Traditional Gender Values and Adolescent Fertility Expectations in Ethiopia

David P. Lindstrom¹ Dennis P. Hogan¹ Craig Hadley² Assefa Hailemariam³

¹Population Studies and Training Center Brown University Providence, Rhode Island 02912 <u>David_Lindstrom@brown.edu</u> 401-863-3765

²Center for Social Epidemiology and Population Health University of Michigan Ann Arbor, MI 48104-2548

> ³Demographic Training and Research Center Addis Ababa University Addis Ababa, Ethiopia

Abstract

In this paper we examine the influence of traditional gender values, education, family and peer relations, and community context on young people's family size expectations in a sample of Ethiopian youth. In particular, we test whether the influence of traditional gender values on family size expectations varies by level of education and by the prevalence of traditional gender values among other youth in the community. We use survey data for 2,172 never married adolescents age 13-17 collected by the Jimma Longitudinal Family Survey of Youth (JLFSY). The JLFSY study area includes a regional city, three outlying rural towns, and surrounding rural communities in the coffee growing region of southwestern Ethiopia. Preliminary analyses indicate that the influence of traditional gender values on expected family size is highly conditioned by the level of schooling and the community context. Education reduces the influence of traditional values, whereas living in a community where traditional values are widespread magnifies the influence of individual values.

Extended Abstract

Studies of entry into marriage and childbearing stress the importance of attitudes and intentions in shaping future behavior, and in particular attitudes regarding gender and family roles. Traditional family values, which emphasize women's role in family maintenance and reproduction, are typically associated with high fertility. Research from diverse cultural and development settings provide consistent evidence that large family size is positively related to low women's status measured either in terms of autonomy of movement and action, decision making power, or attitudes regarding gender relations. Studies also show that attitudes regarding gender and family formation intentions are formed relatively early in life and are heavily influenced by parents, wider kinship networks, community context, and participation in institutions outside of the home. In traditional societies that are experiencing rapid social and economic transitions, young people are simultaneously immersed in family, peer, and institutional environments that may present contradictory idealizations of men's and women's roles and relationships as well as divergent expectations regarding the timing of marriage and ideal family size. The impact of traditional attitudes on young people's family formation intentions may be conditioned by experiences that encourage the formation of non-familial aspirations or community contexts that reinforce traditional values. For instance, formal schooling is often positively correlated with less traditional gender and family values and greater mobility aspirations among youth.

In this paper we examine the influence of gender values, education, family and peer relations, and community context on young people's family size expectations in a sample of Ethiopian youth. In particular, we test whether the influence of gender values on family size expectations varies by level of education and by the prevalence of traditional gender values at the community level. The data for this paper come from the Jimma Longitudinal Family Survey of Youth (JLFSY) conducted by investigators from the Population Studies and Training Center, Brown University and the School of Public Health, Jimma University. The JLFSY includes 3,716 randomly selected households located in the city of Jimma Town, population 120,000, and in three nearby towns and surrounding rural communities. Jimma Town is located approximately six to eight hours diving time to the southwest of the capital of Ethiopia, Addis Ababa. The region is semi-tropical with low-lying mountains and hills, and abundant seasonal rainfall. Agriculture is the basis for the economy, with coffee, chat, corn and cattle major sources of income. Chat is a highly addictive, mild stimulant that is chewed or prepared as tea. It is used locally and exported to neighboring countries in the horn of Africa. The rural communities are populated by Oromo, who are predominantly Muslim. The towns and the city of Jimma are ethnically and religiously diverse, and included Orthodox and Protestant Christians.

A household questionnaire was completed with the household head and spouse of the head. Up to two youth age 13-17, one male and one female, were then randomly selected from each household for individual interviews. A total of 2,194 adolescents were interviewed in the first round of the survey conducted between October 2005 and February 2006. The study design includes the re-interview of households every twelve months and the re-interview of adolescents every six months for a period of at least five years. In this paper we use data from the first round of the household and adolescent interviews (see Table 1). The household questionnaire collected background information including migration experience for all current household members and

adult children of the household head who have established independent households. The questionnaire also collected information on the residential location of relatives of the head and spouse, participation in exchange networks, and measures of economic assets and well-being. The adolescent questionnaires collected information on schooling, employment, family and occupational aspirations, and perceptions of parental expectations, among other topics.

