

# Religion, Patriarchy and the Perpetuation of Harmful Social Conventions: The Case of Female Genital Cutting in Egypt

Lisa Blaydes\*

Melina Platas Izama†

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## Abstract

How are harmful social practices brought to an end? Female genital cutting (FGC) — also known as female genital mutilation or female circumcision — is among the most widespread human rights violations committed against children, worldwide. While FGC remains a nearly ubiquitous practice among ever-married women in Egypt, significant declines in the practice have been witnessed among younger women and girls. In particular, Egypt’s Coptic Christian community has seen steep declines in the practice over time compared to Muslims despite a narrowing of the educational attainment gap between Christians and Muslims in Egypt. Despite significant declines in FGC among Coptic Christians, we find that the gender of a woman’s first-born child — an exogenous variable in Egypt where pre-natal sex selection is rare — impacts attitudes toward FGC. Coptic Christian women with first-born sons are more likely to believe FGC should continue; a first-born son is also linked to support for the permissibility of wife beating, suggesting Christian mothers of first-born sons are more invested in social values which harm women than mothers of first-born daughters. No such effect exists for Muslim mothers. Using data from an original survey experiment conducted in Greater Cairo in 2014, we find provide evidence for a link between religious identity and beliefs about the role of women in upholding societal values. We posit that Muslims and Coptic Christians hold different *types* of patriarchal beliefs — while Coptic Christian respondents exhibit forms of “traditional” patriarchy associated with favoritism toward men, Muslim respondents exhibit patriarchy associated with “fundamentalist” beliefs which tend to simultaneously elevate and burden women by requiring them to serve as virtuous exemplars of societal morals.

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\*Department of Political Science, Stanford University

†Department of Political Science, Stanford University.

# 1 Introduction

Female genital cutting (FGC) is a nearly ubiquitous cultural practice among ever-married women in Egypt, Eritrea, Mali and Sudan, and is practiced elsewhere in Africa, the Middle East, and Asia. According to the World Health Organization, around 140 million women and girls have been subjected to FGC, and 30 million more girls will be cut in the next decade if current trends continue. One in five of all girls and women in the Middle East and Africa who have been cut live in Egypt (United Nations Children’s Fund 2013). Undertaken by Muslims, Christians and, in some cases, African Jewish communities, FGC involves the partial or complete removal of the external female genitalia, and is typically performed on girls by the age of fourteen, before a girl reaches puberty. While some defend the practice as a long-standing, widely practiced cultural tradition, human rights activists view FGC as one of the most common forms of institutionalized violence committed against girls in the developing world. Ironically, the practice is overwhelmingly undertaken at the behest of mothers who believe that their actions are morally, socially and economically justified despite the fact that their own experiences with FGC, and its aftermath, are often described as traumatic.

This paper explores attitudes toward the perpetuation of FGC with a broader goal of understanding the conditions under which harmful social practices perpetuate or end. We analyze data from Egypt to examine rates of FGC across cohorts of women to explore the religious, social and socioeconomic factors associated with the practice. We focus on Egypt for two reasons, despite the fact that Egyptian women represent only about one-fourth of women worldwide subjected to FGC and the form of cutting that takes place in Egypt is less severe than in much of Muslim Africa. Although circumcision was nearly universal for both Muslim and Coptic Christian women age 40 and older, rates of circumcision have declined significantly over the last twenty years. As a result, Egypt provides an important locale for understanding how and when harmful social practices witness declines. At the same time, rates of FGC decline have been uneven. The Egyptian case provides opportunities, therefore, to explore variation in rates of decline across different religious and societal populations.

Using data from multiple waves of the Demographic and Health Surveys, we find that Coptic Christian women have seen much sharper declines in FGC than their Muslim counterparts, particularly in rural communities where universal FGC has long been the norm. Importantly, the decline in FGC among rural Christians has taken place despite highly comparable average levels of wealth and education across rural Muslims and Christians. We also find that socialization within families matters for mothers’ attitudes regarding FGC, particularly within Egypt’s Coptic Christian population. Despite significant declines in FGC among Coptic Christians, we find that the gender of a woman’s first-born child — an exogenous variable in Egypt where pre-natal sex selection is rare — impacts attitudes toward FGC. Coptic Christian women with first-born sons are more likely to believe FGC should continue; a first-born son is also linked to support for the permissibility of wife beating. We hypothesize that having sons invests Coptic Christian mothers, to some degree, in traditional values that impact attitudes toward female siblings in the family. No such effect exists for Muslim mothers. Analyzing the impact of first-born gender status on FGC as a behavioral outcomes is more complex as within-family sex ratios change with the birth of each additional child

and families with multiple daughters may engage in FGC for reasons associated with the marriage market even if they believe the practice should end.

In order to explore the causal mechanisms associated with how attitudes about FGC are formed, we also report findings from an original survey experiment conducted in Greater Cairo in 2014. We find that Muslim and Coptic Christian women have very different beliefs about how religious leaders in their communities view FGC. Women of different religious backgrounds also respond differentially to questioning about the role of women in upholding societal morals when primed to think of their own sons or daughters. When Coptic Christians are primed to think about their own sons, they are much more likely to hold women responsible for protecting societal morals than when primed to think about their own daughters. For Muslims, being primed to think about their own sons leads them to hold women less responsible for upholding societal morals and values than when primed to think about their daughters. These findings suggest that while Muslims and Christians agree, in the aggregate, about the rightful role of women as upholders of societal morals, priming on the respondents own sons versus daughters yields a differential response for Muslims and Coptic Christian respondents. We believe that these results help us to understand the different forms of patriarchy that exist within Egyptian society — while Coptic Christian respondents exhibit forms of “traditional” patriarchy associated with male privileges in power, Muslim respondents exhibit patriarchy associated with “fundamentalist” beliefs which tend to require women to serve as virtuous exemplars of societal morals.

The remainder of the paper proceeds as follows. Section 2 discusses the literature on the evolution of social conventions. Section 3 provides anthropological and empirical descriptive accounts of the practice of FGC in Egypt, our primary case study. Section 4 presents the data, method, and results. Section 5 provides evidence from an original survey conducted in 2014 of Muslim and Coptic Christian women living in Greater Cairo. A final section concludes.

## 2 How do Harmful Social Conventions Change?

Female genital cutting is a practice that exists in nearly forty countries around the world, the majority in Africa, Asia, and the Middle East. FGC is often considered a cultural or religious practice, although no religious text is known to require the cutting of female genitalia. The practice of FGC, particularly in its extreme forms, can have harmful and permanent effects on the physical, social and emotional health of women and girls. Potential health consequences of FGC include infection, shock, hemorrhage, scarring, infertility, and difficulties with menstruation, pregnancy, and childbirth.

Previous scholarly work suggests that harmful social practices, particularly those that seek to control sexual access to women, tend to be self-enforcing conventions maintained by individual’s expectations about marriage market dynamics (Mackie 1996). In such a scenario, practices like FGC in Africa or footbinding in China can persist for hundreds of years despite the harm committed against young women and girls. In the Islamic context, Blaydes and Linzer (2008) argue that Muslim women often face a double-bind when it comes to the perpetuation of patriarchal social norms. By signaling piety through dress, behavior and attitudes, women enjoy better outcomes on the marriage market; demonstrations of

more secular attitudes, however, preference them in the market for high-paying employment. Although attitudes toward gender equality tend to become more favorable with economic and political modernization (Inglehart and Norris 2003), Mackie (1996) finds that harmful social conventions — like FGC — can actually increase rather than diminish with modernization.

Much of what we know about the widespread nature of FGC comes from the Demographic and Health Surveys (DHS), conducted in over 80 countries worldwide, including many in countries where the practice of FGC is common. These nationally-representative household surveys frequently include questions about women’s circumcision status (the DHS refers to cutting as circumcision), attitudes toward female circumcision, and the circumcision status of a woman’s daughters.<sup>1</sup> In countries where FGC is not universal, the practice and prevalence of FGC varies greatly across ethnic and religious groups as well as place of residence (urban/rural).

