

# **WOMEN'S EMPOWERMENT AND ACHIEVEMENT OF DESIRED FERTILITY IN SUB-SAHARAN AFRICA**

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## **Abstract**

Substantial research supports that women's empowerment is associated with use of contraceptives, lower fertility, and longer birth intervals. Some suggest that women's empowerment is a key pathway through which education influences fertility. This study explores factors that influence women's empowerment, ideal family size, and achievement of wanted fertility using data from two recent DHSs done in sub-Saharan Africa that include the Women's Status module: Zambia 2007 and Mali 2006. We estimate the effect of women's empowerment on their ideal number of children and whether there are interactive effects of husbands' ideal number of children on the relationship between women's empowerment and women's ideal number of children. We also examine the effect of women's empowerment, husbands' ideal number children, and wives' ideal number of children, on the difference between wanted and actual fertility. We expect that empowered women will be more likely to achieve their ideal family size than other women.

## **I. Introduction and Aims**

Fertility rates in sub-Saharan Africa remain the highest in the world, with women averaging five to six children in their lifetimes (United Nations Population Division 2008). While there is a preference for large families in the region, unwanted fertility is common; contraceptive use rates are low and women have more children than they desire (Westoff and Bankole 2002).

As countries around the world strive to achieve the Millennium Development Goals, addressing unintended pregnancy and unwanted fertility will accelerate progress towards these goals. Slower population growth permits greater investment in education and health, helping to lift nations out of poverty (MDG 1) (Potts and Fotso 2007). Similarly, reducing fertility can facilitate the achievement of universal primary education by 2015 (MDG 2) and child spacing benefits child survival (MDG 4). Preventing unintended pregnancies would reduce maternal mortality (MDG 5) and offers an effective way of reducing the number of cases of vertical transmission of HIV/AIDS (MDG 6). Slowing rapid population growth would also reduce population pressure on land, natural resources, ecosystems, and ensure environmental sustainability (MDG 7).

This study builds upon the work of Kishore and Subaiya who, in their DHS comparative report of 23 countries, demonstrated that several measures of empowerment were associated with education, employment, media exposure, and age at first marriage more consistently in the countries of sub-Saharan Africa than in other regions (Kishor and Subaiya 2008). This study will explore factors that influence women's empowerment, ideal family size, and achievement of wanted fertility. Women's empowerment is defined as having the ability to make strategic life choices (Kabeer 2001). It is hypothesized that women who are empowered will have a smaller ideal family size because having fewer children will allow them greater freedom to pursue other life opportunities. Similarly, it is expected that empowered women will be more likely to have the agency and resources to achieve the smaller family size that they desire than other women. The results will inform strategies to reduce fertility by influencing ideal family size throughout sub-Saharan Africa.

Aim 1: To assess the factors associated with women's empowerment among the entire sample and a subsample of women with few children (3 or fewer).

Aim 2: To estimate the effect of women's empowerment on her ideal number of children.

Aim 3: To examine any interactive or moderating effects of husbands' ideal number of children on the relationship between women's empowerment and women's ideal number of children.

Aim 4: To examine the effect of women's empowerment, husbands' ideal number children, and wives' ideal number of children, on the difference between wanted and actual fertility.

