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Emerald Book Chapter: Mega, Medium, and Mini: Size and the Socioeconomic Status Composition of American Protestant Churches

David E. Eagle

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MEGA, MEDIUM, AND MINI: SIZE AND THE SOCIOECONOMIC STATUS COMPOSITION OF AMERICAN PROTESTANT CHURCHES

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ABSTRACT

Purpose – *To assess the following question: Do large Protestant congregations in the United States exert social and political influence simply as a function of their size, or do other characteristics amplify their influence?*

Methodology/Approach – *Using the U.S.-based National Congregations Study and the General Social Survey, the chapter employs a multivariate regression model to control for other factors related to church size.*

Findings – *Larger congregations contain a larger proportion of regular adult participants living in high-income households and possessing college degrees, and a smaller proportion of people living in low-income households. In congregations located in relatively poor census tracts, the relationship between high socioeconomic status (SES) and congregation*

size remains significant. Across Protestant groups, size and proportion of the congregation with high SES are correlated. Individual-level analyses of linked data from the General Social Survey confirm the positive relationship between the size of congregation the respondent attends with both high household income and possessing a college degree. These analyses also reveal a negative relationship between size and low household income.

Social implications – *Size is an important factor when considering the social impact of congregations.*

Originality/Value of chapter – *This chapter identifies a systematic difference between churches of different sizes based on SES. This relationship has not been previously identified in a nationally representative sample.*

Keywords: Congregation; socioeconomic status; size; Protestant; megachurch

In 2008, in Orange County, California, the 20,000-plus member, Southern Baptist, Saddleback Community Church hosted a presidential forum between President Barack Obama and his opponent, John McCain. This event underscores the important role that large Protestant churches play in American social and political life. Large churches, simply because of their size, are likely to exercise more influence than smaller churches. It is not accidental that a 20,000-member church hosted the Presidential debate, rather than a coalition of 100, 200-member churches. As one researcher remarks, "one 2,000-person church is easier to mobilize for social or political action than ten 200-person churches, a politician is more likely to address one 2,000-person church than ten 200-person churches, and the pastor of one 2,000-person church probably gets an appointment with the mayor more easily than the pastors of ten 200-person churches" (Chaves, 2006, p. 337). Other research suggests clergy networked by a Protestant megachurch evidence high levels of political involvement and a strong concern for protecting conservative religious values (Dochuk, 2011; Kellstedt & Green, 2003).

What about other factors that might amplify the influence of large churches? In this chapter, I focus on the socioeconomic status (SES) composition of the congregation. To the extent that both larger congregations and more affluent and educated individuals attract the attention of

politicians, a positive correlation between size and the SES composition of the church may magnify the political influence of large churches. If SES and congregation size are related, this raises the question of how the increasing prevalence of large churches may impact other spheres of social life (Wuthnow, 1988, p. 10). Uncovering a relationship between size and SES impacts how we understand the role of religion and social stratification. Large congregations may help to solidify socioeconomic barriers in the wider society. If higher-SES individuals are clustered in large churches, then the presence of large churches in a community may decrease ties between diverse socioeconomic groups. We know from other research that across a wide array of denominations, people are increasingly concentrated in a denomination's largest churches, making understanding their impact all the more vital (Chaves, 2006).

Previous research has not identified size as a key mediator of congregational socioeconomic composition. One study hints at the connection by suggesting that individuals in large churches are more likely to have friends who are corporate executives (Wuthnow, 2002); another contends that large Protestant churches are predominantly middle class (Kilde, 2002, pp. 215–220). However, the bulk of the literature suggests large churches have a more diverse status composition. A study of megachurches – churches with 2,000 or more in worship attendance – argues that they draw from a socially and economically varied catchment (Karnes, McIntosh, Morris, & Pearson-Merkowitz, 2007; Thumma & Travis, 2007). Due to their size, they can adapt their program offerings to appeal to a wide variety of people; this leads to high levels of diversity in terms of income, education, and racial composition (Thumma & Travis, 2007, pp. 139–141; von der Ruhr & Daniels, 2010). Two prominent observers of megachurches state:

> Contrary to how they appear from the outside or to a casual visitor, megachurches are not homogeneous collections of the same kind of person, neither by class, race or education, or political stance. It is true that megachurch attendees do have similar lifestyles, but this is due more to a common suburban milleu … than anything intrinsic to the megachurch itself. (Thumma & Travis, 2007, p. 144)

Other sociologists expand this argument to encompass congregations of various sizes:

> It is past time that we accepted the unanimous results of more than fifty years of quantitative research that show that although class does somewhat influence religious behavior, the effects are very modest, and most religious organizations are remarkably heterogeneous in terms of social status. (Stark & Finke, 2000, p. 198)

A study based on the U.S. Congregations and Life Study concludes, "even at the congregational level, class boundaries are not very powerful" (Reimer, 2007, p. 591).

