RELIGION AND SOCIOECONOMIC ATTAINMENT IN GHANA*

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Substantial research has documented the association between religion and socioeconomic attainment in Western nations. As Christianity has expanded and been transformed in developing nations and the confrontation between Islam and the West has received growing attention, the role religion plays in socioeconomic inequality continues to be a critical issue. We use the Ghana Demographic and Health Survey for 2003 to test the relationship between religious affiliation and socioeconomic attainment. Religious differences in socioeconomic outcomes are substantial in Ghana. Mainline Protestants have a significant advantage in education and wealth. Catholics and other Christians have intermediate values on these socioeconomic outcomes. Muslims and those without attachment to formal religious groups have a significant disadvantage. Educational differences are particularly important because they account for some of the differences in wealth. Moreover, religious differences in rates of school enrollment signal that inequality will persist in the next generation.

Substantial research has documented the association between religion and socioeconomic attainment, but much of the work is based on data collected in Western nations (Keister 2003; Sander 1995; Smith and Faris 2005). As Christianity has expanded and been transformed in developing nations (Jenkins, 2002) and the confrontation between Islam and the West has received growing attention, the role religion plays in socioeconomic inequality continues to be a critical issue. It is possible that culturally distinct religious practices and adaptations could lead to varying patterns of religious influence in different settings. Additionally, understanding the role religion plays in a society where educational and economic structures are undergoing fundamental change helps us understand the nature of development in these societies. In this study, we use the Ghana Demographic and Health Survey for 2003 to test the relationship between religious affiliation and socioeconomic attainment. We examine religious group differences in adult educational attainment, children's school enrollment, and wealth while placing these religions in the social context of a third world country.

RELIGION AND SOCIOECONOMIC OUTCOMES

The relationship between religion and socioeconomic outcomes, long of interest in sociology, continues to be relevant. Lehrer (2004), for example, applying a rational choice framework, emphasizes how the interrelated choices that religion and values offer can, in turn, affect education and wealth. Lehrer argues that "religious affiliation matters because it has an impact on the perceived costs and the perceived benefits of various interrelated decisions that people make over the life cycle" (2004:707). Using a cultural perspective, Keister (2003) discusses several mechanisms through which religion may influence socioeconomic attainment. These include indirect influences that shape the processes leading to mobility such as fertility, marriage, and divorce and direct ones that shape values and priorities that underlie decisions about education, employment, and savings. From either perspective, the role of religion would depend both on the religious traditions that exist and on the structure of educational and economic opportunities. We argue that it is important to understand the relationship between religion and socioeconomic outcomes in developing countries where new religious traditions have been introduced, in part through contact with more developed societies, and where educational expansion and economic development are restructuring educational and economic opportunities.

THE GHANAIAN CONTEXT

In Ghana religion, globalization, and development combine to direct social and cultural change. The linkages between religion and other social institutions, however, are not well understood. Historically, Ghanaians have always been a religious people. Busia (1967) argues that in Ghana religion has been the central organizing structure around which all else is organized. Omenyo (2006:24), quoting Pobee, describes the Ghanaians' epistemology and ontology as religious, leading him to describe the Ghanaian as *homo religious.* Lorimer (1954) found that religion permeated and influenced Ghanaian society and such institutions as reproductive behavior and marriage. In Ghana, one's religious affiliation, belief system, and religiosity are becoming public as well as private issues. Salient rituals such as funerals and weddings are enacted in religious contexts. Social networks are facilitated through and by one's religion, and the absence of religion in one's life can lead to stigma.[1] Aboagye-Mensah (1994) and Yirenkyi (2000) find that religion is a primary factor shaping the Ghanaian culture, identity, and politics.

Ghana has three major religious traditions (Islam, Christianity, and traditional indigenous religions), and a rich variety of subgroups within these (Omenyo, 2006). Although Christianity and Islam have distinctive customs and norms, they are also heavily influenced by traditional Ghanaian culture and religion.[2]

Before the arrival of Islam and Christianity, traditional religion played a critical role in personal beliefs and public events. Although heterogeneous, traditional religions included belief in an all-powerful creative force, a variety of other deities and ancestral spirits, and evil spirits or beings. Islam began to emerge in Northern Ghana as early as the 15 century. Conversion and migration have spread Islam throughout the country. European colonialism introduced Christianity in Southern Ghana (Oheneba-Sakyi and Takyi, 2007). After missionaries established Roman Catholicism and major Protestant denominations, a variety of groups broke off to establish African Independent Christian Churches because the religious establishment was reluctant to include patterns of worship that were consistent

with local culture and beliefs. More recently, Pentecostal groups and charismatic movements have grown dramatically. In 1993, non-Catholic and non-mainline Protestants Christians accounted for just 16.9% of the population. In 2003, that number more than doubled to over 41%. While the "established denominations" (as they are known in Ghana) such as Methodists, Presbyterians, Anglicans, and Catholics tend to have more rigid moral codes, with codified conventions regarding issues of sexuality and the importance of family, these new churches tend to be more liberal in their views, though this may be due to their tendency to be located in urban areas (Addai 2000). Indeed, mainline Protestant groups and Roman Catholicism have been transformed by indigenous groups in Africa (Ilogu, 1979) and have also incorporated charismatic patterns of worship in their services.[3] In addition people often adopt beliefs and practices from a variety of traditions. Indeed, Omenyo (2006) attributes the success of charismatic movements to their ability to incorporate traditional beliefs into Christianity. It is not uncommon for weddings to occur twice, once in the traditional way and once in the Church. In some areas of the country, a marriage is not considered legally binding until traditional marriage rites have been performed. As discussed in more detail below, this mixture of religious traditions has socioeconomic implications.

