

# **HHS Public Access**

Author manuscript *J Sci Study Relig.* Author manuscript; available in PMC 2016 September 01.

Published in final edited form as:

J Sci Study Relig. 2015 September ; 54(3): 461-476. doi:10.1111/jssr.12210.

# Religious Belonging, Religious Agency, and Women's Autonomy in Mozambique

Victor Agadjanian and

School of Social and Family Dynamics, Arizona State University

Scott T. Yabiku

School of Social and Family Dynamics, Arizona State University

# Abstract

Women's autonomy has frequently been linked with women's opportunities and investments, such as education, employment, and reproductive control. The association between women's autonomy and religion in the developing world, however, has received less attention, and the few existing studies make comparisons across major religious traditions. In this study, we focus on variations in levels of female decision-making autonomy within a single religious tradition—Christianity. Using unique survey data from a predominantly Christian area in Mozambique, we devise an autonomy scale and apply it to compare women affiliated to different Christian denominations as well as unaffiliated women. In addition to affiliation, we examine the relationship between autonomy and women's religious agency both within and outside their churches. Multivariate analyses show that women belonging to more liberal religious traditions (such as Catholicism and mainline Protestantism) and tend to have higher autonomy levels, regardless of other factors. These results are situated within the cross-national scholarship on religion and women's empowerment and are interpreted in the context of gendered religious dynamics in Mozambique and similar developing settings.

## Keywords

religion; gender; women's autonomy; sub-Saharan Africa; Mozambique

# Introduction

Organized religion plays an enormous role in everyday life in the developing world. However, the importance and implications of religion may differ across different segments of society. In particular, religious involvement and its causes and consequences are highly gendered. Thus it has long been established that women are usually more religious than men and in settings where religious attendance is not restricted by gender women have higher levels of religious participation (Walter and Davies 1998), even though explanations for this imbalance, and more broadly for the gender differences in religious involvement, are still debated (e.g., Miller and Stark 2002; Sullins 2006). Studies have also shown profound of

Correspondence should be addressed to Victor Agadjanian, T. Denny Sanford School of Social and Family Dynamics, Arizona State University, Tempe, AZ 85287-3701 USA. vag@asu.edu.

Page 2

religious membership and participation for gender relations and women's lives in various developing contexts. These implications are not straightforward. On the one hand, religiosity, regardless of faith, has shown negative correlations with gender equitable attitudes (Seguino 2011). On the other hand, however, it has been argued that religion may be a source of transformation of gender relations and of empowerment for women (Brusco 1995; Ozorak 1996; Rodríguez 1994). Yet, the impact of religion on women's autonomy in the developing world is still debated. This debate can be usefully informed by the scholarship on religion and women's empowerment in the U.S. and other Western settings (e.g., Bartkowski 2001; Davidman 1991; Griffith 1997; Kaufman 1991; Rose 1987; Stacey 1990).

In this study, we engage these bodies of literatures to investigate the association between religion and women's autonomy in a predominantly Christian setting in Mozambique, an impoverished sub-Saharan nation with a Gross National Income per capita of 590 USD (World Bank 2014). Specifically, we focus on two related questions: (1) how women's autonomy varies across different Christian denominations; and (2) how women's autonomy relates to women's religious involvement and experience of inter-church mobility. We start with a review of the relevant cross-national literature that addresses these complex interconnections. We then describe the socioeconomic, ethnocultural, and religious context of the study site. Next, we adapt the findings of prior research to the specifics of the study setting to formulate our conceptual model and hypotheses regarding the two main relationships of interest. After describing the survey data and statistical methods we present and review the results of the analyses. We conclude by situating the findings within the cross-national scholarship on religion and women's empowerment and within the context of gendered religious dynamics in Mozambique and similar developing contexts.

#### Background

Western feminist scholarship has devoted considerable attention to the transformation of the relationship between religion and women's status as a reflection of both secular changes, especially women's entry into the formal labor force, as well as religious organizations' responses to these changes (Ammerman and Clark Roof 1995). Much of that literature has challenged the conventional notion of an inherent deficit of women's power and autonomy in more conservative religious denominations, compared to more liberal ones. Thus, Rose (1987) in her study of a charismatic fellowship showed how women negotiate and redefine gender roles and inequalities while staying within the boundaries of the church patriarchal narrative; the resulting contradictions are continuously resolved through routine, even if not explicit, readjustment of women's and men's roles in the family realm. Griffith (1997) in her ethnography of a large interdenominational evangelical women's organization in the U.S. argued that women's religious devotion is fully compatible with empowerment. Accordingly, submission to church-prescribed inferior roles offers evangelical women "a meaningful source of religious and social power" (201). Similarly, several other U.S.-based case studies (e.g., Kaufman 1991; Ozorak 1996; Rodriguez 1994; Stacey 1990) provide examples of how women navigate patriarchal constraints of different religious traditions to empower themselves. Davidman (1991) showed how well educated women who embraced conservative Judaism also reconciled their modern views and aspirations with traditional

roles prescribed by their new faith. As also shown by Bartkowski (2001), generally conservative evangelical churches offer considerable room for women to negotiate family power and gender roles even without questioning the official church gender ideology and within-church gender stratification. Ingersoll (2003) further extends this line of argument in her ethnographic portrayal of conservative Christian feminists who, without compromising their religious conservatism, actively challenge the convention of women's subordination. Importantly, this de facto redefinition of gender roles and hierarchies is partly driven by practical pressures and constraints of everyday life. Although the contradictions between religious tenets and everyday practice of gender relations in conservative denominations have come to the fore of scholarly and public attention only in the past few decades, largely through the writings by post-secularist feminist scholars, these contradictions were inherent to U.S. evangelicalism and other conservative religious currents since their emergence (Bartkowski 1998). In the contemporary U.S. context, similar apparent incongruences between religious teachings and women's changing societal roles and resulting simultaneous reaffirmation and redefinition of religious convictions, commitments, and practices have also characterized other, non-Christian religious traditions that are often perceived by the public as particularly averse to gender equality, such as Islam (e.g., Bartkowski and Ghazal Read 2003; Ghazal Read and Bartkowski 2000).

Women's increased power in the family, the workplace, and other social venues has paralleled the rise of women's formal authority within religious institutions. Women's ascension to church leadership positions has been more common in less conservative denominations (Chaves 1996; Zikmund, Lummis, and Chang 1998). Studies also show that women's activism within their churches or church-based organizations has also been on the rise, offering women an alternative channel of empowerment, especially in the presence of persistent barriers to women's formal church leadership (e.g., Brasher 1998; Ingersoll 2003; Zikmund, Lummis, and Chang 1998). This research illustrates important connections between women's religion-based agency and their empowerment both within and outside the religious realm.