In this chapter, I show that socioeconomic dynamics *are* salient in understanding the organization of Protestant congregations in the United States. Using the National Congregations Study (hereafter NCS, see Chaves, 2007), a nationally representative sample of congregations, I identify a positive correlation between church size and the proportion of the congregation with high SES. This relationship holds across Protestant traditions, differing only in degree, not direction.

Any connection between size and the SES composition of congregations may simply reflect broader patterns of residential stratification. In this chapter, I aim to determine if this relationship derives merely from geography. In the United States, the poor are concentrated in urban cores (Massey, 1996); the affluent have generally been the first to move to the edges of expanding cities (Baldassare, 1992; Jackson, 1985, p. 6). Previous research shows that megachurches prevail in the suburbs of large urban areas (Bird, 2007; Karnes et al., 2007; Thumma, Travis, & Bird, 2005; Wollschleger & Porter, 2011). The construction and expansion of large church facilities require both available land and considerable political goodwill from city planners. Congregations populated by predominantly higher-SES people are more likely to receive concessions from city officials to construct large facilities. In other words, the relationship between size and SES composition may result from the "suburban millieu" that contains more individuals with higher SES and favors the construction of large church facilities, rather "anything intrinsic" to large churches in and of themselves. Congregations may, to a large extent, reflect their local environments. If it is true that affluent areas favor larger churches, then the observed relationship between size and higher SES composition will not apply in poor areas. In this analysis, I do not find evidence that the relationship between size and the socioeconomic composition of congregations differs significantly in disadvantaged census tracts.

I aim in this research to establish the systematic variation between size and the SES composition of congregations, test the robustness of this relationship, and rule out obvious factors like denominational tradition, the suburban milieu, and the racial composition of the congregation as explanatory factors. In the discussion of the results, I offer several likely candidates for the underlying social processes that are generating these results. However, due to the limitations of space and the lack of data linking things like household time use to congregation size, I leave in-depth exploration of the generative social processes for future research.

DATA

The data for this study come from the NCS and the General Social Survey (GSS) – a nationally representative face-to-face sample of the noninstitutionalized adult population in the United States. NCS-I (1998) surveyed 1,234 congregations and NCS-II (2006–2007), 1,506 (Chaves, 2007; Chaves & Anderson, 2008; Chaves, Konieczny, Beyerlein, & Barman, 1999).[1] The NCS uses a hypernetwork sampling procedure to generate a nationally representative sample of congregations. Respondents to the 1998 and 2006 GSS were asked to identify their place of worship; the congregations nominated by the individuals constitute the sample for the NCS. The data were gathered from telephone interviews with a key informant in the congregation (most often the head clergyperson). The NCS attained high response rates (78 and 80 percent, respectively) as did the GSS (76 and 71 percent, respectively).

The NCS and GSS are linked, which allows analysis at the congregational and individual levels. As this study aims to examine the relationship between size and the SES composition of the congregation (rather than the relationship between the size of congregation an individual attends and their SES characteristics), my main analyses proceed using congregation-level data. I use the individual-level data to confirm patterns in the NCS.

This analysis is restricted to Protestant congregations. Catholic parishes are organized by church officials along geographic lines, making them difficult to compare with Protestants where there is less ecclesiastical control over church size and location. Catholic churches tend not to think in terms of "membership" or attendance, and size is most often calculated from parish roles (Chaves, 2006, p. 332). Latter-Day Saints congregations are also excluded because they tightly control church size at around 300 members (Finke, 1994). This reduces the effective sample size to 972 Protestant congregations in 1998 and 954 in 2006–2007, for a total combined sample of 1,926 congregations.[2]

The dependent variable in this analysis is the number of adults who regularly participate in the congregation, whether or not they are officially members. Thirty-two congregations had missing values for this variable.[3] This number imperfectly represents the actual number of regularly participating adults in the congregation. Defining "regular participants" is an inherently subjective process. However, because the importance of official church membership has declined, Protestant congregations tend to carefully track the number of regular participants as an alternative metric. Also, key informant and individual reports of size are highly correlated; the

correlation coefficient is 0.7 between key informant's estimate of size in the NCS and respondent's estimates of their congregation's size in the GSS (Frenk, Anderson, Chaves, & Martin, 2011). This justifies the assumption that NCS estimates are sufficiently accurate to construct meaningful comparisons with other churches in the sample. In the individual-level analyses, I use the key-informant report of size rather than the respondent's estimate as the dependent variable; likely, key informants more accurately assess size.

