Marriage, Lineage, Relative Spousal Power and Fertility Decline in Ghana

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Abstract

There have been two changes over time in relative spousal power in reproductive decision-making in Ghana: men's education has an increasingly important effect on women's fertility intentions and, given intentions, men have increased relative power in determining contraceptive use. I show that men's influence grew the most among matrilineal groups where women had a fair degree of reproductive autonomy prior to the onset of rapid fertility decline. I also provide evidence of differences in patterns of reproductive control between monogamous and polygynous unions and, within polygyny, by seniority of the wife. Fertility transition has not advantaged monogamous women or junior wives, but senior wives seem more fortunate.

While lower fertility is commonly associated with women's reproductive autonomy (see (Larsen & Hollos, 2003, and citations therein), the literature on reproductive decision-making has paid little attention to variations in relative spousal power in high fertility regimes. Women in matrilineal ethnic groups may be advantaged with respect to reproductive control because descent (and resources) flow through their line. Ghana has a mix of both matrilineal and patrilineal groups, and therefore allows analysis of relative spousal power by lineage type.

An additional problem with the too-easy association between low fertility and women's reproductive autonomy is that cross-sectional relationships are often assumed to describe temporal patterns. That is, if fertility is declining, women's autonomy is frequently assumed to be increasing. Ghana experienced extremely rapid fertility decline from 1988 to 1998, and therefore shifts in relative spousal power during an early phase of fertility transition can be observed using recent data. By examining this separately by lineage type, I am able to determine what has happened to relative spousal power both where women started out relatively advantaged (among matrilineal groups), and where men's influence was significant at the onset of fertility transition (among patrilineal groups).

LITERATURE REVIEW

Contraceptive Outcomes

There are two basic strategies that have been employed in the analysis of relative spousal power as a determinant of fertility outcomes. One is to take fertility intentions as given, and then see which partner's intention carries greater weight in influencing outcomes. The other is to assess the relative weight of various other partner characteristics (age, education, occupation, family planning approval, knowledge of family planning, etc.) on outcomes.

Outcomes are typically measured by contraceptive use, though with panel data subsequent pregnancies provide an even more salient measure of which partner prevailed (Bankole, 1995). Many studies have shown evidence of men's dominance in reproductive decision-making. In poor areas in Mexico, husband's attitude towards family planning predicts use more strongly than wife's does (Casique, 2002). Pronatalist views of husbands in the Philippines were found to be a significant component of unmet need for contraception (Casterline, Perez, & Biddlecom, 1997). In Kenya, husbands' education was found to condition current use more than wives' did (Omondi-Odhiambo, 1997), and in Zimbabwe both his education and his occupation mattered more than her socioeconomic characteristics (Adamchak & Mbizvo, 1994). The wife's perception of her husband's approval of contraceptive use was the most important determinant of her actual contraceptive use in urban Indonesia (Joesoef, Baughman, & Utomo, 1988).

Other conclusions are more nuanced, with attention to the lifecycle. For instance, Bankole (1995) argued that women's relative power in determining future childbearing increased as she bore more children (see also Ortega, Amuchástegui, & Rivas 1998; Scrimshaw, 1978). The odds of a woman contracepting if she wanted to stop childbearing when her husband did not also increased with her age in Maharastra, India, but a man's influence when only he wanted to contracept was higher at all ages (Jejeebhoy & Kulkarni, 1989).

And a few studies have shown women to have more sway in reproductive decisions. Women's wages and education influenced family size more than men's in Peru (Schafgans, 1991). Dodoo (1995) showed that woman's intention to stop childbearing was a significant predictor of contraceptive use in Ghana in 1988, while men's was not. Bankole & Singh's (1998) multi-country study concluded that in the 18 countries where one partner's preferences were

dominant in determining contraceptive use, 10 were countries where men held more sway and 8 were ones where women dominated. Mason & Smith (2000) also analyzed more detailed data for five countries and concluded that the relative weight of husband's intentions was greater in more gender-stratified societies.

