Religion, Patriarchy and the Perpetuation of Harmful Social Conventions: Explaining Women’s Attitudes toward Female Genital Cutting in Egypt

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Abstract

How are harmful social practices brought to an end? Female genital cutting (FGC) is extremely common among ever-married women in Egypt but the practice has declined significantly among younger women and girls. While much of the recent literature on abatement of the practice has focused on individual-level determinants of a mother’s choice to circumcise her daughters, we focus on meso-level factors, particularly norm change within religious communities and attitude formation within families. We find differential FGC trends across Muslim and Coptic Christian communities as well as an effect of the gender of a woman’s first-born child — an exogenous variable in Egypt where pre-natal sex selection is rare — on attitudes toward FGC. The effect of first-born gender varies by religion and birth cohort, however, suggesting ways in which meso-level factors interact with each other to impact women’s attitudes. We conduct an original survey of women in Greater Cairo with a gender priming experiment and find heterogeneous effects by religion on patriarchal attitudes, providing evidence for a link between religious identity and beliefs about the role of women in society.
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.\(^1\) 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. While some defend female circumcision as a long-standing, widely-practiced societal 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.\(^2\)

This paper explores women’s attitudes toward the perpetuation of FGC in Egypt with a broader goal of understanding the conditions under which harmful social practices perpetuate or end (Mackie 1996; Bicchieri 2016). While existing studies tend to focus on individual-level factors — like a woman’s education level, socioeconomic status or exposure to elite communications — we focus on meso-level factors associated with a woman’s religious community and her family structure. 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 despite comparable average levels of wealth and education. Qualitative evidence suggests that the Coptic Church played a leading role in encouraging community members to converge on a change in social practice with regard to FGC.

We also find that socialization within families shapes mothers’ attitudes regarding FGC. For older women, the gender of a first-born child — an exogenous variable in Egypt where pre-natal sex selection is rare — impacts attitudes toward FGC. In particular, older Muslim women and Coptic Christian women with first-born sons are more likely to believe FGC should continue even though Coptic Christian women have lower levels of support for the continuation of FGC overall. We hypothesize that having sons invests mothers, to some degree, in traditional values that can impact attitudes toward gender-related practices and social norms. The first-born gender effect is attenuated for younger mothers, however, and among younger Muslim women, a male first-born child is associated with the opposite result.

In order to explore the mechanisms underlying these attitudes, we conduct an original survey with a gender priming experiment for a sample of young mothers in Greater Cairo. We find that Muslim and Coptic Christian women have very different beliefs about how religious leaders in their communities view FGC. Coptic Christian women believe that their religious leaders want to see an end to the practice, an empirical finding consistent with our conclusion that religious elites have a key role to play in influencing social change on this issue.

Mothers of different religious backgrounds also respond differentially — when primed to think of their own sons or daughters — to questioning about the role of women in upholding

\(^1\) 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.

\(^2\) Recent studies have suggested that the costs of interpersonal violence — like FGC — may be costlier and more pervasive than those associated with civil war (Fearon and Hoeffler 2014).
societal morals. Although 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. When Coptic Christian mothers 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 our sample of Muslim mothers, 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.

Taken together, our findings suggest that for communities where traditionalist values predominate, women’s attitudes are influenced by their own formative experience as new mothers — as proxied by the gender of their first-born child — in combination with the messaging of religious elites in their community. Egypt’s Muslim community exhibits evidence of both traditional views toward gender as well as attitudes more consistent with a “fundamentalist” worldview. Among younger Muslim women, support for FGC remains high but first-born gender no longer has the effect of increasing support for female circumcision. Instead, younger Muslim mothers may view their own daughters as having an elevated religious status, requiring them to serve as virtuous exemplars of Islamic morality.

Our results contribute to three distinct social science literatures. First, we contribute to a growing literature on the effect of child gender on attitudes toward women by extending application of this particularly strategy for causal inference beyond American elites (Washington 2008; Glynn and Sen 2015), broader US sample (Downey et al. 1994; Warner and Steel 1999; Shafer and Malhotra 2011) and a North American sample (Warner 1991). Second, our findings build on an existing literature which differentiates across types of patriarchal bargains in developing societies (e.g., Kandiyoti 1988). While much scholarly work suggests cross-regional variation in the types of patriarchal regimes which predominate, we demonstrate the utility of a “varieties” of patriarchy approach for understanding generational and sectarian differentiation within Egyptian society. Finally, our results relate to the literature on how social conventions, particularly regarding practices which harm women, change (Mackie 1996; Cloward 2014; Cloward 2015; Cloward 2016; Bicchieri 2016).

The remainder of the paper proceeds as follows. Section 2 describes anthropological accounts of the practice of FGC in Egypt, our case study, as well as a summary of the primary empirical findings in the existing literature. Because most of these findings are focused on the individual-level attributes of mothers, we also describe our motivation for studying meso-level factors, like family and religious group socialization. Section 3 describes temporal variation in the prevalence of FGC by religious group in addition to a qualitative discussion reflecting on how the Coptic community has realized declines in FGC. Section 4 adds family socialization — as proxied by first child gender — to the set of factors which influence attitudes toward FGC for both Christians and Muslims. Section 5 provides evidence from an original survey conducted in 2014 of Muslim and Coptic Christian women living in Greater Cairo. Section 6 discusses the implications of our results. A final section concludes.
2 Female Genital Cutting in Egypt

In this paper, we focus on abandonment of female genital cutting, a harmful practice that exists in nearly forty countries around the world, the majority of which are 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.