Fig. 1 offers a histogram of the number of adults in the congregation; Fig. 2 is the same plot but for the subsample of churches with 1,000 or more adult participants. These figures show considerable skew in the overall distribution of congregation size, even among large churches. Small churches tend to survive even though they are not organizationally sustainable (Anderson, Martinez, Hoegeman, Adler, & Chaves, 2008). The *median* congregation has 175 participants, and the *mean* congregation has 462. Most large churches are clustered in the 1,000–2,000 regular-adult-participant category. Only four Protestant congregations have 10,000 or more members. In order to conduct bivariate comparisons of the SES composition of congregations of different sizes, I group congregations into five categories – 0–100; 101–500; 501–1,000; 1,001–3,000; and 3,000 or more
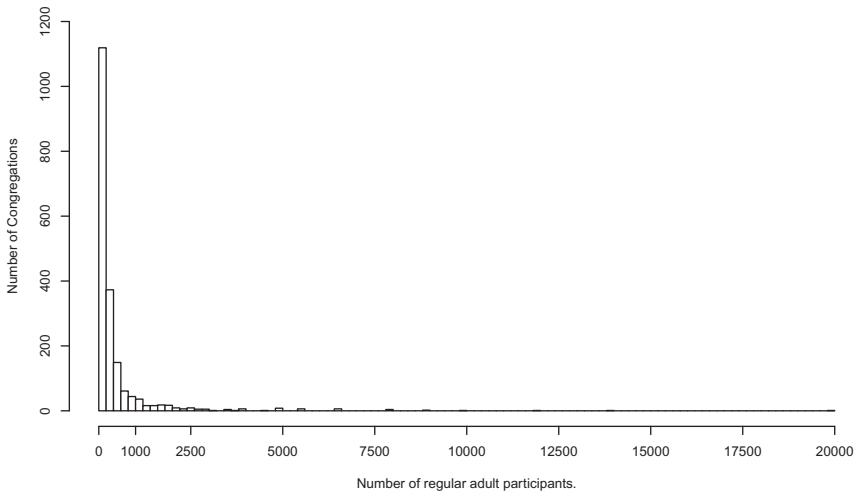
Fig. 1. Histogram of the Size Distribution of Protestant Megachurches in the United States. These Data Are Weighted to be Representative of All the Protestant Congregations in the United States.
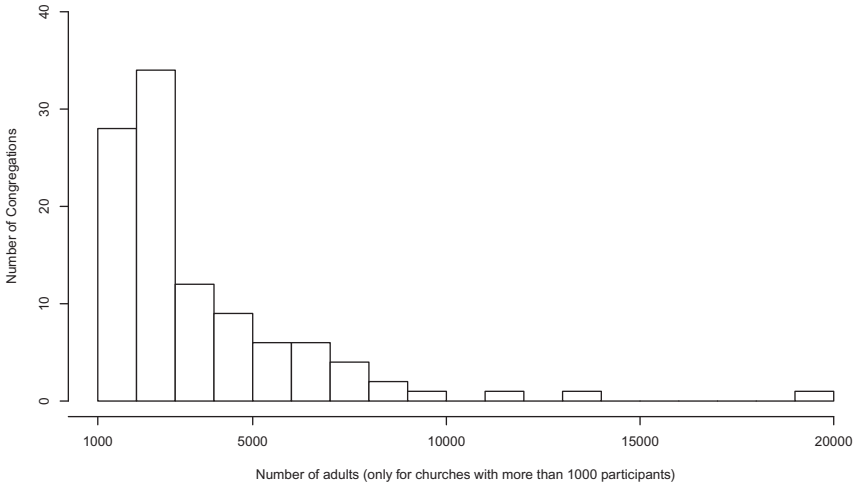
Fig. 2. Histogram of the Size Distribution of Protestant Megachurches (More Than 1,000 Regular Adult Participants). These Data Are Weighted to be Representative of All the Protestant Congregations in the United States.

regular adult participants. These categories balance the ability to display important differences, while also retaining sufficient numbers of cases in each category to conduct meaningful comparisons. Size must be kept in perspective. Among Protestant congregations in the United States, 99.5 percent have fewer than 1,000 adults. Seventy-six percent have 100 or fewer participants. Looked at as a proportion of *Americans who attend Protestant congregations*, 11 percent attend churches with 1,000 or more regularly participating adults and 34 percent attend churches with fewer than 100. Proportionally, large churches are rare; however, they contain a significant part of the Protestant population.

Measuring the Socioeconomic Composition of Congregations

I measure the socioeconomic composition of the congregation using three key measures provided by the NCS: the proportion of people in high-income households (more than $100,000 per year in annual household income), the proportion in low-income households (less than $25,000 per year in annual household income), and the proportion with four-year college degrees. Missing data pose a problem on the social composition

variables. Fifteen percent of the cases are missing estimates of low-income households, 12 percent are missing on high incomes, and 9 percent are missing on Bachelor's degree. In all of these cases, I logged the measure (to normalize the distribution), imputed values using a multiple regression imputation strategy, and transformed the variables back to the original percent scale (Gelman & Hill, 2007). Excluding the missing cases produces the same substantive findings; however, the overall statistical power of the model is reduced.