In contrast to a considerable body of scholarship on the relationship between religion and women's power and autonomy, comparable research in the developing world remains scarce. A number of studies have joined the Western post-secularist feminist discourse in arguing that religion, including its conservative varieties, offers women viable paths for empowerment. Thus Brusco (1995) in her study of Colombian evangelicalism concluded that women's conversion to generally conservative evangelical churches helps them challenge deeply rooted machismo through a redefinition of male and female identities and roles. Gerami (1996) illustrated how women assert their rights and opportunities from within conservative Islam in Iran and Egypt. Similarly, Pang (1997) argued that Islamic religious revival in a minority ethnic group in China empowered women of that group by promoting their solidarity and opposition to gener-discriminating practices.

The reviewed studies are typically based on ethnographic research with relatively small convenience samples; while allowing for nuanced, in-depth exploration of trajectories and expressions of women's empowerment across religious traditions, these ethnographies cannot be generalized statistically. The few existing analyses of quantitative data have

produced inconsistent results. For example, Jejeebhoy and Sathar (2001) did not find differences in autonomy levels between Hindu and Muslim women in India and Pakistan. Other studies in Asia did not detect any significant net differences in women's autonomy between Muslims and non-Muslims either (Ghuman 2003; Morgan et al. 2002). In contrast, Chattopadhyay and Goswami (2007) found a considerable Muslim vs. non-Muslim autonomy gap in West Bengal, although the religious differences were much more muted in a comparable ethno-religious context in Bangladesh. Balk (1994) also found that Muslim women had lower status than Hindu women in a rural area in Bangladesh. Similarly, in rural Bangladesh, Muslim women experienced more domestic violence than non-Muslim women (Koenig et al. 2003). In Africa, Njoh and Akiwumi (2011) found that a positive of association of Christianity, and a negative association of Islam, with women's empowerment indicators included in the Millennium Development Goals. Yet, Seguino (2011) in a multinational analysis of gender attitudes using World Values Survey data did not detect any significant differences across main religious traditions even though religiosity, regardless of specific faith, was negatively correlated with equitable gender attitudes.

Our research employs statistically representative data to make two important contributions to the literature on religion and women's autonomy in developing contexts. The first contribution is in diversifying the religious contrasts beyond what has typically been studied. Whereas the Muslim versus non-Muslim differences in women's status and autonomy and their implications have received some attention, no research in developing countries has examined the role of religious differences within a single religious tradition such as Christianity. This gap in research on religion and women's autonomy is largely due to a lack of appropriate data: major social surveys conducted in developing nations rarely differentiate among various denominations and sects within one religion. Our study begins to fill this gap using uniquely rich survey data from a predominantly Christian area in southern Mozambique to test for variations in levels of women's autonomy across different denominational types.

Our second contribution is to examine the association of religious *agency* with women's autonomy. We consider two types of religious agency: agency within one's own church and agency that involves different churches. The former type refers to women's involvement within their congregations, such as attendance of religious services and other church activities and participation in church-based organizations and groups. In comparison, the latter type of religious agency crosses the boundaries of religious congregations to which women belong and involves religious switching,<sup>1</sup> i.e., a permanent change of religious membership, as well as interactions with other churches that do not entail a formal change of affiliation. Whereas both types of religious agency are usually seen as expressions of religious preferences and religiosity (e.g, Hadaway and Marler 1993; Kalu 2003; Loveland 2003; Sherkat and Wilson 1995), following the reviewed literature on religion and women's empowerment, we can also construe them as proxies for women's ability to use religion to pursue goals that transcend the religious domain and project on other aspects of women's experiences and relationships. In this sense, women's religious agency is not a sign of

<sup>&</sup>lt;sup>1</sup> Following Stark and Finke (2000), we use *switching* to denote "shifts within religious traditions," as distinguished from *conversions*, or "shifts across religious traditions."

J Sci Study Relig. Author manuscript; available in PMC 2016 September 01.

compliance with religion-rooted patriarchal norms, but rather a channel and a tool to formulate choices and make decisions on their own, even when these decisions seemingly contradict specific religious teachings, such as, for example, religious proscriptions on birth control (see e.g., Agadjanian 2013).

#### The Setting

Our data come from Chibuto district in southern Mozambique. With an area of 5,650 km<sup>2</sup> and a population of some 200,000 residents Chibuto is a typical, mainly rural district of Mozambique's Gaza province. The mainstay of the district's economy is subsistence agriculture; like elsewhere in the south of Mozambique, proximity to South Africa has made male labor migration to that country a major source of livelihood for local families (De Vletter 2007). The lineage system is patrilineal, with marriages typically contracted through transfer of bridewealth from the groom's family to the bride's family. Marriages are typically virilocal and polygyny levels are relatively high. These dominant lineage and marriage systems have resulted in pervasive gender inequality, further cemented by men's involvement in labor migration and the dependence of a large share of rural households on their remittances (Loforte 2000).

As much of southern Mozambique, the district is overwhelmingly Christian with a very high level of formal religious membership and considerable denominational diversity. According to our estimates made on the basis of our fieldwork in the area, there is one religious congregation for about every 150-200 district residents. Before Mozambique became independent from Portugal in 1975, Roman Catholicism was the colony's quasi-official religion and the dominant Christian denomination in Chibuto and elsewhere. However, the colonial era also saw a strong growth of mission-initiated (or "mainline") Protestant churches, such as the Presbyterian, Anglican, and Methodist churches; these churches played a key role in the formation of local educated elites that led Mozambique to independence (e.g., Cruz e Silva 2001). Yet, after the nation's independence, the Catholic Church and the mainline Protestant churches alike have lost much of their political influence (Morier-Genoud and Anouilh 2013). Paralleling their political decline, their membership has also shrunk, largely due to competition with other churches. Some of those churches have a substantial presence in Chibuto. Thus a sizeable share of the district's population belongs to Apostolic churches (particularly the Church of Old Apostles), an array of African-initiated churches that were first established in South Africa and then spread through the other southern African nations. These churches are distinguished by strong organizational identity and hierarchy and introvert corporate culture. The area, like much of the rest of the country, has also seen a proliferation of foreign-origin, even if considerably "Africanized," Pentecostal churches, such as the Assemblies of God and Brazil's Universal Church of the Kingdom of God—a part of the continent-wide phenomenon (van de Kamp and van Dijk 2010). Most remarkable, however, has been the explosive growth of the Zionist variety of Pentecostalism. Some of the Zionist churches were imported from South Africa since the early twentieth century, but many are home grown in southern Mozambique (Seibert 2005). Their more recent propagation is attributed in part to growing societal inequalities and insecurities (Pfeiffer 2002). These churches are distinguished by a strong emphasis on miracle healing that is often aided by herbs and similar medical accoutrements borrowed

The rapid rise of Zionist churches and, more recently, other Pentecostal-type churches has owed primarily to church switching. However, prior research has shown that switching is multidirectional; considerable switching takes place within the Zionist-Pentecostal segment and switching (back) to mainline churches is not unusual (Agadjanian 2012). Religious switching is common in denominationally diverse settings, including those in sub-Saharan Africa (e.g., Meyer 2004; Sherkat 2001). In patrilineal societies like the one examined here, when a woman marries a man of a different church, she is expected to switch to his church. However, a considerable share of switching in the area is not related to marriage (Agadjanian 2012).