Of particular relevance for the current study, Dodoo later analyzed 1993 Demographic and Health Survey data for Ghana, as well as 1989 and 1993 for Kenya. He found that in contrast to Ghana of 1988 when women were more likely to get their way, men's fertility intentions dominated in the other three surveys. However, these bivariate results did not survive the controls in the multivariate. Contraceptive use when only the man intended to stop childbearing was only greater than when both partners wanted to go on among monogamous couples in Kenya in 1993 (Dodoo, 1998). Although Kritz (1999) argued that men were more likely to determine contraceptive use when contraceptive prevalence rates are low based on contrasts between ethnic groups in Nigeria, Dodoo's data indicate that men's control might actually increase with the progress of fertility transition. The onset of Kenya's transition was around 1980 (Mbacke, 1994), and rapid enough that by 1993 there had been substantial declines in fertility. Jejeebhoy & Kulkarni's (1989) finding that men's intentions prevailed in cases of conflict more often than women's did was from a relatively egalitarian Indian state in the midst of fertility transition.

Monogamous men in societies like Kenya where plural marriage is a viable option are likely to be those with lower fertility desires, and Dodoo's (1998) study shows that they have more control than their wives if intentions conflict. Dodoo also explicitly considered whether marriage type mattered in either Ghana or Kenya at two different points in time, and he found little difference between monogamous and polygynous unions. However, with fertility decline, seniority of the wife might matter more than type of union. One of the reasons monogamous men

are hypothesized to be able to continue childbearing against their wife's wishes is that she fears that if she does not give him enough children, he will take another wife (DeRose, Dodoo & Patil, 2002; Oheneba-Sakyi & Takyi, 1997). Polygynous women, particular senior wives, already have help in meeting their husband's reproductive demands and might therefore have more relative influence. Junior wives may have fewer options because of their position in the hierarchy.

Relative Spousal Power in the Formation of Intentions

Research that treats intentions as autonomously formed, and then assesses which spouse's intentions have the most impact on behavior, could seriously underestimate the role of gendered power in reproductive decision-making because spousal influence in the formation of intentions is neither absent nor necessarily symmetrical (see Thomson, 1997). DeRose & Ezeh (2002) contend that although reproductive autonomy is commonly thought of as the ability to actualize fertility intentions, if women's stated intentions are more dependent on their spouse's characteristics than men's are, then the actualization of those (dependent) intentions does not demonstrate reproductive autonomy.

In 1988, contraceptive attitudes of Ghanaian wives were significantly affected by their husband's characteristics, while husbands' contraceptive attitudes were generally independent of their wives' characteristics (Ezeh, 1993). Husbands therefore exerted a great deal of influence over wives' attitudes. Reynar (2000) also demonstrated asymmetrical influence of husbands and wives using data for the Kenya Diffusion and Ideological Change project. She showed that women's education influences their own fertility intentions, but not their husband's. In contrast, husband's intentions had significant influence on both their own intentions and those of their wives. There is also evidence from other contexts indicating that wives' stated intentions can incorporate husbands' desires (Folbre, 1983; Pullum, 1983). Determinants of approval of family

planning have received some attention (Lasee & Becker, 1997; Mahmood & Ringheim, 1997), but generally the literature on determinants of fertility intentions is sparse.

DATA AND METHODS

The data for this study come from the Ghana Demographic and Health Surveys (GDHS) conducted in 1988 and 1998. Each of the surveys is based on a nationally representative sample of women aged 15-49 years. In 1988, the GDHS interviewed a sub-sample of husbands (both consensual and formal unions) of female respondents, producing 1010 matched husband-wife pairs. In 1998, men aged 15-59 were interviewed in a sub-sample of households, but not all male respondents were married. This produced 629 couple records.