This study hinges on the accuracy with which key informants estimate the social composition of the congregation. Using data from a sample of 242 U.S. congregations, a recent article compares key informant estimates to averages obtained by individual-level surveys of the participants (Schwadel & Dougherty, 2010). These researchers found key informants accurately estimate the proportion of people with high incomes. On average, key informants and membership surveys came within three percentage points of one another. However, on low income and college degree, key informants have a great deal more trouble – more than a quarter of key informant estimates differed from membership surveys by 20 points or more. These authors also report that size of the congregation does not significantly impact the accuracy of key informant reports. Another study compares NCS estimates to the aggregate characteristics of individual-level data from the GSS. Their conclusions are similar – key informants have greater difficulty assessing less-observable characteristics (Frenk et al., 2011). NCS informants appear to accurately assess the proportion of people in high- and low-income households. They significantly overestimate the number of people with college educations by as much as 10 points.

Independent Variables

Multivariate regression models are employed to measure the relationship between congregation size and SES composition when other factors known to impact the size and social composition of congregations are controlled. This includes the impact of the location of the church building on the SES composition of the congregation. Due to privacy considerations, the NCS investigators limit the publicly available information about the social composition of the census tract in which the congregation's building is located to binary indicators for census tracts with high immigrant and/or minority populations and for tracts where at least 30 percent of the

households are at or below the official U.S. poverty line. As the focus of this study is on SES, I only include the latter variable in the analysis.

Congregational social composition may vary significantly depending on the degree of urbanization. Large churches are overwhelmingly urban. More than 90 percent of churches with 1,000 or more adult participants are in urban areas; all churches with 2,800 or more are in urban areas. Urban areas have different socioeconomic dynamics than less urbanized or rural locations. To control for these differences, a three-category variable is included that indicates whether the census tract where the congregation's building is located is predominantly urban, suburban, or rural.[4]

Relative spending levels may influence congregational size, and a "congregational spending per adult" variable is included in the model. This is the total amount of money spent by the congregation in the previous fiscal year on operating costs in constant 2006 dollars (capital expenditures are excluded) divided by the number of regular adult participants.[5]

Younger and older people have significantly different income profiles than those in middle life; they also vary in their ability to travel to religious services, so congregations with a large percentage of younger or older adults may have significantly different SES profiles. I include variables that estimate the proportion of people in the congregation under 35 years old, as well as the proportion over 60.[6] I also add a variable to the model that measures the percent of the congregation that is female.

In the United States, race and SES are linked (Oliver & Shapiro, 2006). The racial composition of a congregation is also related to size (racially diverse churches tend to be larger, as do predominantly African American churches), so percent nonwhite is added to the model as a control. Operationalizing racial diversity within congregations presents several challenges. A large proportion of congregations (66 percent) are more than 90 percent white. A significant minority (15 percent) are more than 90 percent Black. Less than 2 percent of congregations had more than 10 percent Asian; about 7 percent had more than 10 percent Hispanic. To deal with this highly irregular distribution, I chose to operationalize ethnic diversity as percent nonwhite. Because percent nonwhite has a bimodal distribution, a continuous variable does not work effectively in the regression models. This is a categorical variable with the following categories, 0–10 percent, 11–20 percent, 20–50 percent, and more than 50 percent nonwhite.

SES varies by religious affiliation (Hoge & Carroll, 1978; Keister, 2003; Laumann, 1969; Lenski, 1961; Nelsen & Potvin, 1980). A goal of this analysis is to determine whether the magnitude and direction of the size-social

composition relationship differs across major religious traditions as well as between Charismatic and non-Charismatic churches. Mainline Protestants have higher SES, on average, than conservative Protestants. Mainline congregations are also typically smaller. In order to account for possible differences across Protestant traditions, I add dummy variables for mainline, evangelical, and Black Protestants (Steensland et al., 2000). Evidence suggests that Pentecostal/Charismatic churches differ systematically from non-Charismatic congregations in both size and SES composition (McGaw, 1979, 1980). Affiliation with the Pentecostal movement is common in evangelical and in Black Protestant churches but rare in mainline churches. Charismatic religious identity is signaled with a dummy, coded 1 if the key informant indicated that in the past 12 months people have spoken in tongues in a church service.

To further capture religious tradition, I add two additional variables that measure political and social conservatism. Including these variables helps to provide an additional level of control beyond simply using measures of affiliation. Informants were asked "politically speaking, would your congregation be considered more on the conservative side, more on the liberal side, or right in the middle?" A dummy was created indicating that the congregation was more on the conservative side. Congregations classified as "right in the middle" or "more on the liberal side" were coded zero.[7] The NCS also asks a number of questions about whether the congregation has a policy against same-sex behaviors, premarital cohabitation, and the consumption of alcohol. From previous research (Hertel & Hughes, 1987; Putnam & Campbell, 2010; Wilcox & Jelen, 1990) we know these are highly relevant issues in the contemporary American evangelical movement. I code congregations where informants indicated the congregation has a policy against these behaviors one (zero otherwise). Due to colinearity, I add them together into a social conservatism scale.[8]

I introduce variables to account for regional variation. This variable is based on the U.S. Census Bureau classification system and contains four categories – the Northeast, the South, the Midwest, and the Western regions.[9] In the Midwest and South, churches are larger, and comparatively smaller in the Northeast and West regions (Wollschleger & Porter, 2011).