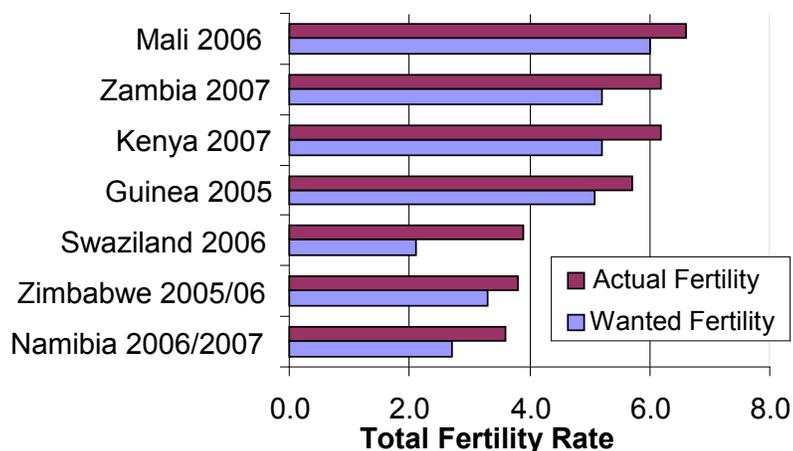
## **II. Background and Significance**

### **Fertility in Africa**

In every country in sub-Saharan Africa, and most countries around the world, the actual total fertility rate is higher than the wanted total fertility rate, according to Demographic and Health Survey (DHS) data (see Figure 1). That is, the average number of children per women is higher than the average number of children per women wanted (MEASURE DHS 2009). High rates of unwanted pregnancy have grave consequences including maternal death and mother-to-child transmission of HIV (Glasier and Gulmezoglu 2006). There are many reasons that fertility in sub-Saharan Africa remains high and many of them relate to women's social status and autonomy, including lack of knowledge and access to contraception, family opposition to contraceptive use, and cultural norms that tie women's status to their fertility. Society assigns significant social status to women who bear children while childlessness usually carries negative social consequences (Cooper et al. 2007; Donkor and Sandall 2007; Harrison and Montgomery 2001).

In most countries in sub-Saharan Africa, contraceptive use remains low and unwanted pregnancies are common. Just 16% of married women of reproductive age use contraception, compared to 64% of women in Latin America, 61% in Asia, and 44% in Northern Africa (Population Reference Bureau 2008). While the total fertility rate (TFR)—or average number of children per woman—is declining in Asia, Latin America, and North Africa, in recent years the decline in fertility rates has stalled in most of sub-Saharan Africa. A recent study

**Figure 1. Wanted and Actual Fertility in Selected Countries, 2005-2007**



Source: Demographic and Health Surveys

using DHS data from 22 sub-Saharan African countries since 1991 observed that in two-thirds of the countries, there was no meaningful change in the TFR during the interval between the two most recent surveys (Bongaarts 2008).

Additionally, an analysis of reproductive preferences in developing countries during the 1990's found that while there was a decline in desire for large families in southern and eastern African countries, in western and middle Africa there was little change; the preference for large families was stable (Westoff and Bankole 2002).

The same study found that the average gap between actual and desired fertility in western and middle Africa was greatest in

Gabon, Ghana, Senegal, and Togo, where the total wanted fertility rate was close to 20% lower than the TFR. On average, the observed TFR for all 29 sub-Saharan countries (5.5) would decline to 4.7 if women had the number of births they preferred (Westoff and Bankole 2002).

### Women's empowerment and reproductive outcomes

A broad body of research exists on women's empowerment and reproductive outcomes. Women's empowerment has been conceptualized and defined in many ways in the literature, and different terms have been used, often interchangeably, including "autonomy", "status", and "agency" among others (Lee-Rife and Edmeades 2009; Malhotra, Schuler and Boender 2002). Kabeer (2001), whose definition is widely accepted, defines empowerment as, "the expansion of people's ability to make strategic life choices in a context where this ability was previously denied to them." Two central components of empowerment are agency and resources (Kabeer 2001; Malhotra et al. 2002).

