



Evans School Policy Analysis and Research (EPAR)

**Polygamous Households and Intrahousehold Decision-Making:
Evidence and Policy Implications from Mali and Tanzania**

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Abstract

A large and growing body of scholarship now suggests that many household outcomes, including children's education and nutrition, are associated with a wife's bargaining power and control over household decision-making. In turn, bargaining power in a household is theorized to be driven by a wife's financial and human capital assets - in particular the degree to which these assets contribute to household productivity and/or to the wife's exit options. This paper draws on the detailed Farmer First dataset in Tanzania and Mali to examine husband and wife reports of a wife's share of decision-making authority in polygamous households, where multiple wives jointly contribute to household productivity, and where exit options for any single wife may be less credible. We find that both husbands and wives assign less authority to the wife in polygamous households relative to monogamous households. We also find that a wife's assets are not as strongly associated with decision-making authority in polygamous versus monogamous contexts. Finally, we find that responses to questions on spousal authority vary significantly by spouse in both polygamous and monogamous households, suggesting interventions based on the response of a single spouse may incorrectly inform policies and programs.

Introduction

We consider two possible reasons why we might expect women in polygamous households to have different levels of bargaining power and, in turn, decision-making authority. First, the value of any single wife's assets may be lower in polygamous households if household and farm labor activities, child bearing and rearing, etc., are shared among wives. Standard theory predicts that a

communal household will lead to some free-riding on supplying household public goods, and differential attention to those for which the private returns are possibly higher (e.g. one's own children). Further, once marginal productivity begins to decline, another wife may take over activities. Depending on the structure of the household and whether there is cooperation or competition, a woman's assets—such as her health or education—may be relatively more or less important to household welfare. Another possibility is that a woman's exit options—or her reservation utility—are different in areas where polygamy is common. For example, where gender norms restrict women's market participation, a common asset like education may have a weaker effect on a woman's bargaining power. Similarly, a wife's bargaining power in a polygamous household may be lower than in a monogamous one simply because the polygamous husband has more options (and hence more bargaining power): the husband can choose to take an additional wife, but the wife cannot take an additional husband.

Regardless of the reasoning behind the differences in bargaining power, the amount of decision-making authority the woman has within the household has been found to affect household outcomes. For example, women's share of household income has been linked to increases in the amount spent on food and decreases in the amount spent on alcohol and tobacco (Hoddinott & Haddad, 1995; Gummerson & Schneider, 2013). De Brauw share of income on decisions about contraceptive use. The effect of female spending is also demonstrated on broader measures of household welfare - including (2014) notes a significant impact of increasing women's improved nutritional and health outcomes (Bhagowalia et

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Please direct comments or questions about this research to Principal Investigators Leigh Anderson and Travis Reynolds at epar.evans.uw@gmail.com.

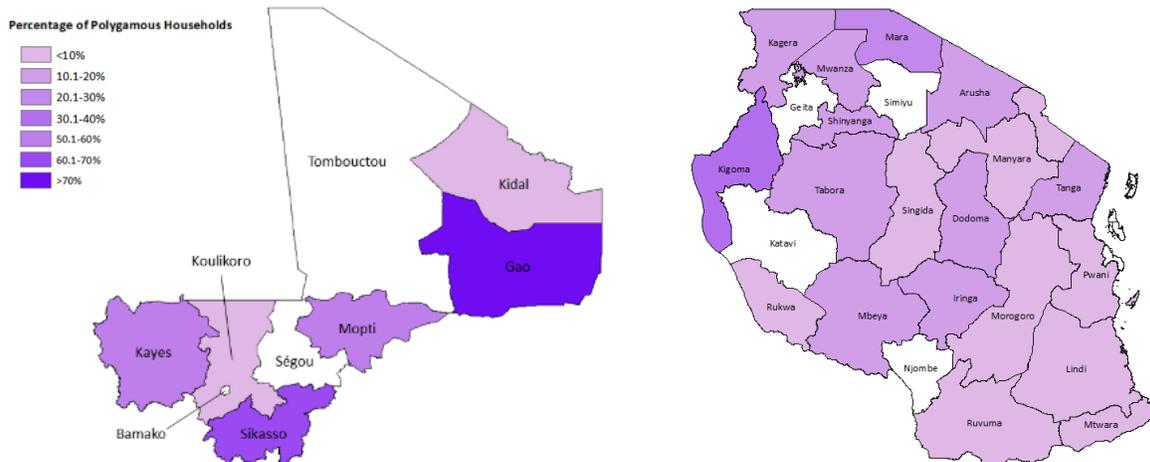


Figure 1. Prevalence of polygamy in Mali and Tanzania.

al, 2010; Ssewanyana & Kasirye, 2012; Lépine & Strobl, 2013), infant feeding practices (Malapit et al, 2013; Malapit & Quisumbing, 2015), child education (Duflo, 2003; Quisumbing & Maluccio, 2003; Martinez, 2013), and health (Anderson et al, 2015).

