### Husbands' Participation in Housework and Child Care in South India

Nancy Luke Department of Sociology Brown University Nancy\_Luke@brown.edu

Hongwei Xu Survey Research Center University of Michigan Xuhongw@umich.edu

#### Abstract

Women's labor force participation is set to increase dramatically with globalization, and an important question is if working wives can bargain for husbands' participation in housework in regions such as India. We conducted a survey of 3300 female workers in a tea plantation in South India, where women are the chief breadwinners. This setting serves as a unique testing ground to examine the relationship between spouses' relative earnings and men's housework. We find a curvilinear relationship between husbands' share of couple income and their participation in cooking, fuelwood collection, and child care. Husbands' participation is lowest at the extremes of income share, supporting theories of bargaining and gender display. We also find varying thresholds of gender display by housework task. When wives earn 28% or more of income, husbands decrease their participation in fuelwood collection, while husbands decrease their contribution to cooking when wives earn 44% or more.

## Introduction

Women's participation in the paid labor force is set to increase dramatically in the coming decades with globalization and liberalization in regions such as India, and these new opportunities for paid employment could affect gender relations within the household. An important question is if wives can bargain for husbands' participation in domains that have traditionally been the purview of women, such as domestic labor and child care.

In most developing countries today, however, women's labor force participation remains low and their income makes small contributions to household budgets. To gain insight on this issue, we conducted a survey in a group of tea plantations, or estates, in South India, where women are the chief breadwinners, and they earn more than their husbands on average (Luke and Munshi 2011). This setting serves as a unique testing ground for various theories of housework and allows us to explore how spouses' relative earnings influence husbands' participation in key housework tasks, including cooking, washing clothes, collecting firewood, and child care.

Given their major contributions to household income in the tea estates, we expect wives to bargain for husbands' participation in housework (Bittman et al. 2003, Gupta 2007, Schneider 2011). Furthermore, given the extreme gender deviance in employment—with women earning more than men in most households—husbands are likely to practice gender display, where they participate least when they make the smallest contributions to household income (Bittman et al. 2003, Greenstein 2000).

We also ask how the relationship between spouses' relative earnings and husbands' participation differs across housework tasks, a question which has not been addressed in previous research. In traditional societies such as India, norms of female responsibility for domestic work could remain stronger for some tasks than others. Therefore, we argue that women will be most able to negotiate for husbands' participation for those tasks that are least feminized, such as fuelwood collection, and least able for those tasks that are most feminized, such as clothes washing. We test these theories of bargaining and gender display and how they differ by the type of household task using survey data from 3300 female tea estate workers.

# **Data and Variables**

We merged two different sources of data from the tea estates to form our data set for this analysis. First, we obtained information from the tea company's computerized records on yearly wages for all workers. This is a key benefit of the study, as income is generally poorly reported, particularly in developing countries. Second, our research team conducted a survey of 3300 married female tea plantation workers. The survey collected information on demographic characteristics of women and their husbands and children.

The dependent variables in our analysis are husbands' participation in each housework task, including cooking, washing clothes, fuelwood collection, and child care. Wives were

asked how often their husbands help with each task currently. The response categories included usually, sometimes, rarely, or never. For each task, we created a dichotomous variable coded 1 if a husband helped usually or sometimes, 0 for rarely or never.

The main independent variable is the husband's share of income, calculated as the husband's earnings less the wife's earnings divided by the total couple earnings. The resulting variable ranging from -1 to 1 was rescaled to range from 0 to 1, as in previous studies (Bittman et al. 2003, Schneider 2011). Control variables include husbands' age, education, and working status, as many husbands on the tea estates are unemployed or retired. Other control variables include wives' age and education as well as the presence of household members who could undertake housework tasks, including sons, daughters, and daughters-in-law. Finally, we also include a variable for any child under the age of 16 living in the household.

## **Preliminary Results**

Table 1 shows descriptive statistics. With respect to housework tasks, we find that husbands' participation is highest in fuelwood collection (80% of men help out usually or sometimes with this task) and cooking (51%), and lowest for child care (39%) and washing clothes (5%). We also divide couples according to the level of husbands' share of income, and find that husbands with the lowest share (less than 45% of total income) are the least likely to help out with each task except clothes washing.