Figure 1 shows the estimated percentage of the adult female population subjected to FGC in selected African and Middle Eastern countries.<sup>2</sup> There are a variety of justifications offered by women regarding why the practice persists. Common reasons given include religious tradition or requirement, cleanliness, aesthetics, ensuring abstinence until marriage, preventing adultery, and improving a woman or girl’s prospects in the marriage market. Where it is prevalent, FGC is frequently associated with Islam, despite the fact that FGC is not practiced in most of the Islamic world. Moreover, the practice of FGC in the Nile Valley began long before the arrival of Islam.

National and international efforts to reduce the practice of FGC have been met with mixed success. International institutions, including UNICEF and the WHO, have defined FGC as violence against women and girls and, as such, consider FGC a violation of women’s rights. Meanwhile a number of national governments, including those in Burkina Faso, Central African Republic, Cote d’Ivoire, Djibouti, Egypt, Ghana, Guinea, Kenya, Senegal, Tanzania and Togo have enacted anti-FGC legislation.<sup>3</sup> Yet criminalization of the practice has not necessarily led to its decline. Beliefs about social norms, such as marriage market prospects and attitudes toward chastity, continue to be central concerns in decisionmaking

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<sup>1</sup>As the focus of the DHS is on reproductive and child health, women of reproductive age (15 to 49 years old) are the primary focus of the surveys, and the most extensive interviews are conducted with women in this age category. However, information is also collected about all household members. Every DHS includes at least a household and women’s questionnaire, and some also include men’s questionnaires. Raw survey data is converted into recode files by MEASURE DHS ICF International, and recode files are available online. Recode file types include an individual recode, where the unit of analysis is the woman, birth recode (for all reported births), children’s recode (for all children under 5 in the household), male recode, household recode, and household member recode. In this paper, we use both the individual recode and the birth recode. There have been six survey rounds since the start of the DHS. Surveys from Egypt are available for the following years: 1988 (DHS I), 1992 (DHS II), 1995 (DHS III), 2000 (DHS IV), 2005 (DHS V), and 2008 (DHS V). Information regarding both female circumcision and religion is available in the 1995, 2005, and 2008 surveys, and we use these three surveys in the analysis we present in this paper.

<sup>2</sup>Figure 1 data have been compiled by the World Health Organization. Data for Burkina Faso, Central African Republic, Cote d’Ivoire, Egypt, Eritrea, Guinea, Kenya, Mali, Niger, Nigeria, Somalia, Sudan, Tanzania, Togo and Yemen are based on DHS surveys. Data for Benin, Chad, Ethiopia, Gambia, Ghana, Liberia, Senegal and Sierra Leone are based on high-quality, non-DHS surveys undertaken by UNICEF, governmental or scholarly commissions. Data for Cameroon, Democratic Republic of Congo, Djibouti, Guinea-Bissau, Mauritania and Uganda are estimates based on anecdotal evidence.

<sup>3</sup>See Toubia and Sharief (2003).

about FGC (Mackie 1996, 2000). The politicization of FGC in the context of debates about the rightful role of religion in politics further complicate the situation. Both Muslim and Christian religious elites play an increasingly important role in condoning or condemning FGC with important implications for influencing convention change. In the next section, we argue that Egypt provides a particularly useful locale for studying the dynamics associated with FGC.

### 3 Female Genital Cutting in Egypt

An exploration the determinants of FGC in Egypt provides important opportunities. One reason for this is that rates of FGC in Egypt have declined over the last twenty years making it possible to explore the dynamics of change over time within a single society. Examination of Egypt also allows one to examine differential trends across religious groups; the implications of religious identification and identity remain understudied in research on FGC.

Coptic Christians are believed to make up between 8 and 10 percent of Egypt's total population, while the remainder of Egyptians are Muslim. While there exists considerable discussion within the Muslim community in Egypt about the desirability and permissibility of the practice, a different trend seems to be underway within the Coptic Christian community in Egypt. In a sample of ever-married women in Minya governorate, Christian women are having fewer daughters circumcised, less extensive forms of cutting are used and the practice is seen as less beneficial than among their Muslim neighbors (Yount 2004). In sample of 1,200 women in urban Giza governorate undertaken by Blaydes, Christians report 34 percent of their daughters have been subject to the practice while the percent for Muslims is about 55 percent. Focus groups of Christian women conducted by Blaydes in 2009 suggest that nuns were instrumental in educating Coptic women about the impermissibility of the practice. We do the first comprehensive examination of national trends in FGC stratified by religious affiliation and offers some tentative explanations for how Christian religious elites have been influential in lowering FGC rates within their communities.

In this section, we begin by describing FGC as it is practiced in Egypt based on anthropological accounts. Next, we examine the historical trends in the prevalence of FGC.

#### 3.1 Anthropological Accounts

FGC in Egypt takes place typically on girls after the age of 4 but before the age of 14. Most women in Egypt have been subjected to a type of FGC that includes cutting of the clitoral hood, partial or complete removal of the clitoris and excision of the labia minora. Pharaonic circumcision — more typically described as infibulation — is the most severe form of FGC. While common in other parts of Africa, infibulation only takes place in the most southern communities of Egypt's Nile Valley, primarily in the Nubian community.

Anthropologists focusing on women's issues in Egypt have written extensively about the prevalence of FGC. Seen as a rite of passage for girls moving from childhood to womanhood, FGC is reported by Egyptian women as being a practice that contributes to cleanliness, is required by religion, increased their marriage prospects and prevents adultery, among other things (El-Kholy 2002, 92). Bibars, conducting field work among low-income women in the

1990s, finds FGC was done to “beautify girls, to please their husbands, or to restrain sexual desire” (2001, 150). According to Bibars,

“...in all seven areas of research, all the women and young girls I met from the age of 16 to 50 were circumcised, and all young mothers were intending to circumcise their young daughters. Education, age class and profession did not change the picture. All were advocates of female circumcision. When they were asked about the reason, religion was cited as the first excuse. But when I probed more deeply, other factors became more significant than religion” (2001, 150).

Among her informants, women were responsible for transmitting social messages about the practice while simultaneously suffering with their own traumatic memories of “screaming, pain, forcing legs apart, scissors and knife” (Bibars 2001, 150). El-Kholy — conducting fieldwork in low-income areas of Cairo in the 1990s — describes the “universality of the practice among women in my sample, both Muslims and Copts: 100 percent were circumcised, and 100 percent had either already circumcised their daughters or were planning to circumcise their younger ones when they were a little older” (2002, 88). According to one informant, the biggest *‘ayb*, or shame, for a woman is to be uncircumcised (El-Kholy 2002, 91). Common across all accounts is the idea that the practice and perpetuation of FGC rests largely in the hands of mothers making what they believe to be a decision in the family’s best interests.

### 3.2 Overtime Trends in FGC

While FGC was nearly universal for adult women born in Egypt before 1975, rates of circumcision for cohorts of younger women have seen important reductions. Figure 2 charts overtime change in FGC prevalence based on data from the Demographic and Health Surveys conducted in Egypt since 1995. The top part of the graph shows FGC rates as a percent of nationally-representative samples of ever-married women in the three major geographic regions of Egypt – Lower Egypt (the Nile Delta), Upper Egypt (the Nile Valley south of Cairo) and urban areas, including Cairo.<sup>4</sup> Graphs for each geographic area show two trend lines, one for Muslim women and a second for Coptic Christian women. Two general observations can be made from the start. Coptic Christian women have seen lower rates of FGC across regions and over time compared to Muslim women, despite being in the 80+ percent range for all of rural Egypt. Also, rates of FGC among urban women appear to be lower than for rural women across virtually all cohorts.<sup>5</sup>

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<sup>4</sup>There exists a fourth geographic designation in Egypt for “frontier” governorates. These governorates tend to be relatively sparsely populated desert communities and the number of women sampled in these areas was too small to make reliable inferences.