We focus on Egypt for two reasons. Although FGC was nearly universal for both Muslim and Coptic Christian women age 40 and older, rates 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 change. At the same time, rates of FGC decline have been uneven. Its religious diversity and changing rates of FGC prevalence make Egypt an ideal setting for examining how various societal factors — like religious community and family structure — shape attitudes toward FGC. The Egyptian case provides opportunities to explore variation in rates of decline across different religious and societal populations.

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 a sample of 1,200 women in urban Giza governorate surveyed in 2009, Christians reported 34 percent of their daughters have been subject to the practice while the percent for Muslims was about 55 percent (Blaydes and Gillum 2013).

2.1 Anthropological Accounts

There are a variety of justifications offered by women regarding why FGC 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 before the arrival of Islam.

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3 Egyptian women represent about one-fourth of women worldwide subjected to FGC though the form of cutting that takes place in Egypt is less severe than in much of Muslim Africa.
3 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, increases 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,

“...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” (Bibars 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.

2.2 Empirical Approaches

Existing empirical studies examining attitudes toward FGC in Egypt have typically focused on the socio-economic status and educational background of mothers, who are seen as key decision makers associated with daughters’ FGC outcomes. Individual-level factors have been widely discussed in the existing literature and are important predictors of support for FGC. Yount (2002) finds — in a study of FGC in Upper Egypt — that a mother’s educational level is negatively associated with both her own circumcision status as well as her intent to circumcise her daughter. Suzuki and Meekers (2008) find that Egyptian women exposed to two or more FGC-related media messages are 1.6 times more likely than unexposed women to support discontinuing FGC. Modrek and Liu (2013) find that maternal education is associated with declines in FGC while paternal education is a less robust indicator of FGC status. In addition, high levels of exposure to FGC-related media messaging may also be associated with reduced support for FGC (Modrek and Liu 2013).

We find that these factors are important but focus our attention on two meso-level factors. The first considers socialization and attitude formation of women within their families.\footnote{Our focus on group-level factors complements existing work on FGC, particularly with regard to the study of FGC in Sub-Saharan Africa. For example, Hayford and Trinitapoli (2011) examine the relationship}
While a number of influential studies have considered household level variables, we focus on one particular aspect of the family, the gender of the first born child. Why examine first born child gender? Sociologists have shown that the gender of one’s children impacts a variety of attitudes. Samples of US and North American populations have been shown to be influenced by child gender (Warner 1991; Downey et al. 1994; Warner and Steel 1999; Shafer and Malhotra 2011). For example, Shafer and Malhotra (2011) find that having a daughter versus a son leads men to reduce support for traditional gender roles. US elites have also been shown to be influenced by child gender. 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. Glynn and Sen (2015) find that judges with daughters “consistently vote in a more pro-woman fashion on gender issues than judges who have only sons.”

A variety of theoretical mechanisms have been proposed to explain the relationship between child gender and parental attitudes and behavior. These include greater exposure to issues regarding gender equality when having a daughter (Warner and Steele 1999); children’s engagement in non gender-conforming tasks, a factor impacted by the sex composition of the household (Brody and Steeleman 1985); a preference that mothers of boys stay home rather than outsource child care (Downey et al. 1994); greater paternal investment in children when there is at least one male child (Harris and Morgan 1991); and that mothers of boys believe marital separation is less likely (Katzev et al. 1994). Adjudicating between these different mechanisms is difficult since multiple factors likely contribute to gender-related attitudes, and probably in combination with one another.

While most studies on child gender focus on elite and US samples, we focus on Egypt, where we also expect that child gender may affect parental attitudes. 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. Sex selection is extremely rare in Egypt so it is unlikely that women are medically-selecting male first-born children.

Beyond family-level factors, we also believe that attitudes and choices regarding FGC reflect the existence of a coordination game suggesting that group-level factors also matter. In Egypt, religion is a major identity marker and marriage takes place within, not across, religious groups. 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 and the Middle East, footbinding in China and widow suicide in India can persist for decades and longer despite the harm committed against women and girls. In many cases, the social conventions force women into extreme chastity or fidelity displays (Mackie and LeJeune 2009).

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 signal-between religious obligation and FGC in Burkina Faso. They find differences between Christians, Muslims and adherents of traditional religions and argue that differential FGC rates are largely explained by specific religious beliefs and other societal factors rather than individual respondent characteristics. The existing work on FGC in Egypt, however, has been less focused on these group-level determinants.

Existence of a “stopping” rule would suggest that women stop having children after having a son, or the desired number of sons.
ing piety through behavior and attitudes, women enjoy better outcomes on the marriage market; demonstrations of more secular beliefs, 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.