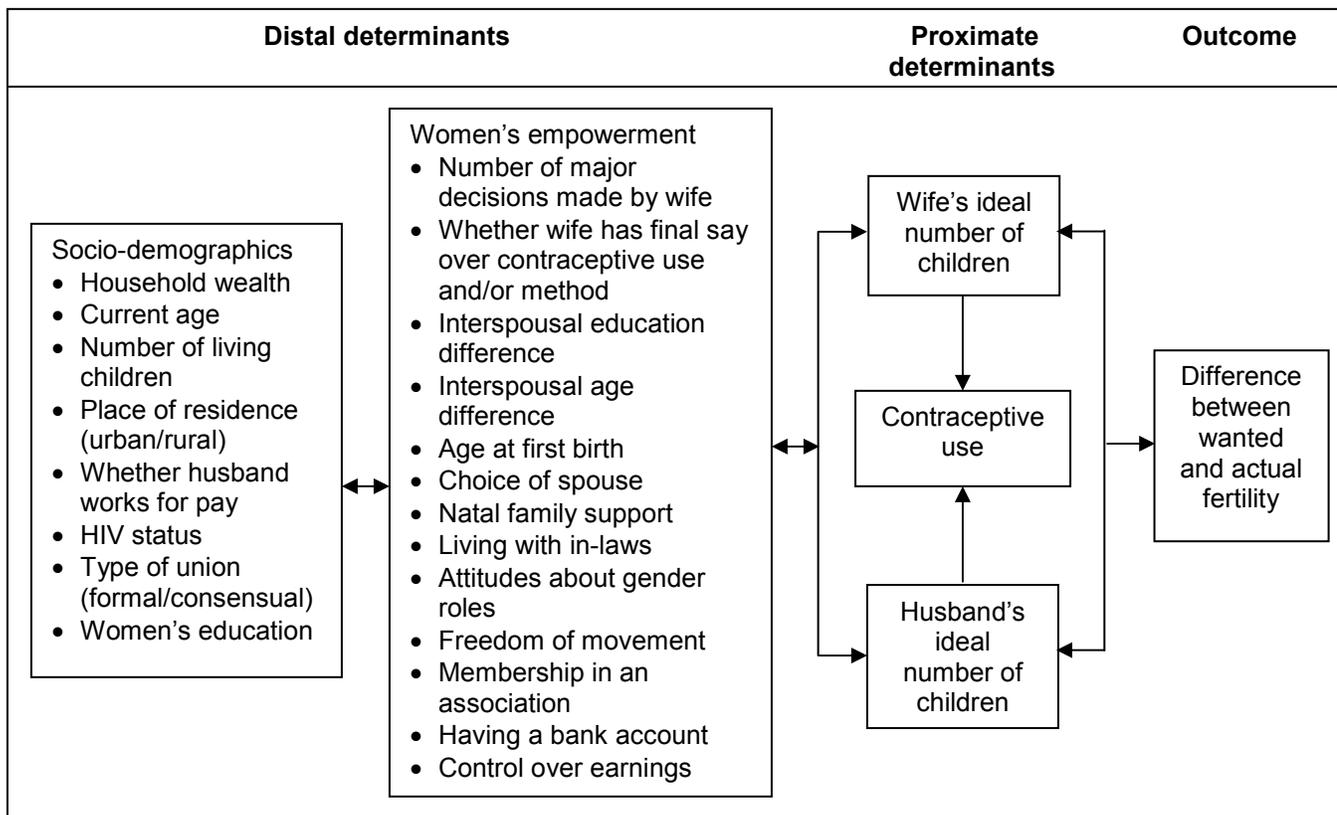
Substantial research, primarily focused on Asia supports that women's empowerment is associated with use of contraceptives (Gwako 1997; Malhotra et al. 2002; Morgan and Niraula 1995), lower fertility (Balk 1994; Dyson and Moore 1983), and longer birth intervals (Upadhyay and Hindin 2005). Some suggest that women's empowerment is a key pathway through which education influences fertility (Jejeebhoy 1995; Mason 1987).

Very little of the research on women's empowerment and fertility outcomes has been done in Africa. For example, in a review of the studies done on women's empowerment and fertility and contraceptive use, only 2 of the 12 studies specifically look at countries in sub-Saharan Africa (Malhotra et al. 2002). A study in Togo, using 1988 DHS data, found that women who selected their own spouses were more likely to communicate about family planning with their spouses and use contraception than those who had an arranged marriage, as were women who worked for cash or participated in credit or savings schemes compared to those who didn't (Gage 1995). Another study of 5 states in Nigeria examined gender equity at the community level and at the individual level and found that equity at the community level affects reproductive behavior, net of the individual effects. Individual measures of women's empowerment had the strongest impact in communities with lower levels of gender equity (Kritz, Makinwa and Gurak 2000).

In her study in Zimbabwe, using 1994 DHS data, Hindin (2000) found that that women's increased household decision-making was not associated with contraceptive use but was associated with reduced fertility. She demonstrates that the addition of decision-making variables provides independent explanatory power beyond that provided by traditional measures of women's status, such as education and labor force participation.

This literature lends support to the hypothesis that women's empowerment will be associated with a smaller ideal number of children, and a smaller difference between actual and desired fertility. The study builds upon previous work by addressing additional unanswered questions including what are the culturally relevant ways

**Figure 2. Conceptual framework**



to measure empowerment in sub-Saharan Africa, and whether and in what conditions do women with few children enjoy high social status. Throughout the region, motherhood has high social value (Cooper et al. 2007; Donkor and Sandall 2007; Harrison and Montgomery 2001). Yet, even among women with no or few children there is variability in empowerment and social status. If we could better understand what factors other than number of children contribute to women's status and empowerment, programs and policies could develop interventions that would raise status and reduce fertility.