First, I investigate shifts in relative power over time in cases of overt conflict in fertility intentions between husbands and wives: I test whether there are differences in contraceptive use according to the gender of the partner that wishes to stop childbearing in each survey year, and whether the changes over time are significant. I employ logistic regression with wife's current contraceptive use as the dependent variable. I chose wife's use because while the husband may secretly use contraception with their wives (most commonly periodic abstinence, see Blanc, Wolff, Gage, Ezeh, Neema, & Ssekamatte-Ssebuliba, 1996), his reported use could be with other wives (also other partners, but that applies to her use as well), and men also show a greater tendency than women to give "modern" response to survey questions (Miller, Zulu, & Watkins, 2001). In preliminary models, I experimented with using only contraception reported by both partners as the dependent variable, with the assumption that the dependent variable was then likely to represent non-secret use. Effects of gendered preferences were stronger in the models with use reported by both partners as the dependent variable. That is, his preferences affected their use more than her use, and her preferences affected her use more than theirs. The

differences were small, but they were supportive of the hypothesis that women's secret use is one method of "resolving" conflict in intentions. In the analyses reported below, I use the wife's report of contraceptive use because it best reflects whether intention to stop childbearing becomes translated into contraceptive use within marriage. Given that secret use is less likely to be sustained that agreed upon use (Biddlecom & Fapohunda, 1998; Blanc et al., 1996; see also Lamptey, Nicholas, Ofosu-Amaah, & Lourie, 1978), I recognize that this choice results in an underestimate of the effects of gendered preferences on cessation of childbearing. Nonetheless, it seems the best measure of how gendered preferences affect the course of early fertility decline. I drop couples where the wife is currently pregnant (n=240) or that are observing postpartum abstinence (n=374) since current contraceptive use is not relevant for them.

The primary independent variables used as predictors of wife's current contraceptive use (hereafter "current use" or "contraceptive use") are only the husband intends to stop childbearing, only the wife intends to stop, and both intend to stop. The reference category is both partners intending to continue childbearing. Intentions are based on husbands' and wives' independent answers the question "Would you like to have a (another) child or would you prefer not to have any (more) children?" This measure of fertility preference has been shown to be the least biased of all standard preference measures (Bongaarts 1990; Pritchett 1994; see also Thomson, McDonald, & Bumpass, 1990). Couples where at least one member was declared infecund were dropped from the analysis (n=29). Those who were undecided were classified as wanting to continue (91 men & 73 women), and those who were sterilized were classified as wanting to stop. I also control for the age, surviving children, and education of each partner (following Bankole & Singh, 1998). I then stratify the sample into matrilineal and patrilineal ethnic groups to test whether relative spousal power and shifts in spousal power vary by lineage

type. Although there are some ethnic groups that practice bilateral descent in addition to a mode that conforms more closely to matrilineal or patrilineal, Takyi (2003) has shown that excluding ethnicities that have some bilateral decent practices does not effect empirical analysis of matriliny versus patriliny in Ghana. The 64 couples reporting ethnicity as "other Ghanaian" or "other African" are classified as patrilineal.

Second, I explore whether there has been change over time in the extent to which each partner's fertility intentions are conditioned by the influence of their spouse, and whether that differs by lineage type. The dependent variable at this stage of the analysis is the wife's intention to stop childbearing. For the logistic regression, it is coded "1" if she intends to stop and "0" if wanting to continue or undecided. A positive coefficient indicates that the higher the value of the covariate, the more likely the wife is to desire to stop childbearing. Preliminary analysis confirmed that there were not significant changes over time in the determinants of husbands' fertility intentions for either the full sample or the matrilineal/patrilineal sub-samples (except that wife's surviving children influenced the future fertility intentions of patrilineal men more in 1998 than 1988). I control for the age, surviving children, and education of each partner as well as a set of couple characteristics: urban residence, household wealth, union type, and lineage type. Household wealth is measured by a linear asset index weighted by principle components using the absence of a dirt floor and the presence of piped water, flush toilet, electricity, television, radio, refrigerator, bicycle, motorcycle, and car (see Montgomery, Gragnolati, Burke, & Paredes, 2000). For polygynous unions, the highest ranking wife (the senior wife) is distinguished from other wives (called junior wives). Wife rank is usually determined by order of marriage.