3 Variation in FGC by Religious Denomination

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. This has particularly been the case for Egypt’s Coptic Christian community. This section explores these trends and provides qualitative evidence about possible reasons for these differences. Later sections consider how religious group interact with family-level factors to influence women’s attitudes toward FGC.

3.1 Temporal Trends in FGC, by Religion

Much of what we know about the widespread nature of FGC comes from the Demographic and Health Surveys (DHS), conducted in over 90 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.7

Figure 1 charts overtime change in FGC prevalence based on data from the Demographic and Health Surveys conducted in Egypt in 2008 and 2014. 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.8 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.9

Footnotes:

7 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.

8 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.

9 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
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. However, while DHS data suggest that Coptic Christian women born in the 1950s and 1960s were 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 narrowed 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.

3.2 Explaining Declines among Coptic Christians

Success stories about villages that have seen major reductions in rates of FGC seem to disproportionately come from Christian areas. What explains the relatively rapid decline in FGC among Coptic women over time? One possible explanation relates to the fact that 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 *ahādīth* (sing. *hadīth*) — 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.\(^{10}\) The scriptural basis for FGC within the Coptic tradition is a time invariant explanatory factor, however. It is therefore an inadequate explanation for over time change in behavior among Egyptian Copts. As a result, this section largely focuses on the role of Coptic Christian organizations in encouraging social change.

Beginning in the 1970s, Coptic private voluntary organizations (PVO) like the Coptic Evangelical Organization for Social Services (CEOSS) identified FGC — along with early marriage and bridal “deflowering” — as local customs harmful to women (Young 2004).\(^{11}\) In

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\(^{10}\)This particular *hadīth*, however, is believed to be only weakly unauthenticated and, thus, legally unsupported by the majority of Muslim scholars around the world. The mere existence of this particular *hadīth*, 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.

\(^{11}\)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).
1982, CEOSS founded a committee to raise consciousness regarding this issue and in 1995 CEOSS intensified their anti-FGC efforts with the creation of local committees in a select number of villages that brought together village leaders with a priest and local implementing team (Yount 2004). As of 2000, the Bishopric of Public, Ecumenical, and Social Services of the Coptic Orthodox Church had FGC programs operating in 24 communities (Yount 2004). Private voluntary organizations sponsor workshops and educational outreach that have been reported to be highly effective in reducing the popularity of FGC as a practice.

The Coptic Orthodox Church has also played an important role in encouraging forms of social change related to the practice of FGC. Recent scholarship has suggested that the Coptic community has become increasingly centralized and institutionalized around an invigorated Coptic Orthodox Church. This revival has been led, for the most part, by university-educated clerics who represent the interests of a professionalized middle class (Haddon 2012). Greater institutionalization of the Coptic Orthodox Church has combined with the existence of an organized hierarchy within Coptic Christianity to make it possible for church teachings to trickle down from the Coptic Pope to the bishops, priests, servants (sing: khādim), and, finally, to the parishioners. Coptic nuns, for example, have been seen as playing a vital role in convincing villagers not to circumcise their daughters. Coptic religious leaders often 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.

The hierarchical character of the Coptic Orthodox Church contrasts with the relative diffuse and 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). 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.

Relatively little research has been conducted on the avenues by which international NGOs and transnational Christian organizations may have influenced the attitudes of Coptic Christian elites. In 1994, Yount (2004) estimates that CEOSS received 75% of its funding from Europe, the US and Canada. Cloward (2014) considers the ways that international actors engage in transnational campaigns to promote certain norms which may be thwarted by individuals who misrepresent their behaviors and intentions when they believe that representatives from the international community are observing them. Our research cannot speak directly to these issues. In the context of Egypt, however, previous research has demonstrated the ways that women may misrepresent their daughter’s FGC status and whether they had been forced to have sex by their husbands as a function of whether they were surveyed by a veiled or unveiled survey enumerator (Blaydes and Gillum 2013).


See, for example, discussions about marriage and virginity at www.copticchurch.net.

See Malstrom (2016) for more details about the debate that emerged in the wake of the CNN broadcast.
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. Following the 2007 circumcision-related death of a 12-year-old girl, the Egyptian Ministry of Health issued a ban on female circumcision; formal legislation criminalizing FGC followed in 2008. Observers have suggested, however, that top-down approaches to eliminate the practice have largely been an exercise in futility.

Over the last twenty years, 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-Salieh (2006, 59) argues that the majority maintain that it is an act worthy of merit (makrama). 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. According to one UNICEF employee working on the issue of FGC, “convincing religious leaders is the key to success...it is easier with Coptic Christians since everyone listens to the pope...but Islam does not have a central authority.”

There also exist particularly good channels of communication between Coptic Christian women and their religious and community leaders, a factor which may be consequential since women are thought to be key decisionmakers when it comes to FGC. Coptic women typically go to the church to attend weekly meetings and tend to be very involved with church activities (Van Doorn-Harder 1995). 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 church meetings). Dedicated church servants attend even more often (Jeppson 2003, 45). Coptic women participate in religious services more often than many of their Muslim counterparts, who are more likely to pray at home than at a mosque.