Economic institutions have also been in flux. Optimism following independence in 1957 was not long lived. Economic growth was volatile until the mid-1970s, and then per capita GDP experienced a dramatic downturn. In the early 1980s, however, economic growth has been on a modest upturn (Leith and Söderling (2003). At the time of the survey, per capital growth was 2.6% per year (World Development Report 2004). Improvements in educational attainment have been dramatic. For example, in the data used here nearly half (47%) of the women aged 45-49 reported having no education compared to 23% of the women aged 20-24. Educational expansion and economic growth are creating new opportunities, but poverty is still very common. The World Development Report (2006) reports that in 1998-99, 78.5% of the population fell below the international standard of $2 per person per day. The relationship between religion and socioeconomic attainment becomes particularly important in a setting with high poverty but expanding educational and economic opportunities.

To put our statistical findings in context we visited Ghana in July 2007. We conducted interviews in five major areas of the country: Accra, Kumasi, Sunyani, Tamale, and Cape Coast. We spoke with both professional and non-professional people. The professionals included six university professors, three university administrators, five religious leaders, two prominent businessmen, two directors of non-governmental organizations, and three government officials. Twenty-four interviews were conducted with non-professionals such as taxi drivers, students, people in the market and along the streets, and other service and hospitality workers. These people spanned all major religions of interest to the study. In all we conducted about fifty such interviews. Additionally, we both observed and conducted focus group discussions with university students from four public and four private religious institutions about access and equity in higher education. We also attended five different religious services. We use information from these interviews and focus groups to contextualize our hypotheses about the relationships between religion and socioeconomic attainment.

RELIGION AND SOCIOECONOMIC ATTAINMENT

We argue that in Ghana socioeconomic outcomes are shaped by the patterns of religious participation, the content of the religious message, and the linkages between religious groups

and other social institutions. The "gospel of prosperity" is of particular interest (Coleman 2000; Hackett 1995). A common message in religious sermons and writings is that believing in Jesus, following his teachings, asking for his intervention, and giving liberal donations to the Church will lead to economic success. Although this message takes various forms in different contexts, the basic message can be found in many settings. It includes the ideas that Jesus has power to provide solutions to financial problems and bless individuals with economic success (Gifford, 2004). Indeed, part of his mission is to eliminate poverty.[4] In one instance the message is crassly portrayed on a poster outside a large church depicting a large mansion and an exotic sports car with the phrase "with God all things are possible."

It is possible that this gospel of prosperity is the source of a new Protestant ethic (Coleman 2000). Continual exposure to the message may legitimize the pursuit of material goods and induce a stronger sense of personal efficacy. The importance of education that is stressed by the society at large is repeated in the churches. The message is reinforced if minister and pastors are economically successful and if peers are accepting the same message. Given that inability to speak English is a major barrier to college education, exposure to English in Church activities may improve access to higher education.

Concern that secular education may undermine religious faith may also play a role in lowering educational attainment among some groups. Parental reservations about secular influence have been found to affect willingness to invest in children's education (Lehrer 2004:716). Humanistic values emphasized in secular education can often diverge from religious teachings (Sherkat and Darnell 1999). Several informants gave this as the reason for the low educational attainment of Muslims. During colonial times, educational achievement of Muslims was limited because of their distrust of European influence. Initially, they were reluctant to have their children attend missionary schools established by Christian colonialists. Later when a secular public education system was established, Muslims feared that the secular nature of education would undermine their belief system. A variety of people including Imams, pastors, and government officials told essentially the same story. More recently, Islamic leaders have realized the importance of education and have improved and expanded their own education systems. There is one accredited Islamic University in the country. On the other hand, literacy may be viewed as an avenue to religious texts. Blunch (2008) argues that a desire to read the Bible increases literacy in Ghana.

Religious groups provide a more concrete avenue to socioeconomic achievement when they establish educational institutions.[5] Several people told us that private religious primary and secondary schools provide better educations than public schools. In higher education, applications to public universities far exceed available positions, and religious universities have been expanding to fill the need. To the degree that members of particular religious groups are given priority in the admission process, membership will facilitate educational attainment. In fact, youth are often introduced to new religious options in college. Many charismatic movements emerged on college campuses (Hackett 1995).[6] In addition, religion is a major growth industry. New church buildings and schools are under construction and the expansion of particular groups provides opportunity for employment in the ministry.

Research in the United States has found that the groups with the most wealth are those with high levels of education and low fertility, contributing to larger wealth accumulation across the generations (Keister 2003). In Ghana, mainline Protestant groups such as Angli-

cans, Methodists, and Presbyterians were the first to start schools and have the lowest ideal family size and parity. The opposite is true for Muslims and those who profess traditional, spiritualist, or no religious affiliations. Given the distinct social and cultural differences and adaptations in Ghana, we anticipate mainline Protestants will have the highest levels of wealth. In contrast, Muslims and more traditional groups, who were resistant to education of the mission schools and secular public schools, will have the lowest levels of socioeconomic achievement. Roman Catholics and other Protestants are expected to have intermediate levels of socioeconomic achievement.