Our outcome of interest in this paper is expectations of future family size. We take the answer to the question "How many children do you think you will have in your lifetime?" and group it into three categories, 0-2, 3-4, and 5 or more. We then use ordered logistic regression to estimate the influence of individual attributes, perceptions of parents' fertility wishes, access to peer and kinship networks, exposure to media, and the community context, on individual family size expectations. One of the attributes of primary interest in this paper is the adolescent's values regarding gender relations. We expect that more traditional values will be related to larger family size expectations. We use factor analysis to construct a single summary index of traditional gender values based on responses to a set of questions regarding gender relations. Respondents were read a total of 15 statements describing the nature of relationships between men and women and were asked after each statement whether they agreed with the statement, disagreed, or did not know. Using factor analysis we found that five of the items loaded strongly onto a single component. These five items were: a woman should always listen to her husband, a man should not have to do housework, a husband should have the final say in family matters, it is acceptable for females to buy condoms, and female circumcision should continue. We scored agree as one, disagree as zero, and don't know as 0.5. We reversed the coding for the item on condoms so that the value of one corresponded to agreement with the statement that it is unacceptable for females to buy condoms. Cronbach's alpha for our composite index was 0.56, which is below the recommended minimum of 0.7. A high value of Cronbach's alpha indicates a consistent and strong degree of association among the individual variables that go into producing the composite index.

Table 2 presents descriptive statistics for our outcome of interest and selected variables in the analysis. Approximately one-half of the youth expect to have two or fewer children, which is substantially below the current fertility levels in the study region. The 2000 Ethiopia Demographic Health Survey reports a total fertility rate of 6.4 children per woman in the Oromiya region, which encompasses the study area. At the other extreme, slightly more than one-in-four youth expect to have five or more children. Support for traditional gender roles varies across items from around one half of the youth to less than 20 percent. The statement receiving the most support is "a woman should always listen to her husband." Around thirty percent of adolescents though their parents wanted them to have two or fewer children, which is substantially less than the percentage of children who expected they would have this number of children.

We first estimated an ordered logistic regression model predicting the expected number of children. Covariates in the model included adolescent's sex, religion, years of schooling, employment status, and traditional gender values, as well as the adolescent's perceptions of his/her parents' wishes, measures of the adolescent's peer and kinship networks, media exposure, and the mean value of the index of traditional gender values for all interviewed adolescents in the community. We next tested for an interaction between years of schooling and traditional gender values, and an interaction between the mean level of traditional gender values among youth in the community and individual gender values. We expect gender values to be of less importance in determining fertility expectations among more educated youth because education provides alternative models of family life and social distinction which in turn influence expected family size. On the other hand, we expect traditional gender values to matter the most in communities where such values are widely shared by ones peers.

Table 3 presents results from the three preliminary regression models. In model 1, years of schooling and frequent contact with peers were both significant and negatively related to expected number of children. Significant positive effects include being male, perceptions that one's parents want one to have more than two children, and living in a community where traditional gender values are prevalent. Individual gender values, however, do not appear to matter. With the addition of the interaction between years of schooling and individual gender values, the main effect of years of school drops from significance, but the effect of traditional gender values becomes positive and highly significant, and the interaction term is negative and highly significant. Figure 1 presents the graphs of the effects of gender values interacted with schooling on the log odds of expecting more than 0-2 children. The three graphs correspond to a value of one standard deviation below the mean of the gender index (Nontraditional), the mean of the gender index (Traditional), and a value of one standard deviation above the mean of the gender index (Very Traditional). The graphs are consistent with our prediction, differences in traditional gender values matter most in influencing family size expectations at low levels of education, and become progressively less important as education increases. Finally, Model 3 includes an interaction between individual gender values and the prevalence of traditional gender values in the community. The interaction effect and the community effect are positive and significant, whereas the main effect of individual gender values is not significant. This finding suggests that individual gender values influence family size expectations only in communities where traditional gender values are prevalent. In less traditional communities individual gender values are less a source of distinction in family size expectations. Figure 2 presents the graphs for these interaction effects.