Knowledge about other factors beyond income that affect a woman’s share of decision-making authority can help us understand why development interventions are effective in certain contexts but not others. However, little is known about decision-making authority within households where more than one wife is present. Some research suggests co-wife support within a polygamous household can improve household outcomes, increasing child survival, supporting women’s reproductive health, and boosting household agricultural production (Adams, Madhavan, & Simon, 2002; Bove et al., 2012; Akresh et al., 2016). But other research observes equally strong competition over household resources (Adams, Madhavan, & Simon, 2002; Madhavan, 2002). And suggests the positive outcomes expected from increasing a wife’s bargaining power in monogamous households may not hold in polygamous households (Kazianga & Klonner, 2006; Madhavan, 2001).

This paper draws on a unique and detailed dataset on husbands and wives in Tanzania and Mali to further examine decision-making processes in polygamous households, particularly in regard to how attributes of the spouses and attributes of household decisions are related to the intra-household allocation of authority in a polygamous context.

Methods

We use survey data collected through the 2010 Farmer First study, with a sample of 1,766 households in Mali and 1,997 households in Tanzania. The survey specifically asked questions regarding which household member has authority over various farm and household decisions¹, separately obtaining responses from both the husband

and a spouse in each household. As illustrated in Figure 2, husband versus wife reports of the allocation of authority within the household often differed widely.²

While thirteen different decisions are included in the survey, we look at a subset of these questions grouped into three indices using principal components analysis: (i) a Farm Index, (ii) a Livestock Index, and (iii) an Information and Training Index.³ We further examine three individual decisions: (i) what happens on the farm generally, (ii) how to spend profits from livestock sales, and (iii) what type of information/training the household needs. For each index and individual decision we consider whether the respondent - husband or wife - affects substantive conclusions surrounding the level and determinants of women’s intra-household authority.

Results

Table 1 presents our main results. The first three columns of Table 1 present results using the wife’s report of her own decision-making authority. In all three regressions, women report having less decision-making authority in polygamous households than in monogamous households, even controlling for other variables including religion and region (not shown). The wife’s health is in general positively associated with her authority, especially in matters related to livestock, where an increase of one unit on the self-reported health variable (with 1 being the unhealthiest and 5 being the healthiest) is associated with the woman giving herself an extra 0.27 beans on average. Inversely, women give themselves fewer beans when their husbands are healthier, and this association is significant for decisions related to farming and information and training.

The last three columns of Table 1 present results for the same three regressions but using the male’s report of the wife’s decision-making authority. While wives tend to give themselves fewer beans across all three indices in polygamous households, husbands only give their wives

significantly fewer beans for two of the three indices (Livestock and Information/Training). One possible explanation for this finding is that wives share decision-making authority—especially on the farm—in polygamous households. Therefore, any single woman reports that she has less decision-making authority in polygamous households, but the husband does not perceive himself to have more decision-making authority overall.

This finding causes some concern that the identity of the survey respondent may have a profound impact on our conclusions. In the full paper we further explore this possibility by allowing the effect of wife’s education and wife’s health status to vary by polygamous status. We find results that differ by the identity of the respondent: education, for example, is associated with decision-making authority in polygamous households if we use the husband’s response, but not if we use the wife’s response. Similarly estimates using the wife’s report suggest a positive correlation between wife’s health and decision-making authority, while estimates using the husband’s report do not.