Adherence to religious teachings may also have an indirect influence on socioeconomic attainment by discouraging premarital sex (Addai, 2000). Premarital chastity is taught by most groups, and youth groups are encouraged to take vows of chastity until marriage. This may differ based on the content of the religious message of the denomination, especially regarding the gospel of prosperity. A worker for an NGO told us that the emphasis on wealth and the gospel of prosperity in many Christian churches has, in part, displaced the traditional moral teachings, perhaps explaining why Muslims have lower rates of premarital sex than Christians.

Finally, patronage may operate within religious communities either through social networks that are created in religious settings or in the work place if employers give preference to adherents of their own group.[7] Tight social bonds also form among adolescents in boarding schools that persist into adulthood, creating a large network of later weak social ties for religious adherents to draw upon. These friendships may be likely to form among adherents of the same religion in religious schools.

However, several factors mitigate the influence of religion. Adherence to a particular group most likely reflects pre-existing predispositions. More isolated charismatic churches that offer services in the local language and depend less on literacy as an avenue for participation will attract a different audience than mainline churches in more affluent neighborhoods that offer service in English and encourage Bible literacy. Clothing of attendees also reflects social class of participants. To the extent that social class of membership is due to these pre-existing differences, religion is not a causal mechanism but another arena in which class differences are evident.

It is also possible that religious teachings and activities constitute a script that is enacted in the church service, but which does not have great significance in other social contexts beyond the social and economic benefits that come with religious affiliation, such as expanded social networks. Some informants told us that people would be nice in church but would become rude drivers and unwilling to give to the poor once outside the church grounds. Two social scientists told us they did not see a strong connection between religious teachings and behavior of adherents.

The message that God will help people with suffering, poverty, and illness is widespread. To the extent that people in all the groups accept a similar message, differences between groups will be minimized. For example, the emphasis on education as an avenue to a better life is ubiquitous. The fact that this message is repeated in religious settings may have no bearing on religious group differences.

Finally, religious participation may inhibit achievement if believers expect solutions to come through God rather than their own efforts. In fact, the time and money given to religious groups may be less productive than time and money being spent on other types of investments such as education, work, and other economic endeavors.

Religious effects operate at both the individual and the group level. For example, individual motivation inspired by teachings about the gospel of prosperity and the models set by successful pastors may operate mostly at the individual level. Peer group influence, availability of educational institutions, and systems of patronage may operate mostly at the group level. Thus, we will estimate religious effects at both the individual and the community level.

ANALYSIS AND METHODS

In this analysis, we consider the relationship between religious affiliation and three socioeconomic outcomes. First, we look at educational attainment of the respondents in the Ghana DHS. Secondly, we examine household wealth. Finally, we look at school attendance of children. Education is important because education is often an avenue to upward mobility for people from disadvantaged backgrounds (Van de Werfhorst 2002), because it reproduces advantage among privileged groups (Heath *et al.* 1992; Marshall *et al.* 1997), and because it is a marker of status (Lareau 2000). The respondents in this survey are females, and female education may not be as central for economic success. But mother's education is often a better indicator of children's well-being than is father's education (Duncan and Magnuson 2005). For comparison, we have repeated some analysis with husband's education to see if results are similar. One disadvantage of looking at respondent education is that it reflects events from the past. To get a more current picture, we also test models with children's school attendance as the outcome of interest. The models including wealth as the dependent variable are used to assess the role of religion in economic attainment.

In the model for educational attainment, we include controls for age, region, rural/urban residence, and ethnicity. In cross-sectional data, age reflects both life-course and temporal changes. As with most developing countries, there are major rural-urban disparities in access to and quality of education and in availability of economic opportunity. Region is included because the northern region has fewer resources and has been slower to develop. Ghana includes many different ethnic groups with distinct languages and cultures. Although religious groups have membership from most major ethnic groups, there is considerable overlap in some ethnic and some religious groups. For example, the Hausa and the Mole-Dagbani are largely Muslim while Akans are predominantly Christians. Ethnic groups compete for resources and are a source of access to social networks that could facilitate access to jobs and economic and political influence (Ametewee 2007).

In the model for wealth, we also include controls for household size, the presence of a husband/partner within the household, and marriage. Household size positively affects household economic well-being, since larger households have more potential earners. The presence of a husband or partner increases economic attainment, since males generally have higher levels of education and are the primary breadwinners, particularly in Ghana. Marriage positively affects economic status for similar reasons.

Data

Quantitative analysis is based on the 2003 Ghana Demographic and Health Survey, a nationally representative survey of women aged 15-49.[8] Questions focus on health and reproduction. Although this focus is not ideal for our purposes, large scale surveys that include

information on religion and socioeconomic status in less developed countries are difficult to come by.