EMPIRICAL RESULTS

Contraceptive Use

In 1988 when the total fertility rate was over six children per woman, contraceptive use was more likely only in the case where the wife wanted to stop childbearing (though there is no statistical difference between that case and where both partners desired to stop). These results are consistent with Dodoo (1995). By 1998, Ghana's fertility transition was well under way, and wives were 3.4 times as likely to use contraception if both they and their husbands wanted to stop childbearing than if both partners wanting to continue (see top panel of Table 2). More strikingly, however, there are marked differences in the influence of each partner's individual fertility intention on contraceptive use over time. Contraception was (insignificantly) less likely in the rare cases where only the husband wanted to stop in 1988, but by 1998 his intention to stop elevated contraceptive use (again insignificantly), even if his wife did not concur. Change for wives ran in the opposite direction: in cases where her husband wanted to continue childbearing, her intention was less influential for contraceptive use in 1998 than it had been in 1988. While the changes over time in contraceptive use rates in cases of conflicting intentions are significant for neither husband nor wife, the gap between their coefficients does change significantly over time. That is, women's influence decreased, men's increased, and the significant gap that had favored women closed.

The second two panels of Table 2 demonstrate remarkable differences in patterns of reproductive control by type of descent. Before the fertility transition was underway, women from matrilineal ethnic groups who intended to stop childbearing when their husbands did not were nonetheless two and half times more likely to be using contraception than couples where neither partner wanted to stop. In patrilineal groups, however, the wife's intention did not

significantly affect use. Over the decade, this situation reversed: wife's intention ceased predicting contraceptive use for matrilineal women while becoming significantly associated with elevated use among patrilineal women. Men unilaterally wanting to stop childbearing did not predict contraceptive use for either lineage type in 1988, but the intentions of patrilineal men made use 3.7 times more likely in 1998.

In short, women's relative power in cases of reproductive conflict decreased among matrilineal ethnic groups over the decade: women went from being more likely to use contraception even if their husband did not want to stop childbearing to no longer holding that sway. Among patrilineal groups, wives became more likely to use contraception if either partner wanted to stop childbearing; men's influence in cases of conflict increased more than women's, but they both increased.

The resulting situation among matrilineal groups by 1998 is then that contraceptive use is no more likely in cases of conflicting reproductive intentions than where both partners want more children. Among patrilineal groups, use rates are elevated if either partner wants to stop, and at their highest when both do. Contraceptive use rates actually increased more among matrilineal groups that are concentrated in the south where fertility decline has been faster, but this was despite the influence of wives' intentions decreasing significantly over time. I re-ran these analyses omitting the heavily patrilineal northern regions where fertility decline has been slower. The results were largely the same, except that among patrilineal groups in the south, the effect of only the wife wanting to stop did not increase as much over time and the effect of only the husband wanting to stop increased more (not shown).

Fertility Intentions

Men's fertility desires changed more radically between 1988 and 1998 than women's did. By the end of the decade, the proportion of husbands and wives intending to stop childbearing was roughly equal. Table 3 nonetheless shows important differences in fertility intentions between husbands and wives by lineage type and marriage type for both survey years. In the aggregate, men's intentions differ from women's more in patrilineal groups than in matrilineal ones. Women in patrilineal groups are therefore more likely to be in the situation where they want to continue childbearing but their husbands do not. The same is true for senior wives of polygynously married men: they are much more likely to want to stop childbearing than their husbands. This makes a great deal of sense because men generally acquire additional wives because they desire additional children rather than the reverse (Speizer & Mosley, 1995). Junior wives, however, are generally younger and less likely to have their own reproductive goals satisfied by the time their husbands want to stop childbearing. With fertility decline in Ghana, junior wives became less likely than their husbands to desire reproductive cessation.