Whereas most, if not all, church leaders in the area, whatever their denominations might be, nominally subscribe to the same set of social teachings that extol women's subordinate roles in the family and in society as a whole, prior research suggests that Apostolic, Pentecostal, and Zionist leaders generally promote these roles more assertively than do leaders of Catholic and mainline Protestant congregations (Agadjanian 2005, 2013). In fact, while social teachings and emphases may vary across congregations depending on individual preferences and priorities of their leaders (e.g., Yeatman and Trinitapoli 2008), it has also been argued that the ideological climate in the Catholic and mainline Protestant churches is in general more flexible and permissive than in the generally more conservative Apostolic, Zionist, or other Pentecostal churches (Agadjanian 2001). Although the specific denominational makeup of the area's religious scene is unique, its general configuration and noted ideological and organizational cleavages can be found throughout the sub-Sahara and other parts of the developing world (see e.g., Anderson 2013; Meyer 2004).

#### **Conceptualization and Hypotheses**

To test denominational differences in women's autonomy, we draw upon the religious ideologies and the histories of the various religious denominations in the study context. We expect that religious influences on women's autonomy result from religious teachings and practices in social and family matters and the enforcement of these teachings and practices in various types of religious denominations. Based on the denominational reality of the setting described above and following earlier research (Agadjanian 2001, 2005, 2013) we distinguish five denominational categories: Roman Catholic; Mission-initiated, or "mainline" Protestant; Apostolic; Zionist; and other Pentecostal. As was mentioned earlier, the social teachings concerning gender roles and women's virtues do not vary greatly across these different types of churches, yet the Catholic and mainline Protestant churches are typically more flexible in the enforcement of such teachings and are generally more ideologically open than the generally more conservative Apostolics, Zionists, and Pentecostals. Therefore, we hypothesize that women's membership in the churches characterized by more flexible interpretations of gender norms and roles will be associated, ceteris paribus, with greater autonomy than membership in the churches of more conservative type. In addition, this reasoning would predict that women who have no religious affiliation would have the highest levels of autonomy, given that they are not

subject to pressures and restrictions resulting from gendered religious teachings or structures.

Our second theoretical focus is on women's religious agency. In rural and semi-rural Mozambique, like in most sub-Saharan settings, religious spaces are important outside-thehome venues for women's self-expression and self-realization. Furthermore, given that women are much more involved with religion than men, the religious space represents an area in which women have particularly active social participation. Yet, depending on how the meaning and implications of religion-based agency are conceptualized, two alternative hypotheses regarding the association between women's religious agency and autonomy can be proposed. Thus, if we assume that religion-based agency is a marker of compliance with religious norms, which typically promote patriarchal values and women's subordination to men, then greater religious agency should connote less autonomy. Alternatively, however, if religious agency is an expression of women's ability to make choices in one of the few social spaces available to them outside the home, then this agency should be associated with greater autonomy regardless of denomination.

Following the approach outlined earlier, we distinguish between the religious agency women exercise within their churches and that which transcends their churches' organizational boundaries and connect them with other churches. For intra-church agency we consider religious attendance and participation in formal church-based groups such as women's groups, Bible study groups, youth groups, etc. For inter-church agency we first look at the experience of religious switching. Because marriage-related switching has little to do with women's own religious preferences, we focus on switching for reasons other than marriage, such as those driven by spiritual quest, search for physical cure, or some social preferences. Although women's marriage-unrelated switching choices are influenced by their social environment and circumstances, in this type of switching women's own preferences and decisions usually play a central role. In addition to switching, i.e., overt and formal change of religious affiliation we also consider experience of participating in other churches' activities without a formal change of church membership. Thus, in that setting women may visit churches other than their own out of spiritual curiosity, for social reasons, or in hopes of finding cure to illness or misfortune.<sup>2</sup>

#### Data

We use data from a representative population-based cluster survey of women aged 18–50 conducted in 2008. The survey had a total sample of 2019 and was carried out in 82 randomly selected communities (clusters), both in neighbourhoods of the district's administrative capital and in villages of its rural areas. Within each sampled household, one randomly selected woman of the target age range was interviewed. In addition to standard socioeconomic and cultural information, the survey collected information on women's complete religious affiliation and switching histories and characteristics of current religious

<sup>&</sup>lt;sup>2</sup>We conducted extensive diagnostics for the autonomy scale's reliability. Thus, we experimented with dropping each item from the scale; the value of Cronbach's  $\alpha$  did not change noticeably as a result, suggesting that each item contributed well to the scale. We also carried out an exploratory factor analysis which further confirmed the scale's robustness. For more details on the autonomy scale see Yabiku, Agadjanian, and Sevoyan (2011).

J Sci Study Relig. Author manuscript; available in PMC 2016 September 01.

involvement. A separate module consisted of ten questions measuring respondents' ability to make daily decisions, such as visiting relatives or friends, going to market, spending money

on family or personal needs, working relatives of friends, going to market, spending money asking for permission from their husbands, or from their husband's relatives when their husbands are not around.

This analysis is restricted to women who were in marital unions at the time of data collection because women's autonomy in a patrilineal and patriarchal setting like this is best defined in terms of their ability to make decisions independently from their marital partners. As noted earlier, we use an inclusive definition of marital union, encompassing formal marriage (contracted through bridewealth, civil registration, or religious ceremony) and non-formalized (consensual) unions, as well as monogamous and polygynous, and coresidential and non-coresidential marriages. Among the 1574 survey respondents in marital union there were only eight Muslims, and we exclude them from the analysis. In total, the analytical sample consists of 1554 women in marital union who belonged to a Christian church or did not belong to any organized religion at the time of the survey and for whom there are no missing values on the covariates.