<sup>5</sup>The number of women represented in each data point varies considerably by religious group and over time and space. Trend lines for Muslims — who represent a much larger percentage of the overall Egyptian population — are measured more accurately than for Christians. This explains why the trend lines for Muslim populations appear to be “smoother” in the figure. While the sample sizes for Christians in Upper Egypt tend to be fairly large, the number of women from Lower Egypt and urban areas who are Christian is smaller.

FGC has been a practice that has been particularly slow to decline in rural Egypt. For Muslim women born before 1990 in rural Egypt, FGC rates remained over 95 percent. Among Coptic Christian women, particularly Copts in disadvantaged Upper Egypt, rates of FGC declined from being nearly universal to under 80 percent over the period examined. One possible explanation for this might be that Coptic Christian women in Upper Egypt enjoyed higher levels of education compared to their Muslim counterparts. This is not the case, however. The lower portion of Figure 2 shows the average number of years of education received by Muslim and Christian women in each of the three major geographic areas. While Coptic Christian women born in the 1950s and 1960s appear to have been slightly better educated than their Muslim counterparts, the cohort of women born in the 1970s saw a closing of the educational achievement between Christian and Muslim women. In Upper Egypt — where more equal numbers of Copts and Muslims provide the most reliable samples — the educational achievement gap narrows from an average of two years for older women to less than a year for younger women. This would suggest that even if *initial* differences in FGC rates across Muslim and Christian communities could be explained by differential education levels, Coptic Christians have seen much larger drops in FGC prevalence than Muslims after taking into account changes in levels of education.

Figure 3 shows the overtime trends in FGC status as reported by women about their daughters (and not themselves, as in the previous graph). The time period under investigation here is much shorter — Figure 3 shows the FGC status for girls born between the years 1987 and 1993. Rates of FGC appear to be in decline for all groups, but most steadily and steeply for Muslim girls living in Lower Egypt and in urban areas. Coptic Christian women, again, appear to be circumcised at much lower rates than Muslim women in Upper Egypt, the poorest and least developed part of the country.

### 3.3 Explaining Declines among Coptic Christians

Success stories about villages that have seen major reductions in rates of FGC seem to be disproportionately in Christian areas. What explains the relatively steep declines in FGC among Coptic women over time? In this section, we explore a number of possible factors.

First, there are no passages in Coptic scripture that specifically discuss FGC. While there is similarly no mention of female circumcision in the Koran, there do exist, however, *aḥādīth* (sing. *ḥadīth*) — reported sayings or deeds of Prophet Mohammed — which suggest that FGC was practiced in Western Arabia during the Prophet’s time but that he advised against severe forms of cutting. This particular *ḥadīth*, however, is believed to be only weakly unauthenticated and, thus, legally unsupportable by the majority of Muslim scholars around the world. The mere existence of this particular *ḥadīth*, despite its poor pedigree, provides literalists with a religious basis for their support of the practice. Coptic supporters of FGC are not able to rely on any scriptural basis for the practice. Indeed, existing statements by Coptic bishops and other religious leaders emphasize that there are no biblical references to female genital cutting or female circumcision and that most Christians around the world do not engage in the practice, even other Orthodox Christians of the Middle East.

A number of additional factors are typically referenced by Coptic religious leaders against the practice of FGC. Coptic religious leaders argue that FGC can have a series of bad effects on women’s health and well-being and, as such, the practice should be viewed as a form of

violence against women and children. Further, they contend that FGC, particularly in its more extreme forms, can hurt the marital relationship because it diminishes the pleasure of marital love. Finally, Coptic religious leaders frequently argue that true Christian chastity starts with the mind and spirit, not with the body. As a result, efforts to impose chastity externally represent a form of repression.

Second, the existence of an organized hierarchy within Coptic Christianity makes it possible for church teachings to trickle down from the Coptic Pope to the bishops, priests, servants (sing: *khādim*), and, finally, to the parishioners. This contrasts with the relative non-hierarchical nature of religious organization in Sunni Islam. While Coptic Christian leaders have offered a relatively united anti-FGC stance since the 1990s, Sunni Islamic scholars have varied historically in their views on the practice of FGC (von der Osten-Sacken and Uwer 2007). And the ambiguities in interpretation may be part of the explanation for why Egyptians today remain uncertain about the religious underpinnings of the practice. For example, scholars of Egypt's Al-Azhar — a seat of Islamic theological learning — endorsed the practice in 1951 and 1981 (Abu-Sahlieh 1994). In 1996, however, the Egyptian Minister of Health announced a ban on FGC. This decision came just two years after Cairo hosted the International Conference on Population and Development. During the course of the conference, CNN had broadcast the circumcision of a young girl in Cairo; FGC was widely condemned by women's health activists in the international community. The ban on FGC was then challenged in Egyptian courts by a conservative Islamic scholar. In 1997, an Egyptian appeals court ruled in favor of banning the procedure, arguing that it violated existing criminal codes, though the ban was not effectively enforced.<sup>6</sup>

More recently, religious scholars and conservative Muslims have emerged as the most vocal advocates of FGC (Moore et al. 1997; Allam et al. 2001; Boyle et al. 2001; Yount 2004), even in the face of government efforts to criminalize the practice. Indeed, although many Islamic scholars in Egypt condemn FGC, Abu-Sallieh (2006, 59) argues that the majority maintain that it is *makrama*, an act worthy of merit. Parliamentarians associated with the Muslim Brotherhood strongly objected to the criminalization of the practice during discussions in the Egyptian parliament. The Egyptian People's Assembly passed legislation criminalizing the practice despite over the objections of Brotherhood members and independent Islamist parliamentarians.<sup>7</sup>

Third, there exist particularly good channels of communication between Coptic Christian women and their religious and community leaders; mothers are believed to be critical decisionmakers when it comes to a daughters FGC status. Coptic women typically go to the church to attend weekly meetings and tend to be very involved with church activities. Part of the reason for this could be related to the status of Copts as a minority group within Egypt. The Coptic Church, perhaps out of fear of losing parishioners, encourage women — who tend to have more free time than their husbands — to go to church two to three times a week (to attend liturgy, bible study or other favorite church meetings). Dedicated church servants would attend more often. As a result, Coptic women attend religious services more often than many of their Muslim counterparts, who are more likely to pray at home than at a mosque. Coptic churchgoers tend to trust their priests and, with frequent attendance,

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<sup>6</sup>“Proud to be Different,” *Al-Ahram Weekly*, March 7-13 2002

<sup>7</sup>Gamal Essam El-Din, “Children Accorded Greater Rights,” *Al-Ahram Weekly*, June 12-18 2008.



there are many opportunities for church activists to deliver public health messages. Perhaps ironically, religiosity and attendance of church services has a positive impact of shedding traditional social practices (contrary to the expectations of modernization theory) conditional on the nature of elite messaging.

Coptic women are also important beneficiaries of the social services provided by Christian voluntary organizations. These groups, like the Coptic Organization for Services and Training and the Coptic Evangelical Organization for Social Services (CEOSS), often organize workshops and educational outreach that have been reported to be highly effective in reducing the popularity of FGC as a practice.<sup>8</sup> CEOSS was founded in 1952 and reaches about 1.5 million beneficiaries annually (Sullivan 1994, 85). It is headquartered in Minya and is one of Egypt's largest private voluntary organizations. Christian PVOs in Egypt tend to be highly active on a per capita basis with strong organizational skills and good efficiency when compared to many Islamic PVOs (Sullivan 1994, 91).

The upper Egyptian village of Deir El-Barsha is an illustrative case of how FGC rates have been lowered in a particular locale. Deir El-Barsha is an entirely Christian village in Minya governorate with deep roots in the Coptic tradition (Hadi 2006, 111). Deir El Barsha is the location of long-standing development programs organized by the CEOSS, where a women's committee helped to organize home visits to promote health education with a goal of reducing rates of FGC, particularly since the early 1990s (Hadi 2006, 114). Research undertaken by the Cairo Institute for Human Rights Studies suggest that "clergy played a crucial role in influencing the decline of practice...in Deir El Barsha...the commitment of religious leaders not to circumcise their daughters and their public proclamation of this abstention created an atmosphere in which ordinary people felt empowered to follow suit" (Hadi 2006, 121). This would suggest that religious elites played a particularly important role in changing social convention.