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”

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17 “Proud to be Different,” Al-Ahram Weekly, March 7-13 2002
This would suggest that religious elites played a particularly important role in changing social convention.

This interpretation of norm change within Egypt’s Coptic Christian community is consistent with arguments made by Finnemore and Sikkink (1998) regarding the role played by norm leaders as the first movers in any process of communal norm change. Coptic bishops, priests and church servants defected from the local norm, risking potential social sanction from their broader communities. But because of the important role of the Coptic clergy in defining community standards for appropriate behavior, their commitment to encouraging norm change was mostly followed rather than rejected. Over time, it became increasingly clear that the community — as a whole — was moving in the direction of discouraging FGC and this sensibility allowed the Coptic community to coordinate on a new equilibrium. Consistent with the mechanisms suggested by Cloward (2016), Coptic norm leaders were likely influenced by high-quality international normative messaging on the undesirable externalities associated with FGC.21

4 Family-level Socialization and FGC

Over time trends in aggregate rates of FGC provide 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. It is also not clear that legal prohibitions serve as a sufficient disincentive. According to Hassanina and Shaaban (2013), legal prohibitions against FGC in Egypt have not had a major effect on its practice, even among more families characterized by high levels of education. This has led analysts to conclude that changing attitudes toward FGC may be of greater influence than changes to the legal environment.

4.1 Demographic and Health Survey Data

We use data from the nationally representative 2008 and 2014 Egyptian Demographic and Health Surveys to explore the attitudes toward the continuation of FGC.22 Summary statistics for the sample of women in the 2008 and 2014 surveys are available in Table 1.

Our main outcome of interest is a mothers’ belief about whether FGC should continue or not.23 In this analysis, we drop all missing data, such that each woman’s beliefs appears as

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21 Cloward (2015) argues that the normally high barriers to defecting from local norms are more likely to be overcome when there are non-circumcising groups living nearby and when there are local elites among the group of first movers.

22 Analyzing the impact of first-born gender status on FGC as a behavioral outcomes is more complex as families with daughters may engage in FGC for reasons associated with the marriage market even if they believe the practice should end. See Patel (2012) for more on the marriage market in Muslim societies, like Egypt. As a result, in this study we focus on analyzing attitudes toward the continuation of FGC.

23 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?”

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a binary variable, 0 if she thinks FGC should be stopped, and 1 if she thinks FGC should be continued. Like existing studies, we hypothesize that having sons invests parents, to some degree, in patriarchal values (e.g., Washington 2008; Shafer and Malhotra 2011; Glynn and Sen 2015).

Our key independent variable of interest is the gender of the first-born child. As first-born gender is a dichotomous variable, throughout the analyses we will estimate the effect of having a first-born male. We believe that this variable serves as an exogenous form of variation since sex-selection is rare in Egypt; the prevalence of such a practice would be particularly low for first-born children.

We include a number of covariates in our analysis. The first is the total number of children born to a woman as a proxy for both socio-economic status (SES) and social conservatism, as lower SES and more conservative households tend to have more children. Maternal education — the number of years the respondent has attended school — has been shown to be highly correlated with her daughter’s FGC status. For example, in a 1990 survey in northern 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.24 We also include an asset-based wealth index created from information collected in the DHS household questionnaire to account for any residual SES effects.

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. In addition, FGC as a practice has been declining over time in Egypt. To control for time trends in FGC, we include a variable for mother birth year. Finally, 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.

Since we are interested in how the effect of first-born gender varies over time and for the two religious groups, we create several samples of older and younger Muslim and Christian women using birth-year cut-points between 1975 and 1990.

4.2 Results

We estimate a linear regression model to analyze our dependent variable of interest.25 Tables 2 and 3 report the main statistical results among older and younger women by religion, using four cutpoints, 1975 through 1990, at five year intervals, to examine the relationship between first-born sons and attitudes toward FGC over time. We separately analyze Muslims and Coptic Christians as we believe that our independent variables may be impacting these populations differentially.26

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24 See Modrek and Liu (2013) for a discussion of the importance of maternal education on predicting attitudes toward FGC.
25 Our results are substantively the same if we use a logistic regression model.
26 We also run our analysis with Muslim and Coptic Christian respondents pooled and then interact religion with first-born child gender and find similar results (see Appendix Table 1). The main specification includes covariates as outlined above, but results are similar without covariates, as shown in Appendix Tables 2 and 3.
We find that having a first-born male is a significant predictor of mothers’ attitudes toward FGC among older women and is particularly strong among Coptic Christian women (see Table 2). Coptic Christian women have overall lower levels of support for FGC when compared to Muslims, however.\textsuperscript{27} Other factors which are associated with higher levels of support for the continuation of FGC include if the woman was herself circumcised and, for Muslim women, her total number of children. Better educated and wealthier women are less likely to support the continuation of FGC.