### **Husband's Influence on Fertility**

Another area that requires further research is husbands' role in the relationship between women's empowerment and their ideal number of children. There is wide consensus that men strongly influence couples' childbearing behavior (Bankole and Singh 1998; Ezeh 1993; Speizer 1999). While men's reproductive preferences in Africa tend to be higher than those of women (Westoff and Bankole 2002), one study in Ghana, suggests that husband's declining fertility desires is largely responsible for national level reductions in fertility (DeRose and Ezeh 2005).

It is unclear how much each partner affects the other's fertility intentions, and how the relative influence of husbands' and wives' fertility intentions affect their reproductive behavior (Mason and Smith 2000). It has been argued that women often capitulate to their perceived desires of their partners, even when there is no overt conflict (DeRose, Doodoo and Patil 2002). In such cases, women's stated intentions often incorporate husbands' desires (Mason and Smith 2000). But it is possible that among some couples, particularly where the woman is more empowered, men and women will make reproductive health decisions jointly and collaboratively. The question remains, are empowered women more likely to achieve their ideal number of children and if so, does the husband's ideal number of children moderate this likelihood?

### **III. Conceptual Framework**

Figure 2 illustrates the conceptual framework for the current study and the interrelationships between measures studied. A woman's socio-demographic characteristics and life experiences will influence dimensions of women's empowerment. These will act as distal determinants of fertility. Women's empowerment influences more proximate determinants of fertility such her own values regarding ideal family

size. Her empowerment level will also influence whether she chooses her own partner, his values regarding ideal family size, and whether she uses contraception. These proximate determinants will then affect the difference between wanted and actual fertility.

### **Scope of Analysis**

To examine these questions, I will use data from ICF Macro's Demographic and Health Surveys, which provide data on a representative sample of people from each country, thus enabling one to make national inferences. Some of these surveys contain the Women's Status Module which offers a unique opportunity to examine women's status systematically across countries. The study uses data from two of the most recent DHSs done in sub-Saharan Africa that include the Women's Status module: Zambia 2007 and Mali 2006. These two countries represent differing cultures and social norms that together will provide greater insight into the variety of relevant issues in the region.

The analysis will be done in several parts. To address Aim 1, I will explore a variety of different measures of women's empowerment (see list in Figure 2) and assess the socio-demographic factors that are associated with each of these measures. I will attempt to create a multifaceted index of women's empowerment that will capture a variety of aspects of empowerment. I will explore this measure of women's empowerment, both among the total sample of women in each country, but also among just the subsample of women with few children (fewer than 3).

To address Aim 2, I will examine the association between several different women's empowerment variables and women's ideal number of children. I will use multivariate analyses to examine these associations while controlling for potential confounders.

To address Aim 3, I will examine the same relationship as in Aim 2, but add husband's ideal number of children as an additional explanatory variable. I will conduct analyses to determine whether and how husbands' ideal number of children moderates or interacts with wives' ideal number of children.

To address Aim 4, I will examine the associations between women's empowerment, husband's ideal family size, and wife's ideal family size on actual fertility. I will use multiple linear regression and control for additional factors. The outcome variable will be a continuous measure of the summed difference between wanted and actual number of children.

### **IV. Expected findings**

The study is underway. We expect to find unique predictors of women's empowerment among women with fewer children than those for women with more children. Additionally, women who are empowered will have a smaller ideal family size because having fewer children will allow them greater freedom to pursue other life opportunities. We expect that husband's ideal number of children will modify the effect of wives' ideal number of children. Finally, it is expected that increased women's empowerment, husband's lower ideal number of children, and wives' lower ideal number of children all will be significantly associated with a smaller difference between desired and actual fertility—that is, they will be more likely to achieve their ideal family size.

### **IV. Potential Policy Significance**

Promoting gender equality is already a Millennium Development Goal in itself (MDG 3) and therefore advancing our understanding of the causes and effects of women's empowerment is more urgent than ever. If women's empowerment is associated with fewer children, governments interested in reducing fertility and speeding the achievement of the Millennium Development Goals will benefit from policies that improve and expand women's empowerment. Such policies include those that delay legal age at marriage, extend property and inheritance rights to women, expand employment opportunities and child-friendly benefits for women, expand their primary, secondary, and higher education opportunities, and prohibit and condemn intimate partner violence. Such improvements in women's status and empowerment are likely to generate larger demand for contraception. Of course, to achieve reduced fertility, expanded access to family planning services is required as demand for contraception grows. This study also explores men's influence on women's wanted and actual fertility. If an effect is demonstrated, the findings will support programs that address men's needs for information and resources for spacing and limiting their children.

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