I include a dummy variable indicating that the survey was done in 2006 to account for potential changes between 1998 and 2006.

In the individual-level analyses, I add race as a four-category variable (white, Black, Hispanic, other). Age of the respondent is included as a continuous variable; female sex category and currently married are added as dummy variables.

Modeling Strategy

In this study, I employ multiple analytical models to assess the relationship between the socioeconomic composition of churches and their size. A linear regression model does not adequately capture the skew in the size distribution of congregations. Additionally, there is the possibility that the strength of correlation varies across different sizes of churches. In this analysis I use a hurdle model (a class of zero-inflated models) to capture skew and to account for different correlations across different sizes.[10] Hurdle models are two-component models that combine a binomial logistic regression (looking at the predictors for being a "zero" (in this case a congregation is a zero if it is below a certain size threshold) vs. a "nonzero") and a negative binomial regression that models the count *beyond* zero (in this case beyond a certain size threshold). The advantage of using a hurdle model over splitting the dependent variable and running separate analyses is the entire sample is retained, which increases statistical power.

The hurdle model produces two sets of coefficients. The first is a set of logistic regression coefficients. These coefficients describe the odds of being in the bigger size category (coded 1). The second set of coefficients describes the correlation between a continuous measure of size and the independent variables for those congregations bigger than the threshold. This portion of the model is a negative binomial regression.[11] Because this portion of the model is log-linear, exponentiating the coefficients gives the multiplicative effect of increasing the independent variable by one unit. I report the hurdle models with two thresholds, ≤ 500 members (essentially the mean) and $\leq 1,000$ members. These thresholds were chosen for theoretical reasons and for mathematical efficiency. The substantive interest in this research is large churches. The 500-participant threshold corresponds to churches above or below the mean size; the 1,000-participant threshold roughly to so-called "megachurches." Going beyond 1,000 members creates a problem with too small a sample of large congregations for the model to converge. The best fit (using BIC values to assess adequacy of fit) was achieved with a threshold of 1,000.

RESULTS

Bivariate Results

What do these data reveal about the relationship between size and the SES composition of U.S. Protestant churches? In Table 1, I present the average

Table 1. Bivariate Results, Congregation Size, and Compositional Characteristics.

	Number of Regular Adult Attenders								
	≤100	101–500	Sig.[a]	501–1,000	Sig.	1,001–3,000	Sig.	>3,000	Sig.
Congregational-level results[b]									
Percent of congregations with									
Annual HH income ≤$25,000	36.73	22.00	***	15.93	***	16.49		14.94	
Annual HH income ≥$100,000	4.79	12.79	***	24.50	***	22.72		29.82	**
College degree	20.35	36.79	***	51.89	***	52.55		62.31	*
Number of congregations	693	894		159		137		43	
Percent of congregations in (out of the total number in a size category)									
Census tract 30% HHs below poverty line	14.26	10.25	**	14.35	**	8.39	**	4.58	
Number of congregations	83	93		26		12		1	
Individual-level results[c]									
Percent of respondents with									
Annual HH incomes ≤$25,000	34.74	24.60	***	21.47		17.04		9.07	*
Annual HH incomes ≥$100,000	3.49	10.92	***	10.60		19.26	**	25.00	
College degrees	19.40	33.25	***	45.42	***	39.91		40.72	

[a]Probability that congregations in the larger category are different from the next smaller category.
[b]*Source*: National Congregations Study, waves I and II, weighted to be representative of all congregations in the United States.
[c]*Source*: National Opinion Research Council General Social Survey 1998 and 2006, weighted to be representative of the U.S. population.
Notes: Significance levels are ***≥.99, **≥.95, *≥0.90, [†]≥0.80.
HH, household.

values of the SES composition indicators over a range of sizes of congregations (these are congregational-level results). I also present the proportion of individuals with salient SES characteristics who attend congregations of difference sizes (these are individual-level results).

Congregational-Level Results
At the *congregational level*, several key relationships emerge. In terms of household incomes, congregations with 3,000 or more participants have

more than six times the proportion of people with household incomes over $100,000 per year compared to congregations with 100 or fewer participants, four times for congregations between 100 and 500 participants. The proportion of people with low household incomes shows the opposite relationship. Congregations with 3,000 or more participants contain, on average, about half as many people in low-income households than congregations with 100 or fewer participants. Educational attainment follows a similar pattern as high income. Congregations with 3,000 or more people contain almost three times as many participants with college degrees than congregations with 100 or fewer regular adult participants.

What about the location of the building? In terms of the distribution of congregations of varying sizes across census tracts with high degrees of poverty, congregations with 3,000 or more attenders are rare in poor census tracts – there was only one in the NCS sample. Eight percent of congregations with 1,000–3,000 regular participants were located in census tracts with high degrees of poverty. About 15 percent of congregations with 500–1,000 participants, 10 percent of 100–500 participant churches, and 15 percent of the smallest churches located their buildings in census tracts with a high degree of poverty.