Multilevel models

Multilevel models are appropriate for three reasons. First, the sampling design included geographic clusters at the first stage. If respondents are more likely to be similar within clusters, then statistical estimates are biased unless we take the intra-cluster correlations into account. Second, Ghana includes a wide variety of ethnic, sub-ethnic and religious groups. Unfortunately, responses on the religious affiliation and ethnic identity variables are not adequate to examine detailed sub-groups. We will estimate random coefficient models as one way of assessing the degree of diversity across geographic areas. Finally, in order to examine the importance of religious group concentration, we include the percentage of adherents in each cluster as a measure of concentration. Multi-level models are designed to include variables measured at different levels of aggregation. Individual responses are included as first level variables, and characteristics of sampling clusters are treated as second-level variables.

Sampling clusters are used as level two units because they consist of relatively small geographic units. There are 412 clusters in the GDHS ranging in approximate size (based on n's weighted to reflect the total number of women aged 14-49) from 886 to 81,436, with an average of 13,747. Clusters do not necessarily represent specific political units, and the largest clusters are probably too large to constitute homogeneous communities. Nevertheless, clusters are small enough that variation across clusters does give a sense of the geographic, cultural, social, and economic variation present in Ghanaian society.

Measures

We employ three different measures as dependent variables. First, we combined educational attainment and literacy. Over 70% of the GDHS respondents who had enrolled in or finished primary school could not read a full sentence (the GDHS measure of literacy). The new variable is coded as 0 for those who have no education (and are not literate), 1 for incomplete primary and not literate, 2 for incomplete primary and literate, 3 for complete primary and not literate, 4 for complete primary and literate, 5 for incomplete secondary and not literate, 6 for incomplete secondary and literate, 7 for complete secondary and literate, and 8 for higher educations and literate.

We employed the GDHS wealth index as our measure of wealth. The country specific index includes things such as building material of the home and household items such as televisions, refrigerators, automobiles. For this analysis, we use the standardized wealth index. The third dependent variable was school enrollment for school aged children.

Religious affiliation is the primary independent variable; we include five groups in the analysis: Catholics, Protestants, Other Christians, Muslims, and those with having no affiliation and/or traditional beliefs. For Protestants in some tables, we combined the Anglicans, Methodists and Presbyterians because the groups have similar levels of education and wealth. Clearly, there are differences within such broad categories as Muslim (there are four major sects present in Ghana) and "Other Christians" (this category includes a variety of Evangelical, Pentecostal, and charismatic groups). Those reporting no religious affiliation or traditional/spiritual were combined because they have no attachment to formal religious organizations and because they have similar values on socioeconomic outcomes of

interest. This category does not refer to a particular religious group but is a residual category; coefficients for this group should be interpreted accordingly.

Results

Table 1 shows the distribution of religious groups by region and type of residence, and the average age of respondents in each group. Those reporting no religion and traditional/spiritual religion tend to be concentrated in the northern regions and in rural areas. Muslims are also concentrated in the north, but not necessarily in rural areas. Catholics are more concentrated in the south, but mainline Protestants and other Christian groups have the highest concentration in the south. Catholics are also more likely to live in rural areas, whereas mainline Protestants and other Christian groups are more likely to be in urban areas. Mean ages are not very different, but the no religion and traditional/spiritual groups are older, perhaps because the other groups have been gaining younger adherents from those groups.

Table 1. Characteristics of Religious Groups in Ghana

Group	% North	% Urban	Mean age	n
No religion	53.0	10.6	32.3	302
Roman Catholic	31.5	31.3	28.6	905
Anglican	7.2	62.3	30.9	69
Methodist	2.1	58.2	28.7	373
Presbyterian	6.9	50.8	28.8	465
Other Christian	8.4	48.8	29.0	2352
Muslim	60.7	40.3	29.0	1013
Traditional/spiritualist	78.1	3.8	34.2	210

Table 2 shows measures of socioeconomic attainment for religious groups. Mainline Protestants rank highest on educational attainment, wealth and children's enrollment. The Other Christian category is not too far behind, followed by Catholics. Muslims rank somewhat lower than each of the categories of Christians, but those reporting no religion or tra-

Table 2 Religious Differences in Socioeconomic Attainment

Group	Respondent education mean	Standardized wealth mean	Boy's attendance rate	Girl's school attendance rate
No religion	.49	-.66	39.0	52.7
Roman Catholic	3.39	-.20	78.1	79.6
Anglican	5.06	.79	92.9	90.0
Methodist	4.35	.43	88.4	81.0
Presbyterian	4.23	.26	80.2	81.3
Other Christian	3.61	.17	78.1	79.9
Muslim	1.61	-.19	68.4	65.5
Traditional/spiritualist	.35	-.77	35.4	35.4

ditional/spiritual religion score the lowest on each of the measures. These differences support our arguments for the importance of religion in socioeconomic attainment. We turn to multivariate analysis to test whether these differences persist with controls, whether concentration of religious groups has any additional impact, and the degree of variability in these effects across sampling clusters.