The first two columns of Table 4 show determinants of wife's intention to stop childbearing for the full sample. In both 1988 and 1998, the husband's education had a significant effect on the wife's fertility intention while her own education did not. The difference in the effects of his education and hers are large, but statistically insignificant. However, the effect of his primary education on her intention grew significantly over the decade. Women with primary educated husbands went from being about twice as likely to intend to stop childbearing to being over four times more likely to prefer to stop. Her own education went from being associated with 40% higher log-odds of intending to stop to 60%.

Overall, then, the effects of education on intention to stop childbearing were magnified across a decade of rapid fertility decline, but the influence of his education grew more than the influence of hers. This overall result conceals important differences according to lineage. Among matrilineal groups, the effect of the husband's education started out weaker than in the whole sample and by 1998 was stronger than in the sample as a whole. The effects of her own education on her fertility intention declined (but not significantly) among matrilineal groups. In contrast, women's own education became a more important determinant of her own fertility preference among patrilineal groups (again, not significantly). The effect of husband's primary education increased slightly among patrilineal groups while the effect of his higher education declined (but not significantly). In sum, the gap between the influence of his education and hers on her fertility intention grew wider among matrilineal groups and narrowed among patrilineal groups.

Also, for both lineage types but more strongly among the matrilineal groups, senior wives became more likely to intend to stop childbearing over time while higher order wives became less likely to intend to stop (Table 4). The models presented in Table 5 with the sample stratified by marriage type are somewhat unstable due to low numbers of cases for 1998. Both the change in sample selection for husbands in the Demographic and Health Surveys and rapid polygyny decline contribute to the sample size problem. Nonetheless, Table 5 clearly shows that the increase in the influence of husband's education on his wife's fertility intention is particularly strong in monogamous unions. Furthermore, it suggests that the fertility intentions of polygynous women have become more independent of their husband's education over time, particularly for senior wives.

DISCUSSION

Overall in Ghana, there were two important shifts in relative spousal power in reproductive decision-making during the first decade of rapid fertility decline. Wives' fertility intentions became more dependent on their husband's education (but no more dependent on their own), and, in cases of conflicting fertility intentions, the likelihood of contraceptive use went up if only the husband wanted to stop and down if only the wife wanted to stop.

In making sense of the differences by lineage type, it is useful to think of husband's influence on wife's fertility intentions as a form of hidden power (see Komter, 1989). If she modifies her fertility intentions in order to avoid conflict with her mate, spouses' intentions will agree even in situations where men retain most of the reproductive control. Of course he could also modify his intentions with respect to her background characteristics and his perception of her fertility desires, but analysis of his intentions found only her reproductive performance (number of surviving children) influenced whether or not he intended to stop. Women seem to modify men's future intentions by satisfying their fertility desires, while the effect of men's education on women's intentions is more likely to be ideological, especially given the controls for place of residence and household assets. Therefore, it is noteworthy that in 1988 when the total fertility rate in Ghana was still quite high, the effect of men's education in matrilineal ethnic groups was practically zero. While matrilineal women's education was also insignificantly different from zero, the estimated effect was higher than for men's education. Contraceptive use was also significantly more likely if only the wife wanted to stop childbearing among matrilineal groups at the eve of fertility transition. Basically, this indicates that for the segment of the Ghanaian population that practices matrilineal descent, women had more reproductive control than men in 1988. Their reproductive intentions seem to be mostly autonomously formed—none

of his background characteristics significantly affected her intentions while her own age and parity did—and, given intention to stop, contraceptive use was more likely. Both of these measures of autonomy eroded by 1998. Men's primary education came to significantly affect their wives fertility intentions and, given conflicting intentions, women became less likely to use contraception. Women's childbearing seems to have been more of their own affair prior to rapid fertility decline among groups where children belonged to the mother. This control that seems in keeping with a tradition of descent through the female line decreased during the first decade of rapid fertility decline.