Among younger women, however, the effect of having a first-born son differs systematically for Muslims and Coptic Christians (see Table 3). For younger Muslim women (i.e., those born after 1975), having a first-born son appears to have a negative effect on the belief that FGC should continue. In other words, a male first child is associated with decreased support for the continuation of FGC, a pattern which is reverse of that which appeared in our sample of older Muslim women.\textsuperscript{28} This suggests a generational change in attitude that became increasingly apparent for women born in the late 1970s and 1980s. In the next section, we consider the extent to which this effect may relate to the rise of Islamic fundamentalist cultural values which emphasize the moral role of women as the defenders of conservative values.

While our sample size is considerably smaller for Christian women, we pick up a positive effect of having a first-born son that is significant at the 10 percent level for Christian women born after 1975. The effect declines in magnitude and is no longer statistically significant for the cohort born after 1980. The sample size is too small to conduct an analysis of Christian women born after 1985. Figure 2 summarizes the coefficient values for these effects.

Together, these results suggest that there was a universal effect of having a first-born son on attitudes toward FGC among older women, and that this effect was especially strong among Christian women. Among younger women, this trend declined or even reversed, especially among Muslim women. In the next section, we report the results of an original survey of younger women in Greater Cairo with the goal of understanding the mechanisms associated with broader trends in support for FGC.

5 Greater Cairo Survey on Attitudes toward FGC

The survey used in this section was conducted in 2014 in two neighborhoods of Greater Cairo in partnership with the Egyptian office of the Population Council, an international non-profit organization.\textsuperscript{29} In each area, all Central Agency for Public Mobilization and Statistics (CAPMAS) Primary Sampling Units (PSUs) were mapped and four were selected for inclusion in the study. We used a neighborhood saturation sampling strategy, in which the survey team canvased selected PSUs and enrolled eligible and willing women into the study. In total, 410 married women between the ages of 25 and 36 years old were enrolled.

\textsuperscript{27} In the full sample, for instance, about 25 percent of Coptic Christian women believe that FGC should continue while that rate is 67 percent of Muslim women.

\textsuperscript{28} This effect is statistically significant when looking at women born after 1980 and remains of similar magnitude for women born after 1980.

\textsuperscript{29} 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.
one daughter were selected to participate in a face-to-face survey administered to no more than one woman per household.\textsuperscript{30} We selected this 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 making choices about their own daughters’ FGC status.

The survey was administered in two adjacent 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.\textsuperscript{31}

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 report our findings with a particular emphasis on the difference between Muslim and Coptic Christian attitudes (see Table 4).

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, 3 percent of Coptic Christian women already had subjected at least one of their daughters to FGC while this figure was 14 percent for Muslim women. When asked about intentions for the future, 4 percent of Coptic Christians had planned to undertake FGC for at least one of their daughters, while this figure was 38 percent for Muslim women.

More than half of the women in the sample indicated that they did not care if their son married a circumcised bride or not. For Muslims, about 38 percent answered yes while

\textsuperscript{30}All interviews were conducted in Arabic.

\textsuperscript{31}In study districts (i.e., Shubra al-Kheima and al-Khousus) average rates of illiteracy are 24 percent, unemployment is at 9.5 percent, and those unmarried are 26 percent. These figures are similar to the national averages across all Egyptian districts. Thus, our sample districts, while not nationally representative, are demographically similar to a national sample.
only 6 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 3). 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 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).

There are significant differences between Christian and Muslim women in their empirical beliefs about the extent of the practice of FGC in their neighborhoods. 70 percent of Muslim women thought most women aged 25-35 in their neighborhood had undergone FGC, compared to 44 percent of Christians. Meanwhile, 42 percent of Muslims thought most girls aged 10-15 in their neighborhood had been circumcised compared to only 12 percent of Christians. Christians also were far more likely to report that they did not know what percent of women and girls had undergone FGC. These trends highlight that beliefs about the extent to which FGC is practiced differ significantly across religious communities, as does certainty about the extent of the practice. Most Muslims expect that their female neighbors have undergone FGC, while most Christian women do not.

5.2 Experimental Design and Results

In this section, we report the results of an original survey experiment designed to gauge the extent to 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.*
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. The logic of the son/daughter prime was to increase the salience of the gender of respondents’ children, with the idea that this would simulate the salience of the gender of a respondent’s first child, while experimentally manipulating gender itself.

Table 5 provides 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.

The women were then asked two questions. The first question read, “Some people say that female circumcision benefits society. Do you, on balance, agree or disagree with this view?” In aggregate, Muslim women were much more likely to agree with this statement than were Coptic Christian women but there was no difference between responses when women were primed to think of their sons or daughters.32

A second question read, “Some people say that women are the protectors of societal morals and values. Do you, on balance, agree or disagree with this view?” 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.33 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 effect of son priming on attitudes by religion is displayed in Figure 4, which includes controls for birth year, respondent FGC status, and wealth quintile. While the priming of sons versus daughters had no effect on the belief that FGC benefits society (top), the belief that women are the protectors of society morals and values differentially impacted Muslim and Christian women (bottom).

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, even if priming on gender has no effect on beliefs about the societal benefits of FGC. 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.