These preliminary results provide evidence that the influence of traditional gender values on adolescent fertility intentions is highly conditioned by other individual attributes and the community context. Here we have explored the role of schooling and the gender values of other youths in the community. In further analyses we will explore the potential mediating effect of occupational aspirations and the local development context, among other factors.

			Sample Size		
	Population	Households	Boys 13-17	Girls 13-17	
City					
Jimma Town	120,000	1,413	401	445	
Towns					
Serbo	3,500	320	98	101	
Sheki	5,300	410	102	89	
Yebu	3,000	338	107	99	
Rural					
Tukur Abulu	3,700	131	49	40	
Gobuo	4,100	135	44	34	
Tukur Balto	3,600	133	39	42	
Hunda Toli	2,800	152	39	39	
Dawa	2,800	213	51	45	
Lemmi Lelissa	4,300	139	36	43	
Cito	2,300	83	48	32	
Keto Unta	4,300	122	50	40	
Billo	2,300	127	51	30	
Total		3,716	1,115	1,079	

Table 1. Sample Characteristics, Jimma Longitudinal Family Survey of Youth, Ethiopia, 2005-06.

Variables	Percent	Mean	
Outcome			
Expected number of children			
0-2 children	47.4		
3-4 children	24.6		
5+ children	27.9		
Background Characteristics	_,,,,		
Female	49.1		
Male	50.9		
Muslim	60.3		
Orthodox Christian	32.9		
Protestant Christian	5.6		
Years of schooling		5.1	
Working for a wage	19.0		
Traditional gender values (Agree)			
A women should always listen to her husband	46.1		
A man should not have to do housework	23.3		
A husband should have the final say in family matters	36.3		
It is unacceptable for females to buy condoms	17.3		
Female circumcision should continue	20.0		
Adolescent's Report of Parents' Wishes			
Father wants adolescent to have:			
0-2 children	30.2		
3-4 children	17.8		
5+ children	27.0		
Don't know what father wants	25.0		
Mother wants child to have:			
0-2 children	30.4		
3-4 children	21.9		
5+ children	29.6		
Don't know what mother wants	18.1		
Peer and kinship networks			
Frequent contact with peers	31.7		
Uncles and Aunts close by	2.1		
Grandparents co-resident or close by	0.3		
Media exposure			
Television in house	23.0		
Number of cases $= 2,172$			

Table 2. Descriptive Statistics, Never Married Adolescents Aged 13-17, Jimma Longitudinal Family Survey of Youth, Ethiopia, 2005-06.

	Model 1	Model 2	Model 3
	β	eta	β
Background Characteristics			
Male	0.353**	0.339**	0.353**
Muslim (ref.)			
Orthodox Christian	-0.338**	-0.349**	-0.347**
Protestant Christian	-0.001	-0.016	-0.014
Years of schooling	-0.043*	-0.039	-0.043*
Working for a wage	-0.046	-0.037	-0.026
Traditional gender values	0.084	0.332**	0.064
Child's Report of Parents' Wishes			
Father wants child to have 0-2 children (ref)			
Father wants child to have 3-4 children	1.041**	1.034**	1.045**
Father wants child to have 5+ children	1.792**	1.778**	1.799**
Don't know what father wants	1.150**	1.126**	1.154**
Mother wants child to have 0-2 children (ref)			
Mother wants child to have 3-4 children	0.937**	0.931**	0.925**
Mother wants child to have 5+ children	1.422**	1.424**	1.411**
Don't know what mother wants	1.344**	1.359**	1.338**
Peer and kinship networks			
Frequent contact with peers	-0.219*	-0.196	-0.214*
Uncles and Aunts close by	-0.042	-0.044	-0.048
Grandparents co-resident or close by	0.004	0.027	0.023
Media exposure			
Television in house	0.161	0.119	0.138
Community Context			
Community traditional gender values	0.502**	0.491**	0.462*
Interactions			
Years schooling × Tradional gender values		-0.057**	
Traditional × Community gender values			0.288*
Log likelihood Chi-square	767.2**	778.0**	771.5**
Number of cases $= 2,172$			

Table 3. Parameter Estimates from Ordered Logistic Regression Model Predicting ExpectedNumber of Children, Jimma Longitudinal Family Survey of Youth, Ethiopia, 2005-06.

** *p* < 0.01, * *p* < 0.05.