## Method

#### **Dependent Variable: Women's Autonomy**

Our operationalization of women's autonomy builds upon earlier work in Mozambique (Yabiku, Agadjanian, and Sevoyan 2011). It assumes that autonomy is a complex concept, and it cannot be measured with a single indicator (Agarwala and Lynch 2006; Jejeebhoy 2000; Mason 1986). Yet, although autonomy is multidimensional, previous research has also suggested that its different components are often correlated and represent a single underlying construct (Agarwala and Lynch 2006). As in previous research (Yabiku, Agadjanian, and Sevoyan 2011), we measure women's autonomy as a scale constructed on the basis of the ten items of the autonomy module of the survey questionnaire. Women were coded 1 on each item if they did not need to ask permission and were coded 0 if they had to ask permission or replied "don't know." Thus the autonomy scale varied from a low of 0 to a high of 10, with higher values representing more autonomy. The scale has high measurement reliability, with Cronbach's  $\alpha$ =.84.<sup>3</sup>

#### **Primary Independent Variables**

- 1. *Individual religious affiliation* at the time of the survey is coded with dummies that represent five types of the area's denominations—Roman Catholic, mainline Protestant (hereafter also referred to simply as Protestant), Apostolic, Zionist, and Other Pentecostal (also referred to simply as Pentecostal). We also include women with no current affiliation as a separate category.
- 2. Women's intra-church religious agency is operationalized with two proxies:

 $<sup>^{3}</sup>$ We experimented with several specifications of the material possession scale by assigning different weights to different constituent items, but the results were essentially the same regardless of specification. Because the effect of household material status is not of primary theoretical interest in this study, we chose to present here models with the most straightforward operationalization of this covariate (results from models with alternative operationalizations of household material status are available upon request).

J Sci Study Relig. Author manuscript; available in PMC 2016 September 01.

- 2.a Frequency of church attendance: women who had a religious affiliation were asked how often they attended religious services at their churches in the past two weeks. This variable was coded into three categories: never, 1–2 times, and 3 or more times (we also tested models in which this variable is coded as continuous, but the results were essentially the same as in the model with the categorical coding). This variable applies only to women who reported a religious affiliation at the time of the survey.
- 2.b *Participation in church-based groups or organizations:* women were asked whether they regularly participate in the church women's group, youth group, Bible study group, choir, etc. The variable is coded as a dichotomy—women who reported participation in at least one group or organization of their churches are coded as 1 and 0 if otherwise. This variable also applies only to respondents who reported a religious affiliation in the survey interview.
- 3. Women's inter-church religious agency is also measured using two proxies:
  - **3.a** *Lifetime experience of switching churches:* this variable is based on women's religious participation history collected in the survey. It is a dichotomy, coded 1 if a respondent switched churches for a reason other than marriage at least once in her life after reaching the age of 12 years, 0 if otherwise. This variable applies to all survey respondents, including those without current affiliation to a church as they could have had an affiliation in the past.
  - **3.b** *Visits to churches other than respondent's own during the 12 months preceding the survey.* Women who declared a church affiliation were asked whether they had visited other churches in the previous 12 months. Women who visited another church at least once, regardless of the purpose of visit, are coded as 1; those who did not report any such visits are coded as 0. In coding this variable we account for whether a woman changed churches during the 12-month period preceding the survey.

#### **Background Variables and Controls**

We include several background characteristics at the individual and household level that are potentially relevant to women's autonomy and might explain the association between the religious variables and autonomy. At the individual level, we control for respondent's age, coded as three groups—18 to 24, 25 to 34, and 35 or over, and for the number of living children. Respondent's education is coded using three dummy categories of no education, 1– 4 years, and 5 or more years. Respondent's work outside the home is dichotomously coded: 1 if the woman is working outside the home (excluding subsistence agriculture), and 0 otherwise. We also include three indicators of respondent's marital characteristics. The first of them is the bridewealth status of marriage: it has been shown that bridewealth payments have implications for wives' autonomy (Horne, Dodoo, and Dodoo 2013). This control is a dichotomy, contrasting full or partial payment of bridewealth to no payment at all. The second control in that group is whether or not the respondent's residence is also her

husband's main residence: women in non-coresident unions are likely to have greater autonomy from their husbands. The third marital characteristic for which we control is monogamous vs. polygamous marriage. We also control for household material conditions by using a scale of household material possessions—radio, bicycle, motorcycle or automobile—ranging between 1 and 4.<sup>4</sup>

In addition to individual- and household-level controls, we seek to account for the effect of the community context: the social environment in which women live may influence their autonomy beyond their religious and other individual characteristics and the characteristics of their households. First, we control of the type of area of residence—town (the district headquarters) vs. the countryside. Town women may be expected to have higher autonomy levels than their rural counterparts. However, different parts of both the town and the countryside have different degrees of socioeconomic development. Thus, women in more developed areas may have higher autonomy due to these factors. To account for these influences, we also control for the number of health clinics within 10 km of the respondent's residence. Health clinics are generally associated with higher levels of community development and the presence of various other organizations that could, in turn, be associated with greater autonomy.

The distribution of the outcome variable and covariates is shown in Table 1. There is a considerable variation in the size of the denominational categories, reflecting the earlier described history and current dynamics of the local religious marketplace. On the one end of the denominational spectrum, members of Zionists churches constitute 42% of the sample; on its other end are mainline Protestants with less than 10% of the sample. Notably, unaffiliated women made up 12% of the respondents.<sup>5</sup> More than half of the sample experienced non-marital religious switching at least once after the age of 12. The modal frequency of religious attendance among women with a religious affiliation was 1–2 times per week (44%), about a quarter of affiliated women reported no attendance, while the remaining 30% attended three or more times. Almost two-thirds of affiliated respondents participated in at least one group or organization of their respective churches. Some 13% of them had visited another church in the 12 months preceding the day of the interview.

We fit a series of multivariate regression models with the 10-level autonomy scale as a continuous outcome. We start the multivariate analysis with a model that includes only religious variables (baseline model). We then add individual-, household-, and community-level controls. Because information on church attendance, participation in church groups, and visits to other churches is available only for women who stated a religious affiliation, these predictors are used only in the models restricted to such women.<sup>1</sup> Because respondents' households were sampled via clusters (villages or neighborhoods), observations within the same clusters are not independent. We account for this non-independence by using multilevel regression models allowing the intercept to vary across

<sup>&</sup>lt;sup>4</sup>Although the survey questionnaire clearly distinguished between *belonging* to a church and *participating* in church activities, it is possible that some of the respondents in the unaffiliated category may have considered themselves part of a church but chose to state in the interview that they did not belong to any church because they were not involved in church life. <sup>5</sup>It is, of course, possible that some unaffiliated women would occasionally go to a church. However, their religious attendance tends

<sup>&</sup>lt;sup>3</sup>It is, of course, possible that some unaffiliated women would occasionally go to a church. However, their religious attendance tends to be non-systematic and would probably be grossly underreported.