## 4 Empirical Analysis

Over-time trends in aggregate rates of FGC provide one type of information about its persistence in Egypt. Data of this form, however, tells us little about decisionmaking taking place within families. Families, and mothers in particular, face a variety of constraints and pressures when it comes to a decision of this sort. The decision regarding whether or not to circumcise one's daughter is one of critical importance, believed in many families to impact the marriageability of girls in a society when economic options outside of marriage are highly limited.

Using data from 2008 Demographic and Health Survey conducted in Egypt we explore the attitudes toward the continuation of FGC on the part of mothers who were sampled for the DHS. A second section explores observable implications associated with our hypothesis that having sons invests mothers, to some degree, in patriarchal values that impact outcomes for female siblings in the family. Again, using data from the Egypt DHS surveys, we examine the extent to which mothers with sons are more accepting of forms of domestic abuse.

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<sup>8</sup>"Proud to be Different," *Al-Ahram Weekly*, March 7-13 2002; John Lancaster, "Coptic Village Leads The Way Against Female Circumcision," *Seattle Times*, July 12 1998

## 4.1 Understanding Attitudes toward FGC

The following sections describe each of our key dependent variables, the independent variables in the analysis and our model results from our analysis of three FGC-related outcomes in Egypt using data from Demographic and Health Survey conducted in Egypt in 2008.

### 4.1.1 Dependent Variables

We examine two main outcome variables in our empirical analysis. The first is a mothers' beliefs about whether FGC should continue or not. The next outcome variable considers a measure of support for patriarchal values as proxied by the permissibility of wife-beating under a variety of circumstances.

1. *Mothers' attitudes toward FGC*: Our first dependent variable reflects a mother's beliefs about whether the practice of FGC should be continued or not. The exact question as read to mothers was the following: "Do you think that the practice of female circumcision should be continued or should it be stopped?" In this analysis, we drop all missing data, such that each woman's beliefs appears as a binary variable, 0 if she thinks FGC should be stopped, and 1 if she thinks FGC should be continued.
2. *Mothers' attitudes toward the permissibility of wife-beating*: If having male children leads women to invest in patriarchal values, we consider how the within-family gender distribution impacts attitudes toward domestic violence. Respondents were asked about the cases in which wife beating is justified. The five justifications offered are the following: 1) a wife goes out without telling her husband, 2) a wife neglects her children, 3) a wife argues with her husband, 4) a wife refuses to have sex with her husband, and 5) a wife burns the food. We run a logistic regression model to determine whether having a first-born male is associated with more traditional values regarding wife beating. The outcome of interest is a dichotomous variable that takes the value of 1 if a woman agrees that domestic violence is justified and a zero otherwise.

### 4.1.2 Independent Variables

Our analysis includes a number of independent variables:

1. *Gender of First-born Child*: Sociologists have shown that the the gender of one's children impacts a variety of attitudes. Washington (2008) finds that conditional on total number of children, having daughters increases a US Congressperson's propensity to vote liberally on issues related to reproductive rights. Shafer and Malhotra (2011) find that having a daughter versus a son leads men to reduce support for traditional gender roles. Glynn and Sen (2012) find that judges with daughters "consistently vote in a more pro-woman fashion on gender issues than judges who have only sons." Because we cannot know for sure that women in Egypt are not using a "stopping" rule, we restrict our analysis here to a woman's exogenously-determined first-born child.<sup>9</sup>

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<sup>9</sup>Existence of a "stopping" rule would suggest that women stop having children after having a son, or the desired number of sons.

Sex selection is extremely rare in Egypt so it is unlikely that conservative women are medically selecting male first-born children.

2. *Total Number of Children:* The total number of children born to a woman is a proxy for both socio-economic status (SES) and social conservatism, as lower SES and more conservative households tend to have more children.
3. *Maternal education:* Number of years the respondent has attended school. In many countries, a mother's educational status is highly correlated with her daughter's FGC status. For example, in a 1990 survey in northern Sudan (today, Sudan) rates of FGC among eldest daughters was over 60 percent among women with no education, and about 30 percent among women with secondary school education. Analysis of the 2005 and 2008 DHS by Liu and Modrek (2012) suggests that maternal education was a key determinant of daughters' FGC status.
4. *Maternal FGC status:* FGC may be seen as a more desirable practice by women who were themselves subjected to FGC. As a result, we include a control variable for a woman's FGC status.
5. *Maternal birth year:* FGC as a practice has been declining over time in Egypt. To control for time trends in FGC, we include variables for mother birth year.
6. *Wealth:* An asset-based index based on information collected in the DHS household questionnaire.
7. *Region fixed effects:* We include region fixed effects for four regions with Upper Egypt and Lower Egypt divided into urban and rural areas. This creates a total of six designations, urban, urban Upper Egypt, rural Upper Egypt, urban Lower Egypt, rural Upper Egypt and frontier areas.

### 4.1.3 Results

We use logistic regression to analyze each of our two dependent variables. Table 1 reports the main statistical results. We separately analyze Muslims and Coptic Christians as we believe that our independent variables may be impacting these populations differentially.<sup>10</sup>

We find that having a first-born male is a significant predictor of mothers' attitudes toward FGC, but only for Coptic Christian women. This effect is robust both with and without control variables. For both Coptic Christians and Muslims, more educated women are less likely to believe that the practice of FGC should continue and women who had been subjected to FGC were also more likely to see the practice continue. Higher levels of wealth were also negatively associated with believing FGC should continue. For Muslims, a woman's total number of children is positively associated with support for continuation of FGC.

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<sup>10</sup>We also run our analysis with Muslim and Coptic Christian respondents pooled and then interact religion with first-born child gender and find highly similar results.

Table 2 reports the results of how having a first-born son impacts attitudes toward wife beating for Muslim respondents. Table 3 provides the same results for Coptic Christian respondents. For Muslim women, there was either no correlation between a first-born son and support for wife beating or a small, statistically significant negative effect. Not surprisingly, wealthier women, women with more education and women with fewer children were less likely to support wife beating under a variety of circumstances. For Coptic Christian women, however, we find a positive relationship between first-born male children and support for wife beating in all specifications, often with large and statistically significant coefficients. Figure 5 summarizes the main findings on this outcome variable, by religious affiliation.

## 5 Greater Cairo Survey on Attitudes toward FGC

The survey used in this part of the paper was conducted by the researchers in two neighborhoods of Greater Cairo partnered with the Egyptian office of the international non-profit organization, Population Council.<sup>11</sup> In 2014, 400 married women between the ages of 25 and 36 years old were selected to participate in a face-to-face survey administered to no more than one woman per household. We selected this relatively young age range to capture the possibility of changing FGC status for relatively young women; by interviewing married women up to age 35, we believed we may also have the opportunity to interview young mothers who were currently making choices about their own daughters' FGC status.

The survey was administered in two bordering neighborhoods — Shubra al-Kheima and al-Khousus — which are located just north of the Cairo governorate border in Qalyubia governorate. Shubra al-Kheima and al-Khousus were selected for two reasons. First, relatively large numbers of Coptic Christians live in this part of Greater Cairo. By surveying women in this area, we were ensured the opportunity to survey enough Coptic Christian women to provide a reasonable sample for gauging attitudes. Second, surveying women in this area allowed us to examine variation across rural and urban areas; Shubra al-Kheima is urban while neighboring al-Khousus is more rural with agricultural fields interspersed with smaller villages.

The survey was described as being related to the future of girls and women in Egypt with a particular focus on health and education. In addition to questions about their educational and family background, women were asked a variety of questions about their health, including their FGC status and attitudes toward FGC. The next section describes some of the main findings of this original data. After that we describe the results of an experiment embedded in the survey which addresses the question of how religious identity interacts with beliefs about the societal role of women and girls, with implications for attitudes toward FGC.