32Although differential results across religious communities would have been consistent with the arguments that we have put forward regarding child gender, the undifferentiated outcomes here are not surprising since the “treatments” were different in scope and magnitude. We argue the gender of a woman’s first-child influences her perspective with regard to social issues; priming one to think about sons or daughters is a different treatment (i.e., consideration of all children of the same gender versus the first-born child) and a less impactful treatment (i.e., priming versus the experience of bearing and raising a child of a particular gender).

33This difference is not statistically significant at conventional levels.
This suggests forms of “traditional” patriarchy are common among younger Coptic Christian women; for younger Muslim women, however, patriarchy takes the form of high moral expectations which simultaneously elevate and burden women. For Muslims, daughters have a special and meritorious religious role to play. Coptic Christians, on the other hand, 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 A “Varieties” of Patriarchy Approach?

Our results suggest important differences in attitudes toward women and girls in Egypt, dependent upon religious affiliation and generational cohort. Muslims, on average, support the continuation of FGC at higher levels than Coptic Christians (see Figure 5). While Coptic Christians tend to be less favorable toward the continuation of FGC overall, our findings suggest that Copts are still susceptible to the influence of exogenously-determined child gender triggers in forming attitudes on women’s issues. Coptic Christians with first-born sons consistently support more patriarchal social norms than those with first-born daughters. While older Muslim women exhibit greater support for continuing FGC if their first-born child is a son, this trend reverses for younger Muslim women. In addition, for our sample of younger mothers in Greater Cairo, priming women to think of their sons versus daughters elicits exactly opposite responses from Muslim and Coptic Christian women, despite nearly identical aggregate levels of support for the statement that women are protectors of societal morals and values.

Taken together, these results suggest the existence of at least two forms of patriarchal values within Egypt. Coptic Christians appear to be less supportive of norms that harm women and girls — in the aggregate — but more receptive to conservative beliefs when those beliefs are deemed to be consistent with their “interests,” defined to include the interests of their first-born child. In other words, messaging from religious leaders appears to have reduced overall levels of support for FGC among Copts, but family-level factors can activate conservative views when it comes to female responsibility for controlled sexuality.34

For older Muslim women, first-born gender has a small, positive effect on the belief that FGC should continue but for women born after the rise of Islamic fundamentalist beliefs this trend reverses. Younger Muslim women may be increasingly influenced by forms of religious conservatism which emerged in the 1970s and 1980s in Muslim societies, like Egypt, which tend to see the behaviors of women as key to achieving a moral society. Indeed, Blaydes and Linzer (2008) characterize 46 percent of Muslim women in Egypt as holding fundamentalist beliefs.35

The experimental evidence that we present considers women’s attitudes after being primed to think about their own sons versus daughters also adds support to this inter-

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34 A number of scholars have pointed to the salience of traditional gender roles within Egypt’s Coptic community as related to female chastity and sexual identity (e.g., Van Doorn-Harder 1995; Armanios 2002; Jeppson 2003).

35 Such beliefs may be consistent with the high expectations placed on women within other conservative social movements like the US evangelical Christian Promise Keepers who sociologists describe as reconstructing a “Madonna Complex” which applies a strict cultural code of gendered behaviors (Conrad 2006).
pretation. When the young, Muslim mothers in our 2014 sample are primed to think about their own sons, they are less likely to feel women are protectors of societal morals and values than when they are primed to think about their daughters. For Christians, we observe exactly the opposite response. The response by Coptic Christians appear to fall in line with what might be thought of as a “typical” patriarchal response pattern — thinking about one’s sons leads a respondent to hold women (i.e., other people’s daughters) responsible for upholding societal values.

These findings contribute to a large and growing literature on heterogenous attitudes within Middle Eastern communities with regard to the rights and burdens associated with gender. Most notably, Kandiyoti (1988, 283) seeks to unpack the overly monolithic concept of patriarchy by examining the conditions under which economic modernization can lead to an “intensification of traditional modesty markers,” reflecting new forms of female conservatism. With regard to Egypt, Mahmood (2005) argues that women express agency by taking advantage of the opportunities a pious lifestyle affords to women. The evidence that we have presented further complicates the ways in which religion and family structure in contemporary Egypt interact to construct attitudes and associated gender-related behaviors.

7 Conclusions

Female genital cutting is one of a number of practices that harm the interests of girls and women but for which societies seem to perpetuate as a result of expectations about others’ behaviors and normative beliefs (Mackie 1996). In particular, mothers and families perpetuate harmful practices out of a desire to coordinate their activities with others and often become invested a belief system that can bring harm to their female children. Bicchieri (2006) defines social norms as rules of behavior that individuals prefer to conform to if they believe that they ought to conform and that others in their network will do so. As a result, models of norm change necessarily take into account the collective nature of the problem and the need for coordinated social change.

National and international efforts to reduce the practice of FGC have been met with mixed success. Although international institutions consider FGC a violation of women’s

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36 Changing societal attitudes about the behaviors of women are often also tied up in debates about the nation and the assertion of societal values in a world system dominated by Western countries. Yuval-Davis (1993) considers the relationship between gender and nationalism, in particular the expectation that women will serve as bearers, protectors and transmitters of the traditional values of a national collectivity. In this context, “ordinary” women become markers of cultural and national cohesion in a broader contest between colonial and anti-colonial forces (Winter 2016).