J Sci Study Relig. Author manuscript; available in PMC 2016 September 01.

clusters. This random-intercept approach helps guard against Type I errors and biased hypothesis tests. The multivariate models are fitted using the MIXED procedure in SAS, version 9.

# Results

Table 2 presents the values of the decision-making autonomy scale for the variables of interest. The average autonomy score is somewhat higher among Catholics and mainline Protestants (6.3) than in the rest of the sample, but the differences across denominational categories are not large. Interestingly, the mean autonomy score of unaffiliated women is at the lower end of the distribution, contradicting our expectation of higher autonomy levels among that group. The autonomy score shows almost no variation across the church attendance spectrum. In comparison, women who participate in a church group or organization tend to score somewhat higher on the autonomy scale than women who do not. Similarly, women who have switched churches at least once have a higher average autonomy score in Table 2 is between women who have visited a church other than their own in the 12 months before the survey and those who have not, 6.8 vs. 5.9. Overall, however, the dispersion of the mean autonomy scores relative to the sample mean value, 6.0, in the predictor variables is rather modest.

Multivariate analysis tests the patterns observed in Table 2. Table 3 shows the results of the random-intercept regression models predicting the decision-making autonomy score. We should note that because of the cross-sectional nature of the data the statistical associations presented in the table are not to be interpreted as confirmed causal relationships. Models 1 and 2 are for the entire sample of married women; Models 3 and 4 are restricted to those of them who had a formal religious affiliation at the time of the survey. Model 1 is a baseline model that includes only religious affiliation and switching experience, i.e., the predictors that are measured for all currently married respondents. Zionists are the reference category. The results show a significantly higher level of autonomy among Roman Catholics and mainline Protestants compared to Zionist women. Women who switched churches for marriage-unrelated reasons at least once since age 12 are significantly different from those who never did: switching experience increases the predicted autonomy score by .40. Model 2 adds the individual-, household- and community-level controls. The addition of the battery of controls notwithstanding, Catholics and Protestants remain significantly different from Zionists. The magnitude of the corresponding estimates does not change much compared to the baseline model: other things being equal, Catholics and Protestants score .41 and .49 higher, respectively, on the autonomy scale than Zionist women. These results provide further support to our hypothesis. At the same time, contrary to our expectation, women with no current religious affiliation show no advantage in autonomy levels in comparison to women affiliated to organized religion. The addition of controls diminishes the effect of church switching experience, but the corresponding coefficient remains highly statistically significant: ceteris paribus, switching experience is associated with a .31 increase in the autonomy score.

Model 3 replicates the baseline model for women with church membership, adding the other predictors of interest that apply only to those women. The effects of the denominational affiliation and of switching experience are very similar to those in Model 1. Among the three added predictors, those that we defined as indicators of women intra-church agencyfrequency of attendance and participation in a church group or organization-show no effect on the autonomy score. In contrast, the second of the inter-church agency proxies, having visited another church in the 12 months preceding the survey, is significantly and positively associated with a woman's standing on the autonomy ladder. When controls are added in Model 4, the picture barely changes: Catholics and Protestants score significantly higher on autonomy than Zionists, both proxies for inter-church agency are positively associated with autonomy, and neither proxy for intra-church agency shows any effect. In sum, these results further confirm our hypothesis about denominational differences in decision-making autonomy. Between the two alternative hypotheses about the relationship of religious agency to autonomy, the one that positis a positive relationship is supported, but only for religious agency that extends outside an individual's own church. We also tested for interactions between the two measures of women's inter-church religious agency and their denominational affiliation, but no interaction effects proved significant (the results of the interaction models are not shown but available on request). These additional tests thus suggest that the association of religious agency with autonomy is not specific to any one particular denomination.

Among other individual and household-level covariates, only age, outside-the-home employment and co-residence with partner are significant predictors: women in the oldest age group and women who are working outside the home have significantly higher autonomy levels compared to women in the youngest age group and women are not working, respectively, whereas women who co-reside with their husbands have significantly lower autonomy scores than those whose husband's main residence is not the same as theirs. Surprisingly, women's education, a commonly assumed marker of women's status, shows no net association with decision-making autonomy. At the contextual level, autonomy shows a strong association with the number of health clinics within 10 km: the more health clinics (and presumably other organizations, infrastructure, and related opportunities) are in the relative proximity of the respondent's residence, the greater is her autonomy. In contrast, women living in the district headquarters and its surroundings are no different in terms of their decision-making autonomy from those living in rural areas.<sup>6</sup>

#### **Discussion and Conclusion**

In conceptualizing the association between religion and women's decision-making autonomy, we proposed to consider this association at two levels—that of belonging and that of agency. With respect to belonging, our analysis confirmed our hypothesis that membership in the more flexible, mainline denominations would be associated with greater autonomy. These results resonate with previous studies in Mozambique that found a positive

<sup>&</sup>lt;sup>6</sup>The coefficient for area of residence does not change noticeably in magnitude and remains statistically non-significant when the number of health clinics in the 10 km radius is removed from the models, suggesting that the effects of these two variables are largely independent from each other.

J Sci Study Relig. Author manuscript; available in PMC 2016 September 01.

relationship between women's membership in mainline churches and their engagement in such novel cultural practices as modern contraceptive use (Agadjanian 2001, 2013). We cannot measure the pathways linking church membership and autonomy directly, but we speculate that the milieu of greater openness to and tolerance of normative innovations in the mainline churches may indeed catalyze changes in gender ideology that are conducive to greater decision-making abilities of their female members. Importantly, our statistical explorations for possible interactions between church membership and church switching experience suggest that the detected denominational variations are not likely to owe to selectivity in church membership formation. We admit, however, that a more definitive conclusion on the role of selection into church membership in shaping women's autonomy requires additional investigation with specialized data.

The detected denominational differences should not be seen as a refutation of the findings of several US-based studies on women's empowerment in conservative churches (e.g., Bartkowski 2001; Griffith 1997; Ingersoll 2003; Rodríguez 1994; Rose 1987). With our statistical data we cannot examine how the negotiation of gender roles and women's autonomy is carried out in the more conservative churches compared to the Catholic and Protestant congregations. Yet the findings do offer an illustration of differences between denominations with a more liberal take on gender relations and women's roles and those that generally hold more conservative positions on these matters.