### 5.1 Summary Findings

The survey module that we designed included both standard questions about attitudes toward FGC as well as a number of newly designed questions aimed at understanding what factors might be important in understanding how the practice might end. In this section, we

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<sup>11</sup>In addition to the staff at the Population Council, we collaborated with Sepideh Modrek (Stanford, School of Medicine) and Maia Sieverding (UCSF, Global Health Group) on this survey.

report our findings with a particular emphasis on the difference between Muslim and Coptic Christian attitudes.

The vast majority of both Coptic Christian and Muslim married women 25-36 year old in our Greater Cairo sample have been subjected to FGC (over 96 percent of Muslim women and over 83 percent of Coptic Christian women). These figures look very similar to national trends. FGC took place before the age of 15 for almost all of the women in the sample, most frequently between the ages of 9 and 10. When asked about their daughters, 2.3 percent of Coptic Christian women already had subjected their daughters to FGC while this figure was 13.9 percent for Muslim women. When one considered both the daughters already subjected to FGC and intentions for the future, 5.4 percent of Coptic Christians had or planned to undertake FGC while this figure was 41.1 percent for Muslim women. A large number of Muslim women said that they would seek the opinion of a doctor in making the decision.

More than half of the women in the sample indicated that they did not care if their son married a bride subjected to FGC or not. For Muslims, about 90 percent answered yes while only 12 percent of Christians answered yes to this question. Women were also asked if they believed the religious leaders wanted to end the practice of FGC. While the vast majority of Coptic Christian women said that they believed their religious leaders wanted the practice to end, the majority of Muslims believed that this was not at all the case for their religious community (see Figure 6). This evidence points to the importance of religious elites in encouraging or discouraging norm change.

As mentioned, the vast majority of Coptic Christians said that they would not subject their daughters to FGC. A number of different answers were offered for *why* not. While some Coptic Christian women pointed to the fact that it was dangerous for girls, others said that it was illegal or no longer done. Even larger numbers said that they would not circumcise because of religion and because it is was not the right thing to do. For Coptic Christian women who said that they would engage in FGC, they most often stated that it was because of customs and traditions that they would do so. For Muslim women, who already subjected their daughter to FGC, they made that decision generally because of customs and traditions or religion. For those who said that they planned to engage in the practice for their daughters in the future, it was most often because of customs and traditions, religion, or so that she would be well-behaved. Muslim women who said that they would not engage in the practice for their daughters pointed to the fact that it was dangerous for girls, that it might affect the girl psychologically or sexually or that it was not the right thing to do. Very few said that they planned *not* to engage in FGC because of religion (particularly in contrast to the Coptic Christian trends).

## 5.2 Experimental Design and Results

In this section, we report the results of an original survey experiment designed to gauge the extent to which Muslims and Coptic Christians might hold different attitudes toward the role of girls and women in Egyptian society. After being asked a number of questions about their family structure, attitudes and health behaviors, respondents were randomly assigned to one of two treatments. The survey enumerator made the following statement:

*Children are valued members of Egyptian society and they represent the future of our country. You said you have (X number) sons [daughters], sorry, could you remind me what their names are? [PAUSE and SMILE]. Now we have some questions about various issues facing Egyptian society. Some people say that women are the protectors of societal morals and values. Do you, on balance, agree or disagree with this view?*

Survey respondents were randomly assigned either the “sons” or “daughters” prime. For those women assigned to the “sons” prime, they were asked to say how many sons they had and their sons names. For the “daughters” prime, they were asked to say how many daughters they had and their names. Table 5 provides some information about the mean values on religion, age, education and a wealth proxy (owning a personal computer) for women assigned either the “sons” or “daughters” prime. The information presented in the balance table suggests no systematic difference between those women who received either the “sons” or “daughters” experimental condition.

In aggregate, Muslim and Coptic Christian women responded to this question quite similarly. 79.6 percent of Muslim women agreed with this statement and 76.9 percent of Coptic Christian women.<sup>12</sup> Yet, the two religious populations responded to the primes quite differently. When Muslim women were primed to think of their sons, 74.6 percent agreed with the statement. When primed to think of their daughters, however, 84.7 percent agreed. When Coptic Christian women were primed to think of their sons, 83.1 percent agreed with the statement, while only 70.7 percent agreed when primed to think of their daughters.

The differential response to the same prime by Muslim and Coptic Christian women who were otherwise quite similar (i.e., from the same neighborhood and roughly the same age) suggests that Muslims and Copts view the burdens on women in slightly different ways. For Coptic Christians, thinking about one’s sons triggers what some might call “traditional” gender norms; men are privileged to women in terms of both greater power and ability to avoid blame. For Muslims, however, prevailing forms of patriarchy require women to serve as the virtuous exemplars of society where moral control is more salient than egalitarianism. In other words, the forms of “traditional” patriarchy common among Coptic Christian women mimic fairly predictable forms of social control; for Muslims, however, patriarchy takes the form of high moral expectations which simultaneously elevate and burden women. The evidence provided in Section 4 is consistent with this interpretation. Muslims are not influenced by the gender of their first-born child in terms of FGC preferences or support for wife-beating because daughters have a special and meritorious religious role to play. Coptic Christians, however, place less of a strict moral burden on women and instead subject them to a type of patriarchy that reflects more traditional forms of privileging men over women.

## 6 Conclusions

Female genital cutting is one of a number of social conventions — including footbinding, honor killing, wife burning and public defloration — that harm the interests of girls and women but for which societies seem to be caught in a “belief trap” (Mackie 1996). Mothers

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<sup>12</sup>This difference is not statistically significant at conventional levels.

and families perpetuate harmful practices out of a desire to coordinate their activities with the expectations held by others and often become invested a belief system that can bring great harm to their female children.

In this paper, we have explored women’s attitudes toward FGC in Egypt with a eye toward trying to understand how mother’s form their opinions about FGC. While it is not surprising that women’s attitudes toward FGC are associated with wealth and education, we uncover two less obvious correlates of attitudes toward FGC. We show that Coptic Christian women have very different attitudes toward FGC than their Muslim counterparts despite having comparable levels of educational attainment. Anecdotal evidence suggests that Coptic Christian religious elites played an important role in affecting this change. We also find that within the Coptic Christian community, women who have a first-born son rather than daughter tend to state their support for the continuation of the practice in the future. We hypothesize that having sons invests mothers, to some degree, in traditional values that impact outcomes for female siblings in the family. We provide some preliminary evidence in support of the causal mechanism that we posit.

Understanding the determinants of FGC has taken on a newfound urgency. Since the overthrow of former Egyptian President Hosni Mubarak in 2011, Egypt has seen cuts in anti-FGC donor funds from abroad and bureaucratic turnover within the Egyptian state has removed many of the technocrats previously responsible for educating the Egyptian public about the dangers of the practice.<sup>13</sup> Islamist party activists — who had earned large vote shares in parliamentary and presidential Egyptian elections before being themselves deposed — had criticized legislation penalizing those who perpetrated FGC.<sup>14</sup> Indeed, Muslim Brotherhood-sponsored mobile health clinics operating in Upper Egypt even advertised male and female circumcisions for LE 30 (US \$5).<sup>15</sup> As traditional societies, like Egypt, continue to negotiate the appropriate role of religious beliefs in governance, public debate and private choices regarding the politics of FGC will have an important effect on the health and well-being of a generation of girls and young women.

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<sup>13</sup>Betwa Sharma, “For Young Women, a Horrifying Consequence of Mubaraks Overthrow,” *The New Republic*, October 29, 2011

<sup>14</sup>Gihan Shahine, “No Spring without Flowers,” *Al-Ahram Weekly*, May 17-23 2012

<sup>15</sup>See Mariz Tadros, “Mutilating Bodies: The Muslim Brotherhood’s Gift to Egyptian Women,” <http://www.opendemocracy.net>, May 24 2012 and Mohammed Abdel Salam, “Egypt’s Brotherhood Mobile FGM Convoys Condemned by Womens Group,” [www.bikyamasr.com](http://www.bikyamasr.com), May 16 2012.