Table 3. Multi-level Regression Predicting Education/Literacy				
Fixed effects (regression coefficients)				
	1	2	3	4
Constant	3.958*	4.837*	5.773*	1.889*
Traditional/none	-2.423*	-1.707*	-1.420*	-1.105*
Catholic	-.314	-.049	.004	-.023
Other Christian	-.604*	-.489*	-.401*	-.333*
Muslim	-1.907*	-1.382*	-1.290*	-.838*
North		-.806*	-.231	.555*
Urban		1.387*	1.269*	.072
Age		-.043*	-.043*	-.041*
Ga/dangme		.081	.066	.051
Ewe		-.122	-.066	-.042
Guan		-.015	.021	.037
Mole-Dagbani		-1.058*	-1.005*	-.585*
Grussi		-.675*	-.618*	-.414*
Gruma		-1.362*	-1.255*	-.680*
Hausa		-.502*	-.410*	-.205
Traditional/None_cluster			-3.021*	
Catholic_cluster			-.829*	
Other Christian_cluster			-1.117*	
Muslim_cluster			-1.649*	
Education_cluster				.895*
Random effects (variances)				
constant	1.270*	.632*	.648*	.000
Traditional/none	.000	.000	.000	.000
Catholic	1.102*	1.001*	.952*	.031
Other Christian	.207*	.169	.175	.000
Muslim	.409*	.862*	.774*	.000

* $p < .05$

Tables 3, 4 and 5 report results four models predicting each of the outcomes. In each case, model 1 is descriptive, simply reflecting religious group differences in each measure of socioeconomic attainment. Model 2 introduces control variables, Model 3 adds cluster level percentages in each group, and Model 4 adds the average level of the relevant measure of socioeconomic attainment for the cluster. Table 3 reports results for education/literacy. Model 1 shows differences in educational attainment for each of the groups compared with mainline Protestants. As was shown in Table 2, Catholics and other Christians lag somewhat behind the mainline Protestants (the implicit comparison group), while Muslins and traditionalists/none are substantially lower. The random effects section of the table shows how much parameters vary across clusters. With the exception of the traditional/none category, variances are comparatively large, indicating that sampling clusters are quite het-

erogeneous. In this model, the constant shows the effects for mainline Protestants. Variances for the constant term and for Catholics are particularly large. The statistical program did not estimate a variance for the traditional/none category. This may be because some clusters are small (1% of clusters have from 3 to 5 cases, and 17% have less than 10 cases), because nearly two-thirds of the clusters (64%) do not have any respondents who reported traditional or no religion, and because the categories of religion are mutually exclusive.

Model 2 adds controls for region, urban residence, age, and ethnicity. The Northern region and rural areas have a substantial educational disadvantage. Educational attainment is also low for some ethnic groups. These controls can account for most of the small Catholic disadvantage, and coefficients for other religious groups are smaller, but are still remain statistically significant. The variances of these parameters also remain large, indicating that control variables do not explain away heterogeneity across smaller geographic areas.

Model 3 considers the importance of concentrations of religious groups. The percentage of adherents in a cluster also has a substantial association with individual educational attainment. Relative to mainline Protestants, concentrations of Catholics and other Christians create a notable disadvantage. For example, the coefficient for other Christians implies

Table 4. Multi-level Regression on Household Wealth

Fixed Effects (regression coefficients)

	1	2	3	4
Constant	.068	-.624*	-.270*	-.183*
Traditional/none	-.147*	-.077*	-.068	-.043
Catholic	-.076*	-.073*	-.065*	-.062*
Other Christian	-.051*	-.039	-.035	-.031
Muslim	-.093*	-.049	-.038	-.040
North		-.382*	-.259*	.010
Urban		1.141*	1.103*	.001
Age		.000	.000	-.001
Household size		.015*	.015*	.013*
Husband present		.074*	.074*	.069*
Education		.046*	.045*	.037*
Ga/dangme		.043	.040	.016
Ewe		-034	-031	-.015
Guan		-.006	-.004	.000
Mole-Dagbani		.055	.058	.029
Grussi		.081	.084	.035
Gruma		.038	-.033	.002
Hausa		.273*	.278*	.245*
Traditional/None_cluster			-.652*	
Catholic_cluster			-.531*	
Other Christian_cluster			-.377*	
Muslim_cluster			-.438*	
Wealth_cluster				.957*
Constant	.763*	.303*	.302*	.000
Traditional/none	.000	.000	.000	.000
Catholic	.062*	.061*	.061*	.000
Other Christian	.034*	.033*	.033*	.000
Muslim	.062*	.120*	.121*	.004

* $p < .05$

Table 5. Multi-level Logistic Regression on Children's School Enrollment				
Fixed Effects (logistic regression coefficients)				
	1	2	3	4
constant	1.597*	-.615	-.826	-5.487*
Traditional/none	-1.330*	-.834*	-.658*	-.642*
Catholic	-.184	.089	-.025	-.113
Other Christian	-.290	-.210	-.243	-.270
Muslim	-.724*	-.313	-.392	-.442
Child's age		.243*	.246*	.281*
Female		.026	.033	.004
North		-.744*	-.463*	.457*
Urban		.207	.125	-.236
Household size		.032	-.034	-.021
Husband present		-.066	-.053	.063
Mother's Education		.101*	.097*	.066*
Wealth		.490*	.471*	.238*
Ga/dangme		-.263	-.278	-.275
Ewe		-.202	-.125	-.078
Guan		-.268	-.213	-.120
Mole-Dagbani		.043	.050	-.128
Grussi		.308	.377	-.186
Gruma		-.494	-.343	-.087
Hausa		.371	.425	-.107
Traditional/None_cluster			-1.665*	
Catholic_cluster			.776	
Other Christian_cluster			.359	
Muslim_cluster			.153	
enrollment_cluster				6.021*
Random effects				
Constant	.957*	.521*	.488*	.000
Traditional/none	.051	.031	.000	.000
Catholic	.442	.188	.559	.000

* $p < .05$

that if all residents belonged to this group rather than to the mainline Protestant group, the overall attainment would be fully one point lower for everyone in the cluster. The disadvantage is even greater for concentrations of Muslims, and larger still for the traditional/none cluster. In short, religion is both an individual and a community level predictor of educational achievement.