37 In the Islamic Republic of Iran, for example, women participated in educational, economic and political activities while simultaneously subjected to a state-enforced attempt to engineer a gendered division of labor within families and society (Yeganeh 1993). For the Iranian case, Moallem (2005) also argues that Islamic feminists have sought to assert women’s equality and their right to leadership within the Islamic Republic. Terman (2010) shows how revolutionary discourse encouraged women to enter the public sphere as defenders of Islamic values. This differs from earlier, more traditional patriarchal discourses that limited women’s involvement in the public sphere. She argues that the Iranian Revolution sought to create a female subject who was simultaneously pious and politically active.

38 Deeb (2006) asserts a similar dynamic among young and pious Shi’i women in Lebanon who view the move away from the traditionalism of past generations as a form of spiritual progress.
rights, the international development community has not developed a set of strategies that has effectively stemmed the persistence of the practice. 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. Yet criminalization of the practice has not necessarily led to its decline. Beliefs about the consequences of undergoing FGC, such as marriage market prospects and attitudes toward chastity, continue to be central concerns in decision-making about FGC (Mackie 1996; Mackie 2000). The politicization of FGC in the context of debates about the rightful role of religion in politics further complicate the situation.

Recent work has explored the individual-level factors associated with the perpetuation of FGC. For example, in the Egyptian case Modrek and Liu (2013) argue that factors associated with a mother’s level of education are consistent and robust predictors of her daughter’s circumcision status. For proponents of modernization theory, it is perhaps not surprising that women’s attitudes toward FGC are associated with education levels. In this paper, we focus on two less obvious correlates of attitudes toward FGC which operate at the “meso” level and are related to a woman’s social environment — her family composition and her religious community. We show that Coptic Christian women have very different attitudes toward FGC than their Muslim counterparts despite having comparable levels of educational attainment. Qualitative evidence suggests that Coptic Christian religious elites played an important role in affecting this change.

We also find that the gender of a woman’s first-born child has an impact on her attitudes toward FGC but that this effect differs across religious groups and by birth cohort. Older women who have a first-born son tend to state their support for the continuation of FGC. We hypothesize that having sons invests mothers, to some degree, in traditional values that impact outcomes for female siblings in the family. For younger women, however, we observe a different impact of first-born child gender on attitudes. Younger Muslim women, many of whom were brought up in a political and religious environment which elevated the moral role of women as upholders of societal values, tend to support FGC less if their first-child is a boy. Younger Coptic Christian women do not follow this same pattern. Results from an original survey experiment conducted in Greater Cairo speak to a possible mechanism for these divergent results across religious communities. We build on a literature that suggests women hold different types of patriarchal beliefs — while Christian and older Muslim women exhibit forms of “traditional” patriarchy associated with favoritism toward men, many younger 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.

Our results have implications for developing more effective policies for combatting FGC in the future. First, our findings suggest that religious communities matter for changing attitudes. Religious elites can help facilitate the coordination of a new cultural “equilibrium” for their communities particularly if marriage markets operate within religious groups as occurs in Egypt. Second, depending on the type of patriarchal beliefs held, different policy interventions may be effective. For “traditionalists” who support FGC more if their formative ideas about parenthood were influenced by the birth of a first-born son, interventions which

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stress the equality of men and women may be effective in reducing the salience of patriarchal beliefs. For younger Muslim women whose beliefs are influenced by a growing fundamentalist tendencies in Egypt, however, messaging should seek to humanize the role that women play in promoting a moral society.
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Table 1: Summary Statistics for DHS 2008 and 2014 Samples

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<td>R²</td>
<td>0.228</td>
<td>0.221</td>
<td>0.223</td>
<td>0.227</td>
<td>0.118</td>
<td>0.118</td>
<td>0.121</td>
<td>0.128</td>
</tr>
</tbody>
</table>

Notes: The dependent variable is attitudes toward the continuation of FGC. All models include region fixed effects. Standard errors are clustered by survey cluster. *** p<0.01; ** p<0.05; * p<0.10.
Table 3: Attitudes toward Continuation of FGC among Younger Women