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Table 1: *Effect of First-Born Gender on Attitudes toward FGC, by Religion*

	<i>Muslim</i>	<i>Muslim</i>	<i>Coptic Christian</i>	<i>Coptic Christian</i>
First-born Male	0.004 (0.039)	0.035 (0.043)	0.346** (0.167)	0.450** (0.182)
# Children		0.096*** (0.019)		0.115 (0.070)
Education		-0.080*** (0.006)		-0.063*** (0.022)
FGC Status		3.532*** (0.257)		4.229*** (1.020)
Birthyear		0.002 (0.004)		0.026* (0.013)
Wealth		-0.224*** (0.028)		-0.209* (0.107)
Constant	0.918*** (0.043)	-6.441 (7.266)	-1.006*** (0.132)	-55.989** (26.620)
Region Fixed Effects	No	Yes	No	Yes
Observations	12,822	12,814	689	689

Standard errors in parentheses

\*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Table 2: *Effect of First-Born Gender on Attitudes toward Wife-beating for Muslim Respondents*

	Go Out	Go Out	Neglect	Neglect	Argue	Argue	Sex	Sex	Food	Food
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
First-born Male	-0.078** (0.036)	-0.059 (0.039)	-0.081** (0.036)	-0.062 (0.039)	-0.043 (0.046)	-0.011 (0.050)	-0.039 (0.039)	-0.015 (0.042)	0.083 (0.058)	-0.050 (0.060)
# Children		0.085***		0.070***		0.081***		0.056***		0.050*
Education		(0.014)		(0.014)		(0.015)		(0.014)		(0.020)
		-0.094***		-0.076***		-0.085***		-0.087***		-0.076***
FGC Status		(0.006)		(0.006)		(0.008)		(0.006)		(0.011)
		-0.051		0.048		0.120		-0.221*		-0.305*
Birthyear		(0.091)		(0.096)		(0.107)		(0.132)		(0.165)
		0.016***		0.012***		0.004		0.000		0.001
Wealth		(0.003)		(0.003)		(0.004)		(0.003)		(0.006)
		-0.263***		-0.270***		-0.357***		-0.252***		-0.441***
		(0.024)		(0.025)		(0.032)		(0.028)		(0.042)
Constant	-0.569*** (0.039)	-31.647*** (6.540)	-0.666*** (0.038)	-24.308*** (6.355)	-1.501*** (0.046)	-9.138 (7.727)	-1.044*** (0.041)	-0.508 (6.760)	-2.206 (0.056)	-3.173 (10.939)
Region FE	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Observations	13,955	13,955	13,968	13,968	13,959	13,959	13,921	13,921	13,961	13,961

Standard errors in parentheses

\*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Table 3: *Effect of First-Born Gender on Attitudes toward Wife-beating for Coptic Christian Respondents*

	Go Out	Go Out	Neglect	Neglect	Argue	Argue	Sex	Sex	Food	Food
First-born Male	0.325** (0.157)	0.348** (0.170)	0.432*** (0.167)	0.505*** (0.179)	0.428** (0.199)	0.416* (0.217)	0.078 (0.194)	0.053 (0.202)	0.314 (0.300)	0.277 (0.312)
Children		0.063 (0.060)		0.051 (0.061)		0.054 (0.072)		0.090 (0.070)		-0.086 (0.102)
Education		-0.074*** (0.022)		-0.078*** (0.021)		-0.098*** (0.031)		-0.087*** (0.027)		-0.168*** (0.051)
FGC Status		0.634** (0.272)		0.791*** (0.264)		0.321 (0.342)		0.609* (0.341)		0.943* (0.571)
Birthyear		0.022* (0.013)		0.019 (0.012)		0.013 (0.016)		0.028* (0.017)		0.002 (0.021)
Wealth		-0.257** (0.107)		-0.112 (0.110)		-0.390** (0.134)		-0.228** (0.116)		-0.251 (0.186)
Constant	-1.165*** (0.131)	-43.792* (25.387)	-1.247*** (0.133)	-39.688* (23.950)	-2.143*** (0.194)	-27.160 (31.897)	-1.70*** (0.159)	-56.903** (33.928)	-2.788*** (0.268)	-4.893 (42.322)
Region FE	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Observations	733	733	733	733	730	730	731	731	731	731

Standard errors in parentheses

\*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

	<i>Muslim</i>	<i>Coptic Christian</i>
<i>Mothers circumcised (%)</i>	96.4	83.1
<i>Average age at time of FGC (years)</i>	9.86	9.02
<i>Daughter already circumcised (%)</i>	13.9	2.3
<i>Daughter circumcised or planned to be circumcised (%)</i>	41.1	5.4
<i>Wants son to marry circumcised bride</i>	89.8	12.3
<i>Thinks government should have a role in banning FGC</i>	29.6	83.6
<i>Percent who agree with the following statements:</i>		
— <i>A husband prefers wife to be circumcised</i>	62.8	16.2
— <i>Circumcision prevents adultery</i>	35.3	11.7
— <i>Circumcision makes girls well-behaved</i>	50.0	17.5
— <i>Circumcision benefits society</i>	48.2	12.3

Table 4: *Summary statistics regarding FGC status and attitudes toward FGC from 2014 Greater Cairo survey, by religion.*

	<i>“Sons” Prime</i>	<i>“Daughters” Prime</i>
<i>Religion (Muslim=0, Coptic Christian=1)</i>	0.31	0.32
<i>Age (in years)</i>	31.2	31.4
<i>Education (secondary level=5)</i>	5.02	4.91
<i>Owens desktop computer</i>	49.8	50.2

Table 5: *Balance table showing the mean values for respondents assigned to either the “sons” or “daughters” prime in the survey experiment. 207 respondents received the “sons” prime and 203 respondents received the “daughters” prime.*