With respect to religious agency, we distinguished between what we defined as intra-church agency, approximated by church attendance and involvement in various church-based groups, and inter-church agency, for which experience of church switching and visits to churches other than one's own were used as proxies. We found no evidence that intra-church agency is associated with women's autonomy. This result suggests that women's lives within their churches are largely unrelated to their decision-making abilities outside of them. Alternatively, one can speculate that women's participation in their churches' daily functioning may both reinforce and undermine their decision-making freedom: such participation may reflect and nurture women's energy and initiative, but these energy and initiatives are exercised within the church's normative territory and, as such, may not translate to women's ability to make independent decisions outside the church.

In contrast, both measures of inter-church agency showed a significant net positive association with women's autonomy regardless of women's individual characteristics and those of their households and their communities. Importantly, these associations were not church-specific. We argue that women's religious mobility beyond the religious organizations of their membership, no matter which specific denominations are involved in that mobility and whether or not it entails permanent transition between religious organizations, contributes to their ability to make independent decisions in different aspects of their lives, including those that are largely and even completely outside the religious domain. This finding adds an important nuance to the scholarship on how women's religion-based agency relates to their decision-making power and autonomy in various experiential fields. Again, while our study is conceptually imprinted by the Western scholarship on women's engagement with religion to negotiate gender norms and boundaries, the nature of the data precludes an in-depth analysis of how women are "doing religion" (Avishai 2008)

in navigating, often not fully consciously, the contradictions between religious patriarchal tradition and the multiple pressures of everyday life. More specialized ethnographic data would be needed to better understand these processes, mechanisms, and manifestations.

It should be noted that some of the detected effects, even if statistically significant, are not large in magnitude. However, the magnitude of a statistical effect is always difficult to interpret when dealing with such abstract and inherently imprecise outcomes as women's autonomy. The presented analyses are based on women's assessment in a single interview, and yet they yielded differences that are not likely to be due to chance alone. Considering that these small differences in autonomy accumulate through myriads of women's social experiences over long periods of time, these differences may have meaningful and consequential implications for women's lives. While our study cannot document these long-term implications, a small yet statistically significant effect captured in this snapshot does offer a strong hint.

We should again acknowledge that as with any cross-sectional data, temporal sequence of events and qualities is difficult to establish and causal inferences must be made with great caution. Thus, in our case, we cannot assert that women's experiences of religious switching or of visiting other churches are antecedent to their sense of decision-making autonomy and even less so that those experiences are causes of that autonomy. Autonomy, a complex of perceptions and abilities, is established through a long process that starts well before the moment in which it is measured in a cross-sectional survey; religious experience therefore may be both a determinant and a consequence of autonomy.

Of course, the findings of our study, focused on but one rural sub-Saharan setting, cannot be easily generalized to the entire subcontinent. Perhaps most distinctly, our setting does not have any sizable presence of Muslims: in many regions of the sub-Sahara, including other (northern) areas of Mozambique, Muslims constitute sizeable shares of the population. However, a focus on a predominantly Christian setting is still valuable and instructive. First, a sizeable portion of the subcontinent, especially in its southern and central parts, is also largely Christian, with a similar complexity of denominational dynamics. And second, even in settings where both Christianity and Islam have sizeable presence, conversions between the two religions are now relatively rare and changes of religious affiliation occur mainly within the Christian block (Soares 2006).

Because women's autonomy is closely related to gender hierarchies and inequalities, our findings have implications for broader processes of women's empowerment in the context of religious change in sub-Saharan Africa. On the one hand, the relative decline of mainline churches and the corresponding rise of Pentecostal and similar denominations across the subcontinent (Kalu 2003; Meyer 2004) may undermine women's autonomy and thus hinder their social and economic advancement. On the other hand, however, the growing denominational diversity of the religious marketplace purports increased options for church switching and inter-church interactions, which, in our account, may be conducive to greater decision-making autonomy. Finally, the increased diversity and competition among different types of denominations for largely female membership and women's continuous ascension to church leadership positions may encourage even the more conservative denominations to

open more room for women's empowerment and autonomy (e.g., Anderson 2013; Brusco 1995; Ozorak 1996; Rodríguez 1994). Constrained by the data and mindful of the complexity of both religious and gender dynamics, we cautiously refrain from more specific assertions about long-ranging ramifications of our findings for gender relations and women's opportunities. Yet, we believe that these findings clearly illustrate the overall relevance of religious belonging and involvement to women's social itineraries and thus illuminate new avenues for future research at the intersection of religion and gender in sub-Saharan Africa and other developing contexts.

# Acknowledgments

The authors gratefully acknowledge the support of the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) grant # R01HD050175.

#### References

- Agadjanian, Victor. Lusotopie: Enjeux contemporains dans les espaces Lusophones [Lusotopie: Contemporary issues in Lusophone spaces]. Paris: Karthala; 1999. Igrejas Zione no espaço sociocultural urbano de Moçambique nos anos 1980–1990; p. 415-23.
- Agadjanian, Victor. Religion, social milieu, and the contraceptive revolution. Population Studies. 2001; 55(2):135–48.
- Agadjanian, Victor. Gender, religious involvement, and HIV/AIDS prevention in Mozambique. Social Science and Medicine. 2005; 61(7):1529–39. [PubMed: 15869833]
- Agadjanian, Victor. Joining, switching, and quitting: Denominational differences and socioeconomic correlates in a sub-Saharan setting. Paper presented at the annual meeting of the Society for the Scientific Study of Religion; 2012.
- Agadjanian, Victor. Religious denomination, religious involvement and contraceptive use in Mozambique. Studies in Family Planning. 2013; 44(3):259–74. [PubMed: 24006073]
- Agarwala, Rina; Lynch, Scott M. Refining the measurement of women's autonomy: an international application of a multi-dimensional construct. Social Forces. 2006; 84(4):2077–99.
- Ammerman, Nancy T.; Roof, Wade Clark. Introduction. In: Ammerman, Nancy T.; Roof, Wade Clark, editors. Work, family, and religion in contemporary society. New York: Routledge; 1995. p. 1-20.
- Anderson, Allan H. To the ends of the Earth: Pentecostalism and the transformation of world Christianity. New York: Oxford University Press; 2013.
- Avishai, Orit. "Doing religion" in a secular world: Women in conservative religions and the question of agency. Gender and Society. 2008; 22(4):409–33.
- Balk, Deborah. Individual and community aspects of women's status and fertility in rural Bangladesh. Population Studies. 1994; 48(1):21–45.
- Bartkowski, John P. Changing of the gods: The gender and family discourse of American evangelicalism in historical perspective. The History of the Family. 1998; 3(1):95–115.
- Bartkowski, John P. Remaking the godly marriage: Gender negotiation in evangelical families. New Brunswick, NJ: Rutgers University Press; 2001.
- Bartkowski, John P.; Read, Jen'nan Ghazal. Veiled submission: Gender, power, and identity among evangelical and Muslim women in the United States. Qualitative Sociology. 2003; 26(1):71–92.
- Brasher, Brenda E. Godly women: Fundamentalism and female power. New Brunswick, NJ: Rutgers University Press; 1998.
- Brusco, Elizabeth E. The reformation of machismo: Evangelical conversion and gender in Colombia. Austin: University of Texas Press; 1995.
- Chattopadhyay, Aparajita; Goswami, Baishali. Status of women in two Bengals: Evidence from largescale surveys. Journal of Social Biology. 2007; 39(2):267–86.
- Chaves, Mark. Ordaining women: Culture and conflict in religious organizations. Cambridge, MA: Harvard University Press; 1996.