Local conditions may not fully determine the makeup of congregations, particularly large ones, because they draw from a wide geographic area (Karnes et al., 2007). Some people may travel from the suburbs to the urban core to worship in a historical building. Others may drive across town for children's programs or a prominent preacher. The NCS contains variables to assess the relationship between size and the distance people travel to attend the congregation. Key informants were asked what proportion of participants live within a 10-minute walk, a 10-minute drive, or more than a 30-minute drive from the building. The results are revealing. Table 2 shows the cross tabulation of size and distance traveled to the congregation. Larger

Table 2. Cross Tabulation of Congregation Size and Distance Traveled to the Congregation.

	Number of Regular Adult Attenders				
	≤ 100	101–500	501–1,000	1,001–3,000	>3,000
Within a 5-minute walk (%)	16.3	18.2	12.8	10.2	8.9
Within a 5-minute drive	58.1	60.5	57.0	58.6	43.9
More than a 30-minute drive	15.7	11.5	11.3	17.6	26.2

Source: National Congregations Study, waves I and II.

churches have a greater proportion of their members who travel long distances to attend services. For churches with more than 3,000 members, about 25 percent of their participants drive more than 30 minutes to attend services. However, even for churches with 3,000 or more participants, they still draw a considerable proportion of their adherents – on average, 53 percent – from nearby locations.

Individual-Level Results
The *individual-level* results tell a similar story. In terms of household incomes, 25 percent of the respondents who attend churches with 3,000 or more participants have household incomes of $100,000 or more per year, as opposed to 10 percent of those who attend churches with between 100 and 500 or 500 and 1,000 participants, and only 3 percent of those who attend churches with 100 or fewer participants. Approximately 9 percent of the respondents who attend churches with 3,000 or more participants have household incomes less than $25,000 per year, as opposed to 17 percent of those who attend churches with 1,000–3,000 participants, 21 percent of 500–1,000 participant churches, 25 percent of 100–500 participant churches, and 35 percent of those who attend churches with 100 or fewer.

   Because key informants in the NCS had difficulty estimating the proportion of people with four-year college degrees, educational attainment evidences a weaker association with size in the individual-level bivariate results. About 40 percent of people who attend churches with 1,000–3,000 and 3,000 or more participants have college degrees, as opposed to 33 percent of those in congregations with 100–500 participants and 19 percent of those in congregations with fewer than 100 participants. Congregations with 500–1,000 participants have the highest proportion educated, with 45 percent.

Multivariate Results

Congregational-Level Results
In Panels A and B of Table 3, I report the baseline results from the multivariate analysis. The earlier size-SES composition patterns from Table 1 remain salient in the multivariate models. The proportion of people in high-income households possesses a strong, significant, positive relationship to size across both thresholds. Out of all the social composition variables, the proportion high income bears the strongest relationship with size. The proportion of people with college degrees is also positively correlated with

Table 3. Congregational-Level Hurdle Regression Coefficients Predicting the Number of Regularly Participating Adults.

Panel A: Negative Binomial Regression Coefficients Predicting Size

	Threshold no. of participants	
	≥ 500	$\geq 1,000$
Intercept	7.193***	7.677***
Percentage of adults in HH with income less than $25,000/year (10%'s)	0.031	0.105**
Percentage of adults in HH with income $100,000/year (10%'s)	0.16***	0.127***
Percentage of adults with Bachelor's degrees (10%'s)	0.037*	0.037
Percentage of adults less than 35 years olds (10%'s)	0.093***	0.057*
Percentage of adults older than 60 (10%'s)	−0.038	0.039
Percentage of adults female (1%'s)	−0.005	−0.01
Percentage nonwhite more than 10, less than 20 percent	0.462***	0.456***
Percentage nonwhite between 20 and 50 percent	0.088	0.086
More than 50 percent nonwhite	−0.135	0.002
Black Protestant (evangelical ref)	0.382*	0.098
Mainline Protestant	−0.332***	−0.378***
More conservative politically	0	−0.043
Social conservatism scale (0–3)	0.022	0.065
Midwest (Northeast ref)	0.051	0.11
South	0.114	0.056
West	0.08	−0.176
In suburban area (urban ref)	−0.399***	−0.391**
In rural area	−0.538***	−0.56**
Age of congregation (years)	−0.004**	−0.002
Congregational spending per member (2006 dollars)	−0.01***	−0.011**
Year 2006	−0.074	0.056
Overdispersion	2.165	3.353
BIC	6,747	3,640

Panel B: Logistic Regression Coefficients Predicting Membership above the Threshold

	Threshold no. of attenders	
	≥ 500	$\geq 1,000$
Intercept	−0.911	−2.392***
Percentage of adults in HH with income less than $25,000/year (10%'s)	−0.051	−0.06
Percentage of adults in HH with income $100,000/year (10%'s)	0.501***	0.479***
Percentage of adults with Bachelor's degrees (10%'s)	0.193***	0.198***
Percentage of adults less than 35 years olds (10%'s)	0.026	0.068