Among patrilineal ethnic groups, husband's education affected their wives fertility intentions even before the fertility transition was in full swing. Her age and parity mattered for her fertility intentions, but the effect of her education was negligible while his was highly significant. Contraceptive use was also no more likely in cases where the future fertility intentions of the marital partners conflicted. Men's "hidden power" did not substantially decrease in patrilineal groups during the course of fertility transition. Although the effects of all of women's background characteristics increased slightly, there were no significant changes over time in the determinants of her intentions. However, in 1998 among patrilineal groups contraceptive use was more likely if either partner wanted to stop childbearing. In cases of overt conflict in fertility intentions, either partner's intention to stop elevated use. By this measure, patrilineal women gained reproductive autonomy between 1988 and 1998. Intending to stop childbearing is less common among patrilineal groups (see Table 3); it seems that for them this represents a more radical departure from traditional reproduction that is more likely to be associated with contraceptive use. Higher use rates for birthspacing among matrilineal groups could also explain why the effects of fertility intentions are stronger among the patrilineal; use

rates went up more among matrilineal women intending to continue childbearing than among patrilineal women with the same intention.

There were not enough polygynously married men who intended to stop childbearing to permit analysis of the effect of conflicting intentions between husband and wife on contraceptive use according to the seniority of the wife. Nonetheless, it is clear from the analysis of fertility intentions that men's influence over the fertility intentions of their senior wives declined over the decade, while remaining significant with respect to the intentions of their junior wives. Junior wives are the most likely group of women to desire to continue childbearing, and the most likely to want to continue when their husband is ready to stop. Under traditional reproductive regimes, the fertility desires of even junior wives would be likely to be met before the end of the husband's reproductive span. With declining fertility desires among men, this is less likely to be the case. Men are likely to self-select into monogamy based on lower fertility desires, but in the transition period when polygyny is declining but still prevalent, junior wives may be the most disadvantaged segment of the population with respect to meeting their reproductive goals. In contrast, the pressure on senior wives to continue childbearing if their husband still wants to is substantially relieved. Perhaps most importantly with respect to the gendered power in reproductive decision-making in the future, the influence of husband's education on wife's fertility intention increased significantly in monogamous marriages over the decade. Men may be exerting more reproductive control as they select into monogamy.

CONCLUSION

It seems that fertility transition destabilizes traditional patterns of reproductive control. Gendered differences in contraceptive outcomes in cases of conflicting intentions that had favored women disappeared among matrilineal descent groups, and the influence of husband's

education on wives' fertility intentions also increased. For the patrilineal, both partners seem to have gained control over stopping childbearing when they desired to, though women's desires are still strongly influenced by their husbands' education (and not vice versa). These changes occurred in a context where initially more women wanted to cease childbearing than men, but men's fertility desires declined more quickly over the decade. Therefore, for some types of women the change can simply be characterized as an increased likelihood of using contraception because their husband's desires have finally dovetailed with their own. This would be too simple an explanation overall, however, given that women's intentions still depend heavily on their husband's education (and not vice versa), and that the relative power of men who want to stop has increased more than that of women who want to stop for both lineage types.

After a decade of converging fertility goals between men and women, no gender differences remain in the proportion desiring to stop childbearing among matrilineal ethnic groups. However, men in patrilineal groups are still more likely to desire to continue. This gap is likely to close as the fertility transition continues since to date, men's fertility desires have dropped faster than women's. It is less clear that men's influence on women's fertility intentions will subside since it grew among the matrilineal and remained strong among the patrilineal. Men's influence on women's fertility intentions also intensified substantially among the monogamous, a growing segment of the population. Men's influence seems to have increased the most where fertility is lowest (in monogamous unions and in the south) and where women's influence used to be the greatest (among the matrilineal). Therefore, it does not seem that women's reproductive autonomy has contributed substantially to rapid fertility decline in Ghana.