- Cruz e Silva, Teresa. Protestant churches and the formation of political consciousness in southern Mozambique (1930–1974). Basel: P. Schlettwein; 2001.
- Davidman, Lynn. Tradition in a rootless world: Women turn to Orthodox Judaism. Berkeley: University of California Press; 1991.
- De Vletter, Fion. Migration and development in Mozambique: Poverty, inequality and survival. Development Southern Africa. 2007; 24(1):137–53.
- Gerami, Shahin. Women and fundamentalism: Islam and Christianity. New York: Garland; 1996.
- Ghazal Read, Jen'nan; Bartkowski, John P. To veil or not to veil? A case study of identity negotiation among Muslim women in Austin, Texas. Gender and Society. 2000; 14(3):395–417.
- Ghuman, Sharon J. Women's autonomy and child survival: A comparison of Muslims and non-Muslims in four Asian countries. Demography. 2003; 40(3):419–36. [PubMed: 12962056]
- Griffith, Marie R. God's daughters: Evangelical women and the power of submission. Berkeley: University of California Press; 1997.
- Hadaway, C Kirk; Marler, Penny L. All in the family: Religious mobility in America. Review of Religious Research. 1993; 35(2):97–116.
- Horne, Christine; Nii-Amoo Dodoo, F.; Dodoo, Naa Dodua. The shadow of indebtedness: Bridewealth and norms constraining female reproductive autonomy. American Sociological Review. 2013; 78(3):503–20.
- Ingersoll, Julie. Evangelical Christian women: War stories in the gender battles. New York: New York University Press; 2003.
- Jejeebhoy, Shireen J. Women's autonomy in rural India: Its dimensions, and the influence of context. In: Presser, Harriet B.; Sen, Gita, editors. Women's empowerment and demographic process: Moving beyond Cairo. New York: Oxford University Press; 2000. p. 204-38.
- Jejeebhoy, Shireen J.; Sathar, Zeba A. Women's autonomy in India and Pakistan: The influence of religion and region. Population and Development Review. 2001; 27(4):687–712.
- Kalu, Ogbu. Pentecostal and charismatic reshaping of the African religious landscape in the 1990s. Mission Studies. 2003; 20(1–2):84–109.
- Kaufman, Debra R. Rachel's daughters: Newly Orthodox Jewish women. New Brunswick: Rutgers University Press; 1991.
- Koenig, Michael A.; Ahmed, Saifuddin; Hossain, Mian B.; Khorshed Alam Mozumder, ABM. Women's status and domestic violence in rural Bangladesh: Individual- and community-level effects. Demography. 2003; 40(2):269–88. [PubMed: 12846132]
- Loforte, Ana M. Género e poder entre os Tsongas de Moçambique [Gender and power among the Tsongas of Mozambique]. Maputo: Colecção Identidades; 2000.
- Loveland, Matthew T. Religious switching: Preference development, maintenance, and change. Journal for the Scientific Study of Religion. 2003; 42(1):147–57.
- Mason, Karen O. The status of women: Conceptual and methodological issues in demographic studies. Sociological Forum. 1986; 1(2):284–300.
- Meyer, Birgit. Christianity in Africa: From African independent to Pentecostal-Charismatic churches. Annual Review of Anthropology. 2004; 33(1):447–74.
- Miller, Alan; Stark, Rodney. Gender and religiousness: Can socialization explanations be saved? American Journal of Sociology. 2002; 107(6):1399–423.
- Morgan, S Philip; Stash, Sharon; Smith, Herbert L.; Mason, Karen O. Muslim and non-Muslim differences in female autonomy and fertility: Evidence from four Asian countries. Population and Development Review. 2002; 28(3):515–37.
- Morier-Genoud, Eric; Anouilh, Pierre. The Catholic Church in Mozambique under revolution, war, and democracy. In: Manuel, Paul C.; Alynna, Lyon; Wilcox, Clyde, editors. Religion and politics in a global society: Comparative perspectives from the Portuguese-speaking world. Lanham, MD: Lexington; 2013. p. 185-203.
- Ozorak, Elizabeth W. The power, but not the glory: How women empower themselves through religion. Journal for the Scientific Study of Religion. 1996; 35(1):17–29.