Table 3. (*Continued*)

Panel B: Logistic Regression Coefficients Predicting Membership above the Threshold

	Threshold no. of attenders	
	≥ 500	≥ 1,000
Percentage of adults older than 60 (10%'s)	−0.147***	−0.203***
Percentage of adults female (1%'s)	−0.023***	−0.017*
Percentage nonwhite more than 10, less than 20 percent	0.574*	0.892***
Percentage nonwhite between 20 and 50 percent	0.552***	0.522**
More than 50 percent nonwhite	0.568*	0.172
Black Protestant (evangelical ref)	−0.332	0.376
Mainline Protestant	−0.81***	−0.88***
More conservative politically	0.236	0.496**
Social conservatism scale (0–3)	−0.195***	−0.182*
Midwest (Northeast ref)	0.352	0.407
South	0.476*	0.696*
West	0.332	0.937**
In suburban area (urban ref)	−0.639***	−1.237***
In rural area	−1.951***	−1.957***
Age of congregation (years)	0.012***	0.005
Congregational spending per member (2006 dollars)	−0.033***	−0.028***
Year 2006	−0.474***	−0.397**

Source: National Congregations Study, waves I and II.
***$p \leq 0.001$, **$p \leq 0.01$, *$p \leq 0.05$, †$p \leq 0.1$.
HH, household.

size across models, but it does not have as strong of a relationship as high income. The proportion with a college degree is significantly correlated with the size of congregations up to the 1,000-participant mark. After that point it is no longer a significant predictor. In terms of the proportion in low-income households, in most cases the relationship is nonsignificant.

To put these results into context, consider two congregations, one with 500 adult participants and one with 1,000. Each have no participants in households with high incomes. Increasing the proportion in high-income households to 10 percent has the following impact. The odds that a congregation is larger than 500 is 1.65; larger than 1,000 is 1.61. A congregation with 500 participants is estimated to contain 586 if 10 percent live in high-income households, 808 if 30 percent. In congregations with 1,000 participants and 10 percent in high-income households, the predicted size is 1,135, and 1,463 with 30 percent.

Holding income constant and increasing the proportion with a college degree from zero to 10 percent produces the following estimates. The odds that a congregation has 500 versus less than 500 is 1.213, and 1,000 versus less than 1,000 is 1.219. A congregation with 500 is predicted to contain 519 participants (559 with 30 percent). Past 1,000 participants, the relationship is no longer significant.

In Table 4, I examine the impact of adding a dummy for churches with their buildings located in census tracts with high degrees of poverty. Churches with more than 1,000 attenders are less likely located in disadvantaged census tracts. The odds of a 1,000-participant church being located in a disadvantaged census tract is 0.422 (there is no difference in odds of a church containing 500 or more participants being located in a disadvantaged tract). Churches in disadvantaged census tracts are also smaller by a factor of about 0.44. Thus, a 500-participant church in a disadvantaged census tract is predicted to contain 1,120 outside these areas (for a 1,000-participant church, the predicted size outside a disadvantaged census tract is 2,252).

However, even though large churches are less likely found in census tracts with high degrees of poverty, the size–high SES relationships remain. None of the interaction terms between poor census tracts and SES composition achieve significance, indicating that the size-SES relationship is similar both inside and outside disadvantaged census tracts.

What about religious tradition? Does the relationship between size and SES hold over mainline, Black Protestant, and evangelical churches? Does it also hold within Pentecostal churches? Table 5 shows that the size-SES composition is similar, but less powerful in mainline churches. In this table, I only present the results using 500 members as the threshold. The odds of a mainline church having more than 500 participants and 10 percent high income is 1.35 versus 2.00 for an evangelical church. The odds of a mainline church having more than 500 participants and 10 percent low income is 0.797 versus 1.00 for an evangelical church, which is not surprising given the historical association between higher SES and mainline churches. The size-SES relationship is not different in Black Protestant versus evangelical Protestant churches. The size-SES relationship is not affected when Pentecostal affiliation is added.

In terms of other control variables, there are two other noteworthy results. First, the model predicts a small cost efficiency gain with increasing congregation size, holding all other variables constant (i.e., the coefficient on spending per member is negative). This *negative* relationship between church size and congregational spending is consistent across all models. This

Table 4. Hurdle Regression Coefficients Predicting the Number of
Regular Adult Attenders with Census Tract Characteristics and
Interaction Terms Added.