Given substantial regional variation in educational opportunity, we test a final model (Model 4) that adds the average educational attainment for the cluster. Average education in the cluster has a large coefficient. Not surprisingly, there is almost a one to one correspondence between average education in the cluster and education of respondents. With average educational attainment included in the model, random effects drop to zero. Even so, coefficients for religious groups remain quite large. In this model, Catholics do not differ appreciably from mainline Protestants, other Christians are somewhat disadvantaged, and Muslims and the other category have a substantial disadvantage. In sum, religious differences in education are robust when a variety of controls are added for region, residence, age, ethnicity, and average attainment in the area.

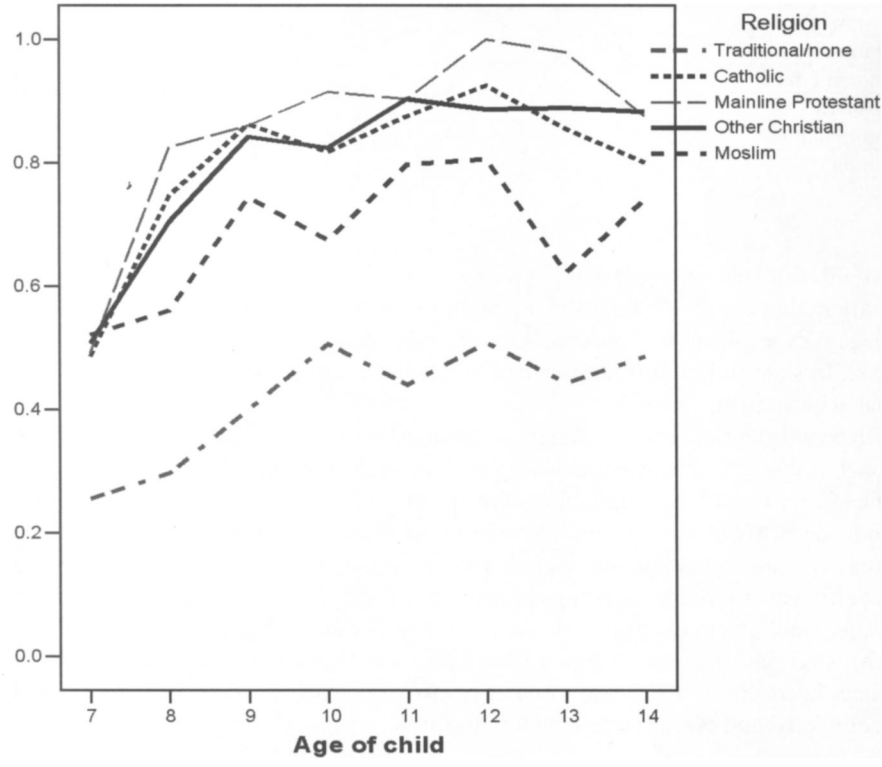
We utilize a parallel approach to examine the effects of religion on the DHS wealth index. This index is standardized; so coefficients in Model 1 indicate that mainline Protestants are only .068 standard deviations above the mean, Catholics and other Christians are somewhat below average, and Muslims and the traditionalists fall even farther below average. Random effects indicate that variation across clusters can be about as large as the average effects.

Model 2 indicates that wealth is higher in the South, in urban areas, and in larger households where the husband is present. With the exception of the Hausa, coefficients for ethnic group are not statistically significant. Wealth is also greater in households where the wife is more educated. Controls account for a substantial portion of the disadvantage among Muslims and the traditional/none category. Catholics still fall below average when control variables are taken into account.

For household wealth, concentration of religious groups appears to matter more than individual affiliation. Concentrations of mainline Protestants relative to other groups is associated with higher wealth (see Model 3). Moreover, when cluster concentration is included, the only individual affiliation that seems to matter is Catholic. Results are not much different when the average wealth in the cluster is included as a control as reported in Model 4.

Educational attainment and wealth of adults is an indicator of prior experience of adults and of the socioeconomic mix of religious groups. To gain a perspective on current educa-

Figure 1. Children's School Enrollment by Religion.



tional behavior and future prospects for religious differences, we examine enrollment of school aged children. Figure 1 shows enrollment rates by age. These differences indicate that inequalities evident among adults are being reproduced in the next generation. Enrollment rates are highest for Mainline Protestants. Catholics and other Christian groups are not far behind. Muslims have substantially lower rates of enrollment, and the traditional/none group has by far the lowest enrollment.