- Pang, Keng-Fong. Islamic "fundamentalism" and female empowerment among the Muslims of Hainan Island, People's Republic of China. In. In: Brink, Judy; Mencher, Joan, editors. Mixed blessings: Gender and religious fundamentalism cross culturally. New York: Routledge; 1997. p. 41-56.
- Pfeiffer, James. African independent churches in Mozambique: Healing the afflictions of inequality. Medical Anthropology Quarterly. 2002; 16(2):176–99. [PubMed: 12087628]
- Rodríguez, Jeanette. Our Lady of Guadalupe: Faith and empowerment among Mexican-American women. Austin: University of Texas Press; 1994.
- Rose, Susan D. Women warriors: The negotiation of gender in a charismatic community. Sociological Analysis. 1987; 48(3):245–58.
- Seguino, Stephanie. Help or hindrance? Religion's impact on gender inequality in attitudes and outcomes. World Development. 2011; 39(8):1308–21.
- Seibert, Gerhard. But the manifestation of the Spirit is given to every man to profit withal: Zion churches in Mozambique since the early 20<sup>th</sup> century. Social Science and Missions. 2005; 17(1): 125–50.
- Sherkat, Darren E. Tracking the restructuring of American religion: Religious affiliation and patterns of religious mobility, 1973–1998. Social Forces. 2001; 79(4):1459–93.
- Sherkat, Darren E.; Wilson, John. Preferences, constraints, and choices in religious markets: An examination of religious switching and apostasy. Social Forces. 1995; 73(3):993–1026.
- Soares, Benjamin. Muslim-Christian encounters in Africa. Leiden: Brill; 2006.
- Stacey, Judith. Brave new families: Stories of domestic upheaval in late-twentieth century America. New York: Basic Books; 1990.
- Stark, Rodney; Finke, Roger. Acts of faith: Explaining the human side of religion. Berkeley: University of California Press; 2000.
- Sullins, D Paul. Gender and religion: Deconstructing universality, constructing complexity. American Journal of Sociology. 2006; 112(3):838–80.
- van de Kamp, Linda; van Dijk, Rijk. Pentecostals moving South-South: Ghanaian and Brazilian transnationalism in southern Africa. In: Adogame, Afeosemime; Spickard, James, editors. Religion crossing boundaries: Transnational dynamics in Africa and the new African diasporic religions. Leiden: Brill; 2010. p. 123-42.
- Walter, Tony; Davies, Grace. The religiosity of women in the modern West. British Journal of Sociology. 1998; 49(4):640–60.
- World Bank. The World Bank development indicators, 2013. 2014. Available at <a href="http://databank.worldbank.org/data>">http://databank.worldbank.org/data></a>
- Yabiku, Scott T.; Agadjanian, Victor; Sevoyan, Arusyak. Husbands' labor migration and wives' autonomy. Population Studies. 2011; 64(3):293–306. [PubMed: 20865630]
- Yeatman, Sara E.; Trinitapoli, Jenny. Beyond denomination: The relationship between religion and family planning in rural Malawi. Demographic Research. 2008; 19(55):1851–82. [PubMed: 20463916]
- Zikmund, Barbara Brown; Lummis, Adair T.; Chang, Patricia Mei Yin. Clergy women: An uphill calling. Louisville, KY: Westminster John Knox; 1998.

# Table 1

#### **Descriptive Statistics**

	Percent or Mean (SD)
Outcome	
Autonomy score (0–10)	6.0 (2.5)
Predictors	
Denominational category	
Roman Catholic	12.5
Mainline Protestant	9.5
Apostolic	12.2
Zionist	42.1
Other Pentecostal	11.1
Does not belong to any church	12.0
Church attendance in past 2 weeks*	
Never went to church in past 2 weeks*	26.2
Went to church 1–2 times in past 2 weeks*	43.6
Went to church 3 or more times in past 2 weeks*	30.1
Participates in a church group*	65.4
Switched churches for non-marriage reasons at least once	54.9
Visited another church in past 12 months*	12.9
Controls	
Age 18–24	28.0
Age 25–34	37.6
Age 35–50	34.4
Number of living children (0–11)	2.9 (2.0)
In polygamous marriage	22.7
At least some bridewealth paid	48.4
Co-resident husband	81.7
No formal schooling	33.6
1–4 years of school	38.7
5 or more years of school	27.7
Currently works outside the home	28.9
Household material possession index (1-4)	2.1 (.9)
Lives in town (district headquarter)	23.3
Number of health clinics within 10 km (0-5)	1.6 (1.1)
Number of cases	1,554

Note:

<sup>\*</sup>only those with a religious affiliation at time of survey.

#### Table 2

#### Autonomy Scores by Religious Characteristics

	Mean (SD)
Denominational affiliation	
Roman Catholic	6.3 (2.3)
Mainline Protestant	6.3 (2.5)
Apostolic	6.1 (2.4)
Zionist	5.9 (2.7)
Other Pentecostal	6.1 (2.5)
Does not belong to any church	5.9 (2.5)
Church attendance in past 2 weeks*	
Never went to church in past 2 weeks	6.0 (2.6)
Went to church 1-2 times in past 2 weeks	6.0 (2.4)
Went to church 3 or more times in past 2 weeks	6.1 (2.6)
Participation in church groups*	
Participates in a church group	6.2 (2.6)
Does not participate in any church group	5.8 (2.4)
Lifetime non-marital church switching experience	
Switched churches at least once	6.2 (2.6)
Never switched churches	5.8 (2.4)
Visits to other churches in past 12 months $*$	
Visited another church in past 12 months	6.8 (2.6)
Did not visited another church in past 12 months	5.9 (2.5)
Total sample	6.0 (2.5)

#### Note:

 $^{*}$  only those with a religious affiliation at time of survey.

Table 3

Multivariate Analyses: Random-Intercept Linear Regression of Decision Making Autonomy

	Moc	Model 1	Mo	Model 2	Mod	Model 3	Model 4	el 4
Covariate	β	SE	β	SE	β	SE	đ	SE
Catholic	.414	.201*	.411	.200*	.449	.202*	.415	.203*
Protestant	.529	.223*	.485	.221*	.513	.225*	.461	.224*
Apostolic	080.	.198	.038	.196	.093	.201	.037	.200
[Zionist]								
Other Pentecostal	.214	.204	.184	.202	.176	.204	.156	.203
Not affiliated	.094	.200	.086	.198	n/a	n/a	n/a	n/a
[Did not go to church in past 2 weeks]								
Went to church 1-2 times in past 2 weeks					102	.158	120	.156
Went to church 3 or more times in past 2 weeks					092	.176	136	.174
Participates in a church group					.128	.140	.078	.140
Switched churches for non-marital reasons at least once	.404	.124**	.313	.123**	.417	.132**	.343	.132**
Visited another church in past 12 months					.483	.196*	.403	.195*
[Age 18–24]								
Age 25–34			690.	.158			.024	.167
Age 35–50			.536	.195**			.432	.211*
Number of living children			027	.036			021	.039
[No formal schooling]								
1 to 4 years of school			.154	.142			.162	.153
5 or more years of school			.042	.173			.011	.184
Works outside the home			.294	.132*			.328	.142*
Bridewealth paid in full or partially			017	.128			004	.137
Polygamous marriage			115	.145			178	.157
Co-resident husband			957	.157**			877	.167**
Household material scale			081	.065			053	.070
Lives in district headquarters and its environs			113	.308			116	.316
Average number of health clinic within 10km of home			.374	.107**			.387	.110**

Author Manuscript

Author Manuscript

Author Manuscript

	Model 1	Mod	Model 2	Mod	Model 3	Mod	Model 4
⊖0Variate	β SE	β	β SE	ß	SE	β	SE
Intercept	$5.648$ $.172^{**}$ $5.867$ $.324^{**}$ $5.573$ $.220^{**}$	5.867	.324**	5.573	.220 <sup>**</sup>	5.738 .354**	.354**
BIC statistic (model fit)	7102	70.	7050	62	6244	62	6209
Number of cases	1554	15	1554	13	1366	13	1366

Agadjanian and Yabiku

Notes: Reference categories in brackets; Significance levels

\*\* p<.01, p<.05.