Conclusions

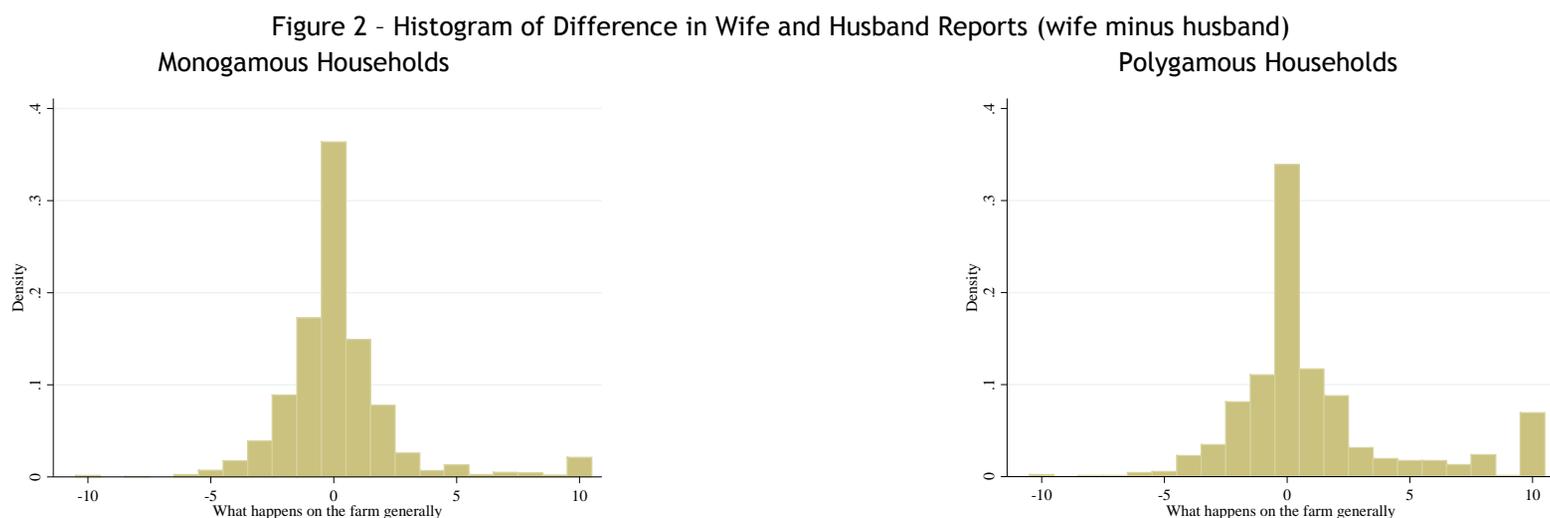
In this paper, we document differences in decision-making authority in polygamous and non-polygamous households, with both husbands and wives reporting lower shares of decision-making authority for wives in polygamous households. Moreover, results suggest that household responses are not spousal neutral, and hence may incorrectly inform policy and programs.

Table 1 - Wife's Share of Decision-Making in Polygamous Households

	Wife Reports			Husband Reports		
	Farm Index	Livestock Index	Information and Training	Farm Index	Livestock Index	Information and Training
Polygamous	-0.189***	-0.499***	-0.413***	-0.039	-0.326**	-0.553***
Asset score	0.006	0.009	0.002	0.003	0.007	-0.003
Acres	-0.002	-0.013***	0.000	-0.001	-0.011**	-0.008**
Children under 10	0.004	-0.128	-0.036	-0.099**	-0.192**	-0.043
Seniors (age>=60)	0.002	-0.138	-0.108	0.011	0.009	-0.091
Age (female)	0.005	0.001	-0.003	0.004	0.008	-0.005
Age (male)	0.002	0.010*	0.002	0.000	-0.009	0.009
Education (female)	0.081*	0.003	-0.059	-0.037	-0.089	-0.156**
Education (male)	-0.021	-0.079	-0.031	0.007	0.003	0.090**
Health (female)	0.037	0.272*	0.113	0.125**	0.133	0.085
Health (male)	-0.108*	-0.124	-0.158*	-0.026	0.076	-0.045
Protestant	0.044	0.142	0.215	0.087	0.268**	0.056
Muslim	0.143	0.348	0.333	0.002	0.467**	0.106
Other Religion	-0.011	-0.133	-0.036	0.235**	0.114	0.078
Adjusted R ²	0.181	0.148	0.143	0.238	0.162	0.165
Observations	2825	2825	2814	2825	2825	2819

Standard errors available in full paper. The first three columns use the wife's report of decision-making as the dependent variable, while the last three columns use the husband's report of decision-making as the dependent variable. Also included in the regression but omitted from the table are region dummies. Catholic is the omitted category for religion.

* p<0.10 ** p<0.05 *** p<0.01



Endnotes

¹ The questions were asked as follows: Thinking of yourself and your spouse, how is household decision-making shared between the two? I am giving you 10 beans and I want you to share them between yourself and your spouse according to the power each has in making the decision.

² Figure 2 summarizes the difference between the number of beans the wife allocates to herself and the number of beans the husband allocates to the wife in terms of authority over “What happens on the farm generally.” While there is a substantial amount of agreement across spouses (a value of zero), there is also significant variation: in fact, only 35.62 percent of households had perfect agreement in husband versus wife reports of decision-making authority. In the figure, the left panel represents monogamous households, while the right panel represents polygamous households. There appears to be more disagreement in polygamous households, particularly on the right end of the distribution, which suggests wives tend to give themselves more beans than husbands give their wives.

³ The 12 decisions are: what crops to plant, how to spend profits from crop sales, where to sell crops, whether to buy new farm equipment, what happens on the farm generally, what seed variety to buy, what foods to feed the family, when to sell livestock, how to spend profits from livestock sales, child schooling, whether to attend farm training, and what type of information/training the household needs. In the full paper, we explain how we arrive at the index groupings.

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