Logistic regression is used to estimate effects since the outcome is dichotomous (see Table 5). Coefficients from Model 1 for religious affiliation are consistent with differences reported in the graph with Catholics and other Christians somewhat below mainline Protestants, followed by Muslims and traditional groups at the bottom. The variance for the constant term is also quite large, indicating substantial spatial variation in enrollment rates. Once control variables are included in Model 2, coefficients for religious groups are reduced, but the traditional group and Muslims are still lower than Christians. Coefficients for control variables indicate that enrollment rates increase with age, are lower in the North, and are higher in households with greater wealth and maternal education. The persistence of religious differences, even after these controls are included, suggests that there may be something important about religious identity that influences educational outcomes. Inclusion of the percentage in each religious group in the cluster (Model 3) suggests that people in the traditional group are at a significant disadvantage, especially when they are concentrated in the same geographic area. The final model (Model 4) includes average enrollment rates in the cluster as an independent variable. The coefficient for the traditional group remains strongly negative.

CONCLUSION

Religious differences in socioeconomic outcomes are substantial in Ghana. Mainline Protestants have a significant advantage in education and wealth. Catholics and other Christians have intermediate values on these socioeconomic outcomes. Muslims and those without attachment to formal religious groups have a significant disadvantage. Educational differences are particularly important because they account for some of the differences in wealth; the fact that education differences are evident in rates of school enrollment signals the likelihood that inequality will persist in the next generation.

Several factors may account for these differences. Unfortunately, available data do not allow a detailed analysis of the variety of paths of influence. We suspect that several mechanisms are important including values placed on socioeconomic achievement in religious communities, access to schooling, peer group interaction in religious settings, and social capital developed in religious contexts. It is likely that these paths of influence differ across subsets of the religious groups considered here and are stronger among more active participants. Differences reported here are not necessarily a causal effect of religious group membership. As noted above, people may self-select into religious groups because of their socioeconomic status. Other factors not included in our analysis may also influence both religious group membership and socioeconomic status. Our findings must also be qualified because the wealth index does not capture the economic value of assets such as land, housing, and financial investments.

One of our most important findings is that religious effects are evident at both the individual and the group level. Religion may be as important in providing social capital and access to schools as in creating a value system that motivates individual action. It is also

important to note that religious differences persist even after we account for cluster level average socioeconomic attainment. In other words, religious differences are not simply due to the concentration of particular groups in areas when educational and economic development have created more or less opportunity. People with particular religious affiliations are different from their neighbors who belong to other religious groups.

As Christianity continues to spread in less developed countries, the relationship between religion and socioeconomic outcomes requires renewed attention. The interplay of long-held religious traditions, religious innovation, educational expansion, and economic change will likely lead to modified forms of relationships that have been observed in developed countries over the last few decades. To the extent that people rely on religion to give meaning and a sense of identity in the context of massive poverty and deprivation, religious institutions that can meet these needs will flourish. But identity and meaning may not suffice. Religions that can also offer access to a better education and social capital may also gain a comparative advantage. It is also likely that different types of religious institutions will be better able to attract people from different socioeconomic positions. If our predictions are correct, religion will continue to play an important role in socioeconomic inequality at the same time that socioeconomic inequality forms the context within which religious institutions develop.

NOTES

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[1]One man we spoke with told us of an atheist man whose community, upon his death, refused to administer proper burial rites, causing shame and dishonor for his family.

[2]Many informants emphasized this. Traditional religions, with their focu son ancestral spirits and the human relationship to land and God, are one of the primary forces driving Ghanaian adaptations to the major world religions. A university professor of religion told us that these beliefs were "at the base of all religion in Ghana, including Islam and Christianity."

[3]Attendance at various mainline churches makes this clear. Drums and other traditional African musical instruments have now been incorporated into both the charismatic and Catholic forms of worship. One religious history academic informed us that "even the preaching style is changing. There is less theology in the services. The interpretation of the scriptures is much more related to existential reality than to the actual word of God." Charismatic practices such as exorcism, healing, and deliverances have made their way into the mainline churches' religious services, creating friction between old and new members.

[4]Several academics and various people we met on the street said that for the African there is no room for (economic, social, or political) failure. The gospel of prosperity is therefore welcomed and seen as an equalizing force, of sorts, in an environment constrained by factors beyond most Ghanaians' control.

[5]A history of education in Ghana can be found at www.edughana.net/history.htm.

[6]Many people pointed this out. Young successful people found opportunities for leadership lacking in the Church. Thus they were more attracted to newer charismatic groups that offered greater opportunities for participation.

[7]Patronage came up repeatedly in discussions, particularly with Christians. While it is not general practice to ask one's religion on a job application, it "nearly always comes up" in job interviews. The practice, however, seems to tie into ethnicity too, as some groups are known to practice ethnic patronage more than others.

[8]See http://www.measuredhs.com/ for a detailed description of DHS data.