	Threshold no. of Participants	
	≥ 500	$\geq 1{,}000$
Negative binomial coefficients – noninteractive model		
30% census tract below poverty line	−0.807**	−0.812†
Logistic regression coefficients – noninteractive model		
30% census tract below poverty line	−0.328	−0.861*
BIC	6,781	3,659
Negative binomial coefficients		
30% census tract below poverty line	−0.167	−0.774
Percentage of adults in HH with income less than $25,000/year (10%'s)	0.110	0.304*
Percentage of adults in HH with income $100,000/year (10%'s)	0.175†	0.183†
Percentage of adults with Bachelor's degrees (10%'s)	.0800	0.109†
30% poor census tract × low HH income	−0.209	−0.474
30% poor census tract × high HH income	0.237	−0.001
30% poor census tract × 4-year degree	−0.118	0.164
Logistic regression coefficients		
30% census tract below poverty line	−0.270	−1.828**
Percentage of adults in HH with income less than $25,000/year (10%'s)	−0.032	−0.041
Percentage of adults in HH with income $100,000/year (10%'s)	0.486***	0.411***
Percentage of adults with Bachelor's degrees (10%'s)	0.160***	0.171***
30% poor census tract × low HH income	−0.031	0.132
30% poor census tract × high HH income	−0.184	0.260
30% poor census tract × 4-year degree	0.061	0.036
BIC	6,733	3,609

Source: National Congregations Study, waves I and II.
Notes: All control variables applied.
***$p \leq 0.001$, **$p \leq 0.01$, *$p \leq 0.05$, †$p \leq 0.1$.
HH, household.

indicates that larger churches are slightly more economically efficient, on
average, than smaller congregations. This result holds under a number of
different imputation strategies. The increase in efficiency is not due to
denominational differences, as religious tradition is held constant in the

Table 5. Hurdle Model Regression Coefficients Predicting the Number of Regular Adult Attenders with Religious Tradition and Interactions Added, 500-Participant Threshold.

Negative binomial regression coefficients	
Intercept	6.45***
Percentage of adults in HH with income less than $25,000/year (10%'s)	0.052
Percentage of adults in HH with income $100,000/year (10%'s)	0.255†
Percentage of adults with Bachelor's degrees (10%'s)	0.055
Black Protestant (evangelical ref)	−0.388
Mainline Protestant	0.093
Black Protestant × low-income HH	0.154
Mainline Protestant × low-income HH	−0.214
Black Protestant × high-income HH	0.168
Mainline Protestant × high-income HH	−0.050
Black Protestant × Bachelor degree	0.128
Mainline Protestant × Bachelor degree	−0.044
Logistic regression coefficients	
Intercept	−1.173†
Percentage of adults in HH with income less than $25,000/year (10%'s)	−0.013
Percentage of adults in HH with income $100,000/year (10%'s)	0.695***
Percentage of adults with Bachelor's degrees (10%'s)	0.199***
Black Protestant (evangelical ref)	−0.834
Mainline Protestant	0.695
Black Protestant × low-income HH	0.068
Mainline Protestant × low-income HH	−0.227†
Black Protestant × high-income HH	−0.123
Mainline Protestant × high-income HH	−0.388**
Black Protestant × Bachelor degree	0.139
Mainline Protestant × Bachelor degree	−0.0919
BIC	6,635

Source: National Congregations Study, waves I and II.
**$p \leq 0.001$, **$p \leq 0.01$, *$p \leq 0.05$, †$p \leq 0.1$.
HH, household.

model. Second, the negative coefficient on year comes from the fact that the NCS does not alter the question on household income between the two waves to correct for inflation.

Individual-Level Results Confirm Those at the Congregational Level
At the individual level, these relationships continue to hold. In Table 6, I present these results (the NCS variable, the number of regular participants in the congregation is still the dependent variable). To conserve space,

Table 6. Hurdle Model Regression Coefficients Predicting the Size of
Congregation an Individual Attends.

	Threshold No. of Participants	
	≥ 500	$\geq 1,000$
Negative binomial regression coefficients		
Intercept	7.768***	8.351***
HH income $100,000/year (constant dollars)	0.313***	0.274**
HH income less than $25,000/year (constant dollars)	−0.056	−0.009
College degree or higher	−0.181**	−0.189*
Dispersion	1.924	2.932
Logistic regression coefficients		
Intercept	−0.887***	−1.693***
HH income $100,000/year (constant dollars)	0.518***	0.675***
HH income less than $25,000/year (constant dollars)	−0.594***	−0.631***
College degree or higher	0.332**	0.155
BIC	7,832	4,199

Source: National Congregations Study, waves I and II.
Notes: All control variables applied
***$p \leq 0.001$, **$p \leq 0.01$, *$p \leq 0.05$, †$p \leq 0.1$.
HH, Household.

I do not present the coefficients on the control variables for the individual-level models (available upon request). The individual-level model reveals a positive relationship between living in a high-income household and attending a congregation of more than 500 and more than 1,000 (for 500 or more the odds are 1.68, for 1,000 or more, the odds are 1.96). Having a college degree is also modestly correlated with size (for 500 or more the odds are 1.39, not a significant predictor for churches larger or smaller than 1,000). In contrast with the congregational-level results, being in a low-income household is a negative predictor of being in a church of 500 or more (odds = .552, a positive association between the percent low