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Continue circumcision</td>
<td>Continue circumcision</td>
<td>Continue circumcision</td>
<td>Continue circumcision</td>
<td>Continue circumcision</td>
<td>Continue circumcision</td>
</tr>
<tr>
<td>Firstborn male</td>
<td>-0.011*</td>
<td>-0.014*</td>
<td>-0.014</td>
<td>-0.020</td>
<td>0.041</td>
<td>0.015</td>
</tr>
<tr>
<td></td>
<td>(0.006)</td>
<td>(0.008)</td>
<td>(0.010)</td>
<td>(0.019)</td>
<td>(0.026)</td>
<td>(0.031)</td>
</tr>
<tr>
<td>Total children</td>
<td>0.012***</td>
<td>0.014***</td>
<td>0.012*</td>
<td>-0.008</td>
<td>0.042**</td>
<td>0.033</td>
</tr>
<tr>
<td></td>
<td>(0.003)</td>
<td>(0.004)</td>
<td>(0.006)</td>
<td>(0.014)</td>
<td>(0.018)</td>
<td>(0.023)</td>
</tr>
<tr>
<td>Years of education</td>
<td>-0.012***</td>
<td>-0.012***</td>
<td>-0.012***</td>
<td>-0.012***</td>
<td>-0.009***</td>
<td>-0.008*</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.002)</td>
<td>(0.004)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>Respondent circumcised</td>
<td>0.516***</td>
<td>0.522***</td>
<td>0.518***</td>
<td>0.534***</td>
<td>0.214***</td>
<td>0.208***</td>
</tr>
<tr>
<td></td>
<td>(0.013)</td>
<td>(0.014)</td>
<td>(0.017)</td>
<td>(0.030)</td>
<td>(0.028)</td>
<td>(0.032)</td>
</tr>
<tr>
<td>Birth year</td>
<td>0.003***</td>
<td>0.005***</td>
<td>0.007***</td>
<td>0.006</td>
<td>0.005</td>
<td>0.009</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.002)</td>
<td>(0.005)</td>
<td>(0.004)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>Wealth</td>
<td>-0.037***</td>
<td>-0.038***</td>
<td>-0.037***</td>
<td>-0.026***</td>
<td>-0.026</td>
<td>-0.038*</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.004)</td>
<td>(0.006)</td>
<td>(0.009)</td>
<td>(0.018)</td>
<td>(0.021)</td>
</tr>
<tr>
<td></td>
<td>(1.613)</td>
<td>(2.477)</td>
<td>(4.199)</td>
<td>(10.416)</td>
<td>(7.545)</td>
<td>(12.867)</td>
</tr>
</tbody>
</table>

N          | 17984 | 12545 | 6785 | 2069 | 811 | 545 |
R²         | 0.224 | 0.232 | 0.237 | 0.238 | 0.145 | 0.148 |

Notes: The dependent variable is attitudes toward the continuation of FGC. All models include region fixed effects. Standard errors are clustered by survey cluster. *** p<0.01; ** p<0.05; * p<0.10.
Table 4: Summary statistics regarding FGC status and attitudes toward FGC from 2014 Greater Cairo survey, by religion.

<table>
<thead>
<tr>
<th></th>
<th>Muslims</th>
<th>Coptic Christians</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent circumcised</td>
<td>0.96</td>
<td>0.83</td>
</tr>
<tr>
<td>Average age of circumcision</td>
<td>9.86</td>
<td>9.02</td>
</tr>
<tr>
<td>At least one daughter circumcised</td>
<td>0.14</td>
<td>0.03</td>
</tr>
<tr>
<td>Intend to circumcise at least one daughter</td>
<td>0.32</td>
<td>0.04</td>
</tr>
<tr>
<td>Wants son to marry circumcised bride</td>
<td>0.38</td>
<td>0.06</td>
</tr>
<tr>
<td>Thinks government should have a role in banning FGC</td>
<td>0.26</td>
<td>0.78</td>
</tr>
<tr>
<td>Percent who agree with the following statements:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>— A husband prefers wife to be circumcised</td>
<td>0.37</td>
<td>0.10</td>
</tr>
<tr>
<td>— Circumcision prevents adultery</td>
<td>0.26</td>
<td>0.08</td>
</tr>
<tr>
<td>— Circumcision makes girls well-behaved</td>
<td>0.44</td>
<td>0.15</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th></th>
<th>“Sons” Prime</th>
<th>“Daughters” Prime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion (Muslim=0, Coptic Christian=1)</td>
<td>0.31</td>
<td>0.32</td>
</tr>
<tr>
<td>Age (in years)</td>
<td>31.2</td>
<td>31.4</td>
</tr>
<tr>
<td>Education (secondary level=5)</td>
<td>5.02</td>
<td>4.91</td>
</tr>
<tr>
<td>Owns desktop computer</td>
<td>49.8</td>
<td>50.2</td>
</tr>
</tbody>
</table>

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Figure 1: Average rates of female genital cutting for Christian (grey) and Muslim (black) women in lower, upper and urban Egypt across five-year birth cohorts beginning in 1945. Data drawn from DHS respondents about their own FGC status.

Figure 2: Coefficient values for Effect of First-Born Son on Attitudes toward FGC by Religion and Birth Cohort.
Figure 3: Survey Respondent Beliefs that Religious Leaders want to End the Practice of FGC, by Religion. Data drawn from 2014 Greater Cairo survey.

Figure 4: Results of two priming experiments. Respondents where respondents were asked the following question (top): “Some people say that female circumcision benefits society. Do you, on balance, agree or disagree with this view?” and (bottom) “Some people say that women are the protectors of societal morals and values. Do you, on balance, agree or disagree with this view?” Includes controls for respondent birth year, FGC status, and wealth quintile. Data drawn from 2014 Greater Cairo survey.
Figure 5: Percent of DHS respondents (2008 and 2014 samples) who believe FGC should be continued.