Table 2 shows preliminary logit regressions by housework task. For each task, we present one specification for the full sample of couples. Earlier studies have found that the effect of men's earnings is primarily driven by those who are out of work, and therefore we also present one specification restricted to couples with husbands who had any earnings. For the regressions examining child care, we restrict the analysis to households that included at least one child age 16 or under.

For three of the four housework tasks—cooking, fuelwood collection, and child care—we find a positive and significant effect of husband's earnings share and a negative and significant effect of the quadratic term. This indicates a curvilinear relationship, which is show graphically as predicted probabilities in Figure 1. As husbands' share of couple income decreases (wives' share increases), husbands increase their participation in each of these three tasks, which supports bargaining theory. However, when husbands' share is lowest, they are least likely to help. This is interpreted as gender performance or gender display. Interestingly, we also find varying thresholds of gender display by housework task. When wives earn 28% or more of income, husbands decrease their participation in fuelwood collection, while husbands decrease their contribution to child care when wives earn 33% or more and cooking when wives earn 44% or more. Thus, although husbands' overall participation is highest for fuelwood collection, which is plausibly the least feminized task, they also "do gender" and do not carry out this task at a lower level of wives' income share than either child care or cooking. In addition, the coefficients on husbands' share of income and the quadratic are not significant for clothes washing.

Husbands do very little washing, and it appears that wives cannot bargain to increase this level. We also find that the results for each regression are robust to the exclusion of couples where men's earnings are zero. Overall it appears that husbands who fail to be the primary economic provider in the family attempt to neutralize this gender deviance by performing gender-typical behavior in another domain (here, not doing housework).

With respect to the control variables, we see that husbands' age is negatively and significantly associated with participation in all tasks besides cooking. Unemployed husbands are significantly more likely to help with cooking and child care than those employed, and retired husbands help more with fuelwood collection than those not retired. These results support the view that nonworking men have more time available to help with housework tasks. Wives' age is negatively and significantly associated with participation in all tasks besides clothes washing. Future work will include sensitivity analyses, such as exploring fixed-effects at the estate level to address estate heterogeneity and separately estimating the effects of husbands' and wives' absolute earnings (see Gupta 2007).

### References

- Bittman, Michael, Paula England, Liana Sayer, Nancy Folbre, and George Matheson. 2003. When does gender trump money? Bargaining and time in household work. *American Journal of Sociology* 109(1):186-214.
- Greenstein, Theodore N. 2000. Economic dependence, gender, and the division of labor in the home: A replication and extension. *Journal of Marriage and Family* 62:322–35.
- Gupta, Sanjiv. 2007. Autonomy, dependence, or display? The relationship between married women's earnings and housework. *Journal of Marriage and Family* 69:399-417.
- Luke, Nancy and Kaivan Munshi. 2011. Women as agents of change: Female income and mobility in India. *Journal of Development Economics* 94(1):1-17.
- Schneider, Daniel. 2011. Market earnings and household work: New tests of gender performance theory. *Journal of Marriage and Family* 73:845-860.

# Table 1. Descriptive Statistics

	All Men	By Husband's Share of Couple's Earnings				
		< 0.45	0.45 - 0.55	> 0.55		
Men's Usual or Sometimes Participation in						
Housework Tasks						
Cooking (%)	51.2	45.7	51.5	53.6		
Washing clothes (%)	4.5	4.7	3.5	5.4		
Fuelwood collection (%)	80.0	62.4	84.8	85.9		
Child care (%)	39.4	25.4	38.2	47.6		
Background Characteristics						
Husband's earning share	0.48					
Total couple earnings (Rs.)	40129.5	24715.0	44425.6	42769.2		
Husband's age	41.7	48.6	41.0	39.0		
Husband's years of education	5.8	5.2	5.6	6.2		
Husband unemployed (%)	11.5	61.8	0.0	0.0		
Husband retired (%)	3.3	17.6	0.0	0.0		
Wife's age	38.3	43.5	38.0	36.2		
Wife's years of education	3.7	2.9	3.5	4.3		
Son residing in HH (%)	79.1	77.5	82.2	76.3		
Daughter residing in HH (%)	64.5	51.9	67.6	67.0		
Daughter-in-law residing in HH (%)	6.7	17.3	4.6	3.9		
Child under age 16 residing in HH (%)	63.7	38.2	68.7	70.6		
N	3320	618	1445	1257		