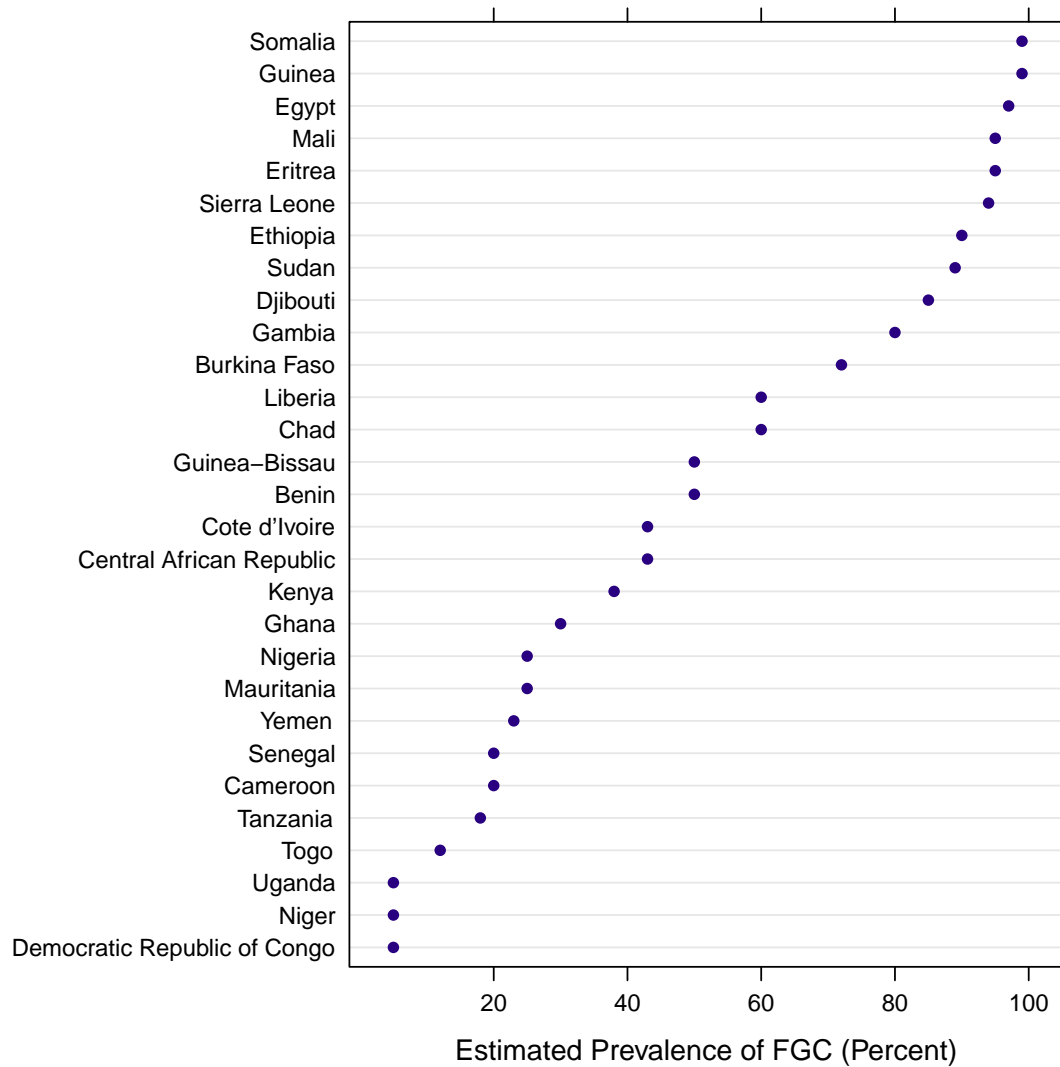


Figure 1: *Estimated percent of adult female population subjected to FGC in selected African and the Middle Eastern countries.*

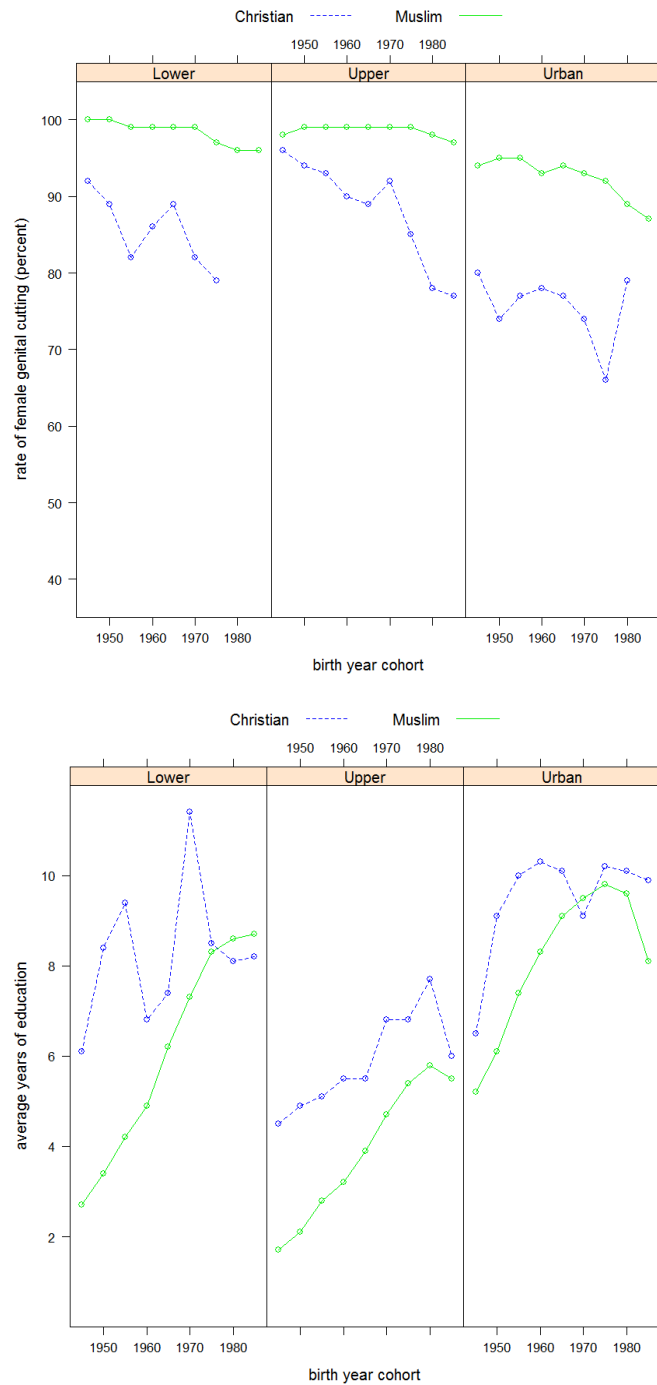


Figure 2: *Top: Average rates of female genital cutting for Christian (blue-dotted) and Muslim (green-solid) women in lower, upper and urban Egypt across five-year birth cohorts beginning in 1945. Bottom: Average number of years of education for Christian and Muslim women in lower, upper and urban Egypt across five year birth cohorts. Data drawn from DHS respondents about their own FGC status.*



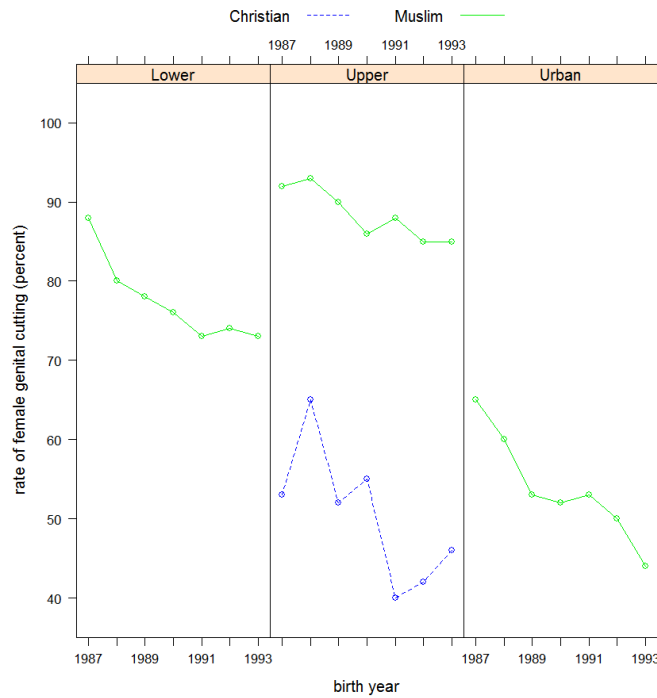


Figure 3: Average rates of female genital cutting for Christian (blue-dotted) and Muslim (green-solid) girls in lower, upper and urban Egypt born between the years 1987 and 1993. Data drawn from reports offered by DHS respondents about the FGC status of their daughters. Average rates for Christian daughters in lower and urban Egypt are excluded because of small sample size.

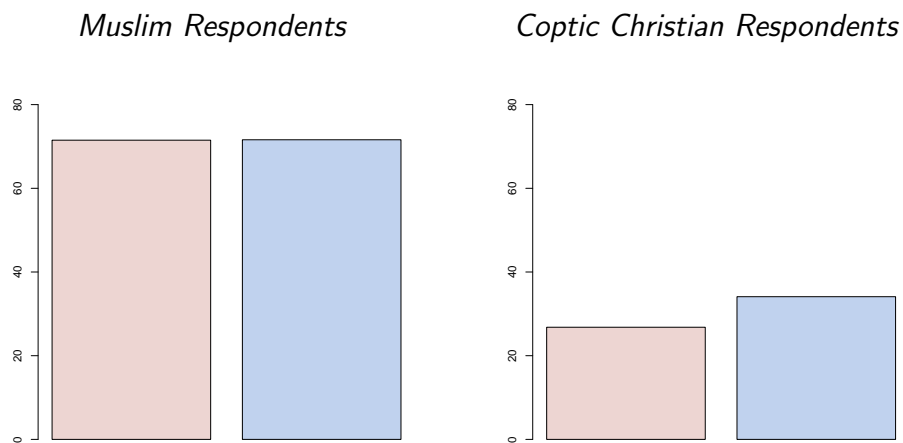


Figure 4: Predicted probabilities for Muslim (left) and Coptic Christian (right) women for whether or not FGC should continue. The pink bar (left within each panel) indicates first-born child is a daughter; the blue bar (right within each panel) indicates first-born child is a son. Data from 2008 DHS; predicted probabilities correspond to Table 1, columns 1 and 3.