TABLE 1. DISTRIBUTION OF INDEPENDENT AND DEPENDENT VARIABLES

	1988		1998	
Dependent variables				
Wife's current contraceptive use	19.1%		35.7%	
Wife intends to stop childbearing	27.8%		34.1%	
Independent variables				
For contraceptive use				
Both want to continue childbearing (ref)	66.5%		63.1%	
Only husband wants to stop	6.3%		8.7%	
Only wife wants to stop	16.3%		7.9%	
Both want to stop	14.9%		27.2%	
For wife's fertility intention				
Urban residence (ref=rural)	22.9%		26.1%	
Asset index (Mean)	-.1538 (.6878)		.3198 (1.1576)	
Marriage type				
Monogamous (ref)	68.9%		82.0%	
Senior wife	15.5%		8.4%	
Junior wife	15.7%		9.6%	
Matrilineal (ref=patrilineal/other)	44.6%		43.4%	
For both analyses	Husbands[a]	Wives	Husbands	Wives
Age (mean)	38.7 (9.3)	31.8 (8.2)	37.9 (9.1)	30.9(7.6)
Surviving children (mean)	4.8 (3.5)	3.6 (2.3)	3.8 (3.1)	3.0 (2.1)
Education				
None (ref)	36.7%	56.7%	26.3%	40.8%
Primary	46.9%	39.6%	57.2%	52.2%
Secondary and higher	16.5%	3.7%%	16.5%	7.1%

Source: Demographic and Health Surveys, weighted data
Standard deviations in parentheses

[a] In presenting descriptive statistics for 1988, I exclude husbands over 59 years old because the sampling frame for 1998 did not include older men.

TABLE 2: LOGIT COEFFICIENTS FOR WIFE'S CONTRACEPTIVE USE, GHANA

	1988	1998
Full sample (ref=both want to continue)		
Only husband wants to stop	-1.4375	.1488
Only wife wants to stop	.6060*	.2962
Both partners want to stop	.5768	1.2173***
Number of observations	617	379
Matrilineal (ref=both want to continue)		
Only husband wants to stop	-1.3504	-1.1519
Only wife wants to stop	.9410*	-.8216
Both partners want to stop	.5713	.6484
Number of observations	314	149
Patrilineal/Other (ref=both want to continue)		
Only husband wants to stop	-1.3345	1.3190*
Only wife wants to stop	.3818	1.3864*
Both partners want to stop	.6715	1.9786***
Number of observations	303	230
Monogamous (ref=both want to continue)		
Only husband wants to stop	-.8456	.1636
Only wife wants to stop	.6138*	-.2906
Both partners want to stop	.7221*	.3585
Number of observations	694	472

* significant at $p \leq .05$. ** significant at $p \leq .01$. *** significant at $p \leq .001$.
All models includes controls for the age, number of surviving children, and education of both husband and wife.

TABLE 3. PERCENT INTENDING TO STOP CHILDBEARING BY MARRIAGE VARIABLES, GHANA 1988 & 1998

	1988			1998		
	Husbands	Wives	Difference (Wives-Husbands)	Husbands	Wives	Difference (Wives-Husbands)
Full sample	18.6%	27.8%	9.2%	32.3%	34.1%	1.8%
Lineage type						
Matrilineal	23.6%	30.4%	6.8%	41.5%	41.5%	0.0%
Patrilineal/Other	14.6%	25.7%	11.1%	25.3%	28.5%	3.2%
Marriage type						
Monogamous	20.0%	28.0%	8.0%	33.2%	34.9%	1.7%
Polygynous, Senior wife	15.6%	34.0%	18.4%	28.3%	42.9%	14.6%
Polygynous, Junior wife	15.6%	20.9%	5.3%	28.3%	19.6%	-8.7%
Number of observations[a]	1008	1009		602	602	

[a] There are missing values on the fertility intention variable for 2 husbands and 1 wife in the 1988 sample.