# Table 2. Logit Regression of Men's Participation in Housework Tasks

	Cooking				Washing clothes			
	Full sample		Men with earnings		Full sample		Men with earnings	
Economic resources								
Husband's earning share	4.01	1.73 *	4.08	1.73 *	-0.85	6.18	-1.57	5.73
Husband's earning share squared	-3.59	1.62 *	-3.65	1.61 *	0.37	5.58	1.11	5.13
Total couple earnings	0.00	0.01	0.00	0.01	-0.02	0.01	-0.01	0.01
Husband's characteristics								
Husband's age	0.00	0.01	0.00	0.01	-0.04	0.02 *	-0.04	0.01 **
Husband's years of education	0.01	0.01	0.01	0.01	0.06	0.03 *	0.05	0.03 +
Husband unemployed	1.09	0.55 *			-0.34	1.75		
Husband retired	0.77	0.62			-0.58	1.88		
Wife's characteristics								
Wife's age	-0.01	0.00 **	-0.02	0.00 ***	0.00	0.02	-0.01	0.02
Wife's years of education	0.01	0.01	0.01	0.01	-0.01	0.02	-0.02	0.02
Household composition								
Son residing in HH	-0.03	0.07	0.08	0.08	0.05	0.14	0.06	0.13
Daughter residing in HH	-0.33	0.04 ***	-0.31	0.05 ***	-0.03	0.35	-0.02	0.41
Daughter-in-law residing in HH	-0.32	0.12 **	-0.21	0.13	0.18	0.31	0.47	0.37
Child under age 16 residing in HH	0.37	0.07 ***	0.35	0.07 ***	0.05	0.15	0.00	0.23
Constant	-0.29	0.36	-0.32	0.37	-0.73	1.78	-0.51	1.71
N	3303		2813		3305		2815	

+ p<0.1; \* p<0.05; \*\* p<0.01; \*\*\* p<0.001

Table 2. Logit Regression of Men's Participation in Housework Tasks (con	ı't)
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	Fuelwood collection				Child care			
	Full sample Men wi		Men wit	h earnings	earnings Full sample		Men with earnings	
Economic resources								
Husband's earning share	5.62	2.71 *	5.51	2.66 *	7.19	3.03 *	7.04	2.91 *
Husband's earning share squared	-3.88	2.36 +	-3.76	2.38	-5.32	3.05 +	-5.16	2.94 +
Total couple earnings	0.00	0.01	0.00	0.01	-0.04	0.01 ***	-0.04	0.01 ***
Husband's characteristics								
Husband's age	-0.03	0.01 *	-0.03	0.02 +	-0.06	0.01 ***	-0.06	0.01 ***
Husband's years of education	-0.02	0.01 *	-0.04	0.01 ***	0.00	0.01	0.01	0.01
Husband unemployed	1.09	0.87			1.71	0.58 **		
Husband retired	1.57	0.84 +						
Wife's characteristics								
Wife's age	-0.02	0.01 *	-0.02	0.01 +	-0.07	0.00 ***	-0.07	0.01 ***
Wife's years of education	-0.01	0.01	0.00	0.02	0.05	0.01 ***	0.05	0.01 ***
Household composition								
Son residing in HH	0.14	0.07	0.29	0.10 **	-0.24	0.12 *	-0.20	0.10 *
Daughter residing in HH	-0.14	0.11	-0.17	0.13	-0.07	0.08	-0.03	0.10
Daughter-in-law residing in HH	-0.71	0.08 ***	-0.67	0.17 ***	-0.36	0.48	-0.04	0.43
Child under age 16 residing in HH	0.04	0.20	0.08	0.18				
Constant	2.03	0.55 ***	1.96	0.55 ***	4.39	0.56 ***	4.30	0.57 ***
Ν	3307		2817		2100		1965	

+ p<0.1; \* p<0.05; \*\* p<0.01; \*\*\* p<0.001