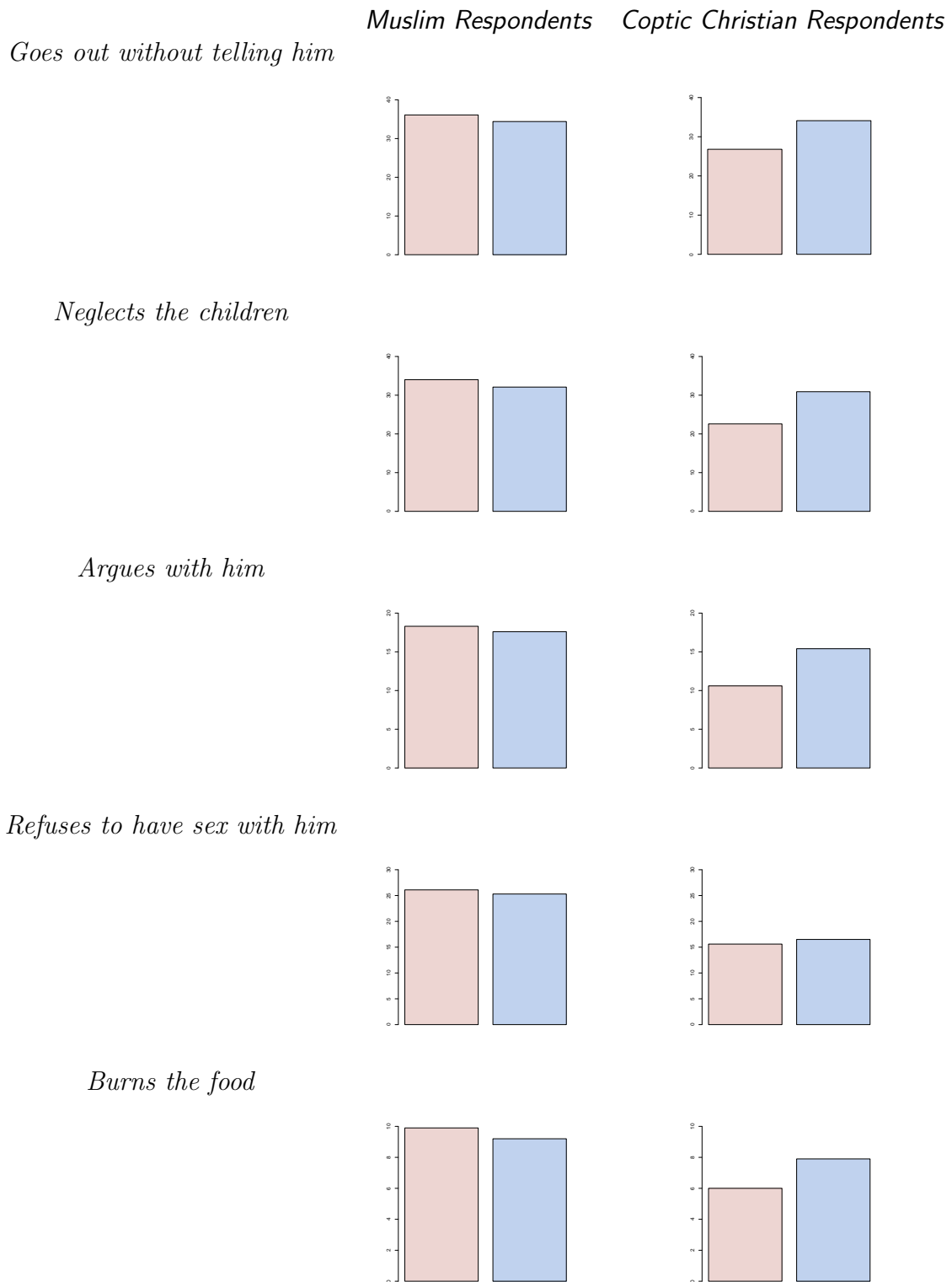


Figure 5: Predicted probabilities for Muslim (left) and Coptic Christian (right) women for the permissibility of wife-beating under a variety of circumstances. The pink bar (left within each panel) indicates first-born child is a daughter; the blue bar (right within each panel) indicates first-born child is a son. Data drawn from 2008 DHS; predicted probabilities correspond to Tables 2 and 3, columns 1, 3, 5, 7 and 9.

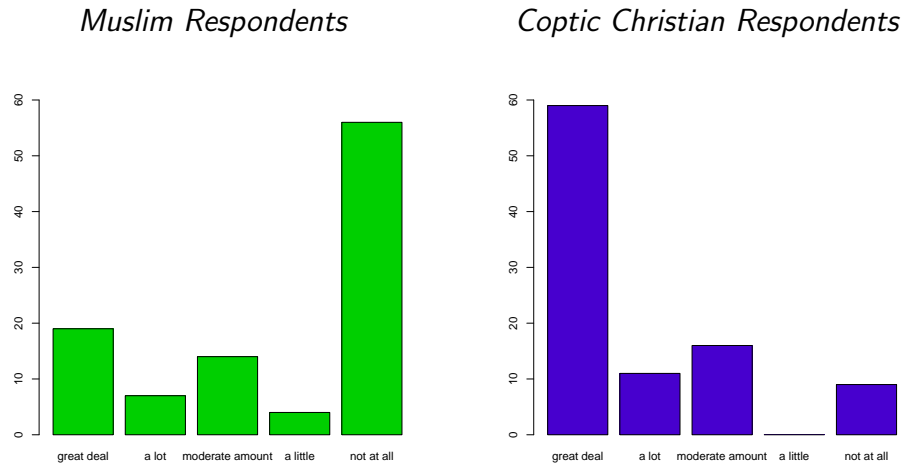


Figure 6: Survey respondents beliefs about the belief that religious leaders want to end the practice of FGC. Data drawn from 2014 Greater Cairo survey.

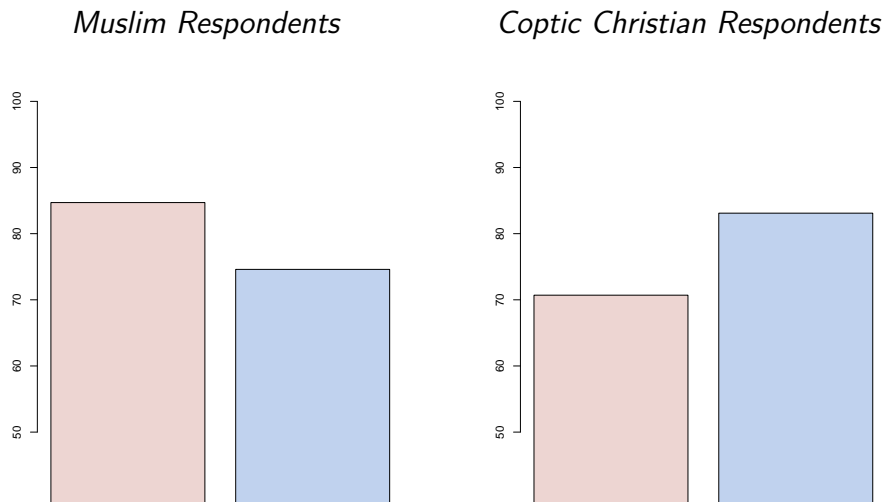


Figure 7: Results of priming experiment for Muslim (left) and Coptic Christian (right) respondents. The pink bar (left within each panel) indicates respondent was reminded of her daughters; the blue bar (right within each panel) indicates the respondent was reminded of her sons. Data drawn from 2014 Greater Cairo survey.