TABLE 4. LOGIT COEFFICIENTS FOR WIFE'S INTENTION TO STOP CHILDBEARING, GHANA 1988-1998

	Full sample		Matrilineal		Patrilineal/Other	
	1988	**1998**	**1988**	**1998**	**1988**	**1998**
Husband's characteristics						
His age	.0068⬥	-.0032	.0032	-.0136	.0083⬥	-.0039
His surviving children	-.0048⬥	.0510⬥	-.0085⬥	.1105⬥	.0034⬥	.0363⬥
His primary education	.6874**	1.4519***†	.2016	.9695*⬥	1.1030***	1.3886***
His secondary/higher education	1.1430***	1.0699**	.4526	2.8207	1.9174***⬥	.7950***
Wife's characteristics						
Her age	.0711***	.0509	.0562*	-.0402	.0883***	.0934***
Her surviving children	.4273***	.7172***†	.4452***	1.0352***†	.4006***	.6126***
Her primary education	.3446	.4986	.3429	.0987	.1657	.6366
Her secondary/higher education	.4926	.6460	.8954	.0226	-.2891	.8675
Marital characteristics						
Urban residence	.0755	.0563	-.1850	.7551	.4357	-.2283
Asset index	.1274	.1523	.4403	-.1090	-.2926	.1990
Union type (ref=monogamous)						
Senior wife	.3076	.6549*	.6732	1.9729*	-.0063	.4261
Junior wife	-.0195	-.4038	.1277	-.6547	-.2406	-.2376
Matrilineal (ref=patrilineal/other)	-.0787	.3702	n/a	n/a	n/a	n/a
Constant	-6.0511***	-6.3863***	-5.1223***	-5.2755***	-6.8963***	-7.2665***
Number of observations	1009	602	449	204	560	398

* significant at $p \leq .05$. ** significant at $p \leq .01$. *** significant at $p \leq .001$.

⬥His coefficient is statistically different from hers at $p \leq .05$.

† Change over time significant at $p \leq .05$.

TABLE 5. LOGIT COEFFICIENTS FOR WIFE'S INTENTION TO STOP CHILDBEARING, GHANA 1988-1998

	Monogamous		Senior Wives		Junior Wives	
	1988	**1998**	**1988**	**1998**	**1988**	**1998**
Husband's Characteristics						
His Age	.0076	.0167	.0032	-.0025	.0373	-.0262
His Surviving Children	-.0320◆	-.0645◆	-.0344◆	.3743*†	.0088◆	.0164◆
His Primary Education	.2953	2.2366***◆†	.7629	-.2726*	2.7095***	.5193***
His Secondary/Higher Education	.7884*	1.8650***	2.0359	-1.8867†	1.8717***	.5832***
Wife's Characteristics						
Her Age	.0662**	.0357	.1049*	.1158	.0008***	-.0573***
Her Surviving Children	.4465***	.9296***†	.4450***	-.0424	.6518***	1.1884***
Her Primary Education	.3168	.4816	.0941[1]	.4428	1.0284	.2936
Her Secondary/Higher Education	.6680	.5713				
Marital Characteristics						
Urban Residence	.1166	-.0144	.2775	-.7096	.3934	1.1152
Asset Index	.1542	.1549	-.1049	1.0550	-.0475	-.1183
Matrilineal (ref=patrilineal/other)	-.1131	.2001	.4021	3.4314*†	-.8184	.5432
Constant	-6.0511***	-6.3863***	-5.1223***	-5.2755***	-6.8963***	-7.2665***
Number of Observations	695	602	155	62	159	68

* significant at p≤.05; ** significant at p≤.01; *** significant at p≤.0.001

◆His coefficient is statistically different from hers at p≤.05

† Change over time significant at p≤.05

[1] The two educational categories were combined for polygynous wives because only one senior wife had secondary or higher education in 1988 and none did in 1998. Three junior wives had secondary of higher education in 1988 and one did in 1998.

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