a dummy equal to one if the household is polygamous. The dependent variables in Panel A are the summary index of male dominance in decision-making or male engagement in household tasks in the current household, reported by the husband or wife; the dependent variables in Panel B are indices of experience of intimate partner violence, reported by the wife. The independent variables are the summary index of male dominance in the husband's natal family or the wife's natal family, as specified. An alternate definition of male dominance is employed in which male dominance is identified if a decision is reported to be made by the husband alone, or both spouses jointly. Asterisks denote significance at the ten, five and one percent level.