Appendix A. Regression on partner's educational attainment.					
constant	3.045*	3.270*	3.805*	1.127*	.726*
Traditional/none	-2.428*	-1.068*	-.730*	-.619*	-.781*
Catholic	-.818*	-.183*	-.159	-.148*	-.203*
Other Christian	-.500*	-.404*	-.288*	-.251*	-.280*
Muslim	-2.033*	-.853*	-.560*	-.457*	-.697*
North		-.728*		.311*	
Urban		.850*	.824*	.081*	.054
Age		-.014*	-.015*	-.017*	-.017*
Ga/dangme		-.181*	-.187*	-.059	-.010
Ewe		-.045	.034	-.041	-.072
Guan		-.154	-.264*	-.029	-.024
Mole-Dagbani		-.892*	-1.115*	-.452*	-.398*
Grussi		-.682*	-.852*	-.391*	-.342*
Gruma		-1.23*	-1.325*	-.497*	-.419*
Hausa		-.597*	-.465*	-.428*	-.537*
Other		-.971*	-1.003*	-.583*	-.583*
Traditional/None_cluster			-1.983*		1.084*
Catholic_cluster			-.369*		.369*
Other Christian_cluster			-.721*		.229
Muslim_cluster			-1.314*		.939*
Partner's education_cluster				.887	.948*
(n)	3908	3908	3908	3908	3908
R^2	.24	.42	.43	.54	.55

* p < .05

REFERENCES

Aboagye-Mensah, R.K., 1994 . Mission And Democracy in Africa: The Role of the Church. Accra, Ghana: Asempah Publishers.

Addai, Isaac. 2000. Religious Affiliation and Sexual Initiation Among Ghanian Women. *Review of Religious Research* 41:328-43.

Ametewee, Victor K. 2007. Ethnicity and Ethnic Relations in Ghana. Pp. 25-41 in Steve Tohah (ed.) *Ethnicity, Conflicts and Consensus in Ghana*. Accra, Ghana: Woeli Publishing.

Blunch, Niels-Hugo. 2008. Religion and Human Capital in Ghana. Paper presented at the annual meetings of the Population Association of America. New Orleans.

Busia, Kofi A., 1967. *Africa in Search of Democracy,* New York: Praeger.

Coleman, Simon. 2000. *The Globalisation of Charismatic Christianity: Spreading the Gospel of Prosperity.* Cambridge University Press.

Gifford, Paul. 2004. Persistence and Change in Contemporary African Religion. *Social Compass* 51:169-76.

Duncan, Greg and Katherine Magnuson. 2005. Can Family Socioeconomic Resources Account for Racial and Ethnic Test Score Gaps? *The Future of Children* 15(1):35-54.

Hackett, Rosalind I. J. 1995. The Gospel of Prosperity in West Africa. Pp. 199-214 in R.H. Roberts (ed.) *Religion and the Transformations of Capitalism.* London: Routledge.

Heath, Anthony, Colin Mills and Jane Roberts. 1992. Towards Meritocracy? Some Recent Evidence on an Old Problem. In Colin Crouch and Anthony Heath (eds.) *Social Research and Social Reform.* Oxford, U.K.: Oxford University Press.

Ilogu, Edmund. 1979. The Indigenisation of Imported Religions. *Journal of Asian and African Studies* 14:121-31.

Jenkins, Philip. 2002. *The Next Christendom: The Coming of Global Christianity.* Oxford: Oxford University Press.

Keister, Lisa A. 2003. Religion and Wealth: The Role of Religious Affiliation and Participation in Early Adult Asset Accumulation. *Social Forces* 82:173-205.

Lareau, Annette. 2000. *Home Advantage: Social Class and Parental Intervention in Elementary Education.* Lanham, Maryland: Rowman & Littlefield.

Lehrer, Evelyn L. 2004. Religion as a Determinant of Economic and Demographic Behavior in the United States. *Population and Development Review* 30(4):707-26.

Leith, J. Clark and Ludvig Söderling. 2003. *Ghana—Long Term Growth, Atrophy and Stunted Recovery.* Uppsala, Sweden: Nordiska Afrikainstitutet.

Lorimer, Frank. 1954. *Culture and Human Fertility: A Study of the Relation of Cultural Conditions to Fertility in Non-industrial and Transitional Societies.* New York: UNESCO.

Marshall, Gordon, Adam Swift and Steven Roberts. 1997. *Against the Odds?: Social Class and Social Justice in Industrial Societies.* Oxford: Oxford University Press.

Oheneba-Sakyi, Yaw and Baffour K. Takyi (eds.). 2007. *African Families at the Turn of the 21st Century.* Dubuque, Iowa: Kendall/Hunt Publishing Company.

Omenyo, Cephas N. 2006. *Pentecost Outside Pentecostalism: A Study of the Development of Charismatic Renewal in the Mainline Churches in Ghana.* Zoetermeer, Netherlands: Boekencentrum Publishing House.

Sander, William. 1995. *The Catholic Family: Marriage, Children, and Human Capital.* Boulder, Colorado: Westview Press.

Sherkat, Darren E. and Alfred Darnell. 1999. The Effects of Parents' Fundamentalism on Children's Education Attainment: Examining Differences by Gender and Children's Fundamentalism." *Journal for the Scientific Study of Religion* 38(1):23-25.

Smith, Christian and Robert Faris. 2005. Socioeconomic inequality in the American Religious System: An Update and Assessment. *Journal for the Scientific Study of Religion* 44(1):95-104.

Van De Werfhorst, Herman G. 2002. A Detailed Examination of the Role of Education in Intergenerational Social-class Mobility. *Social Science Information* 41(3):407-38.

World Development Report 2004: Making Services Work for Poor People. Oxford: Oxford University Press.

World Development Report 2006: Development and the Next Generation. Oxford: Oxford University Press.

Yirenkyi, Kwais. 2000. The Role of Christian Churches in National Politics: Reflections from Laity and Clergy in Ghana. *Sociology of Religion* 63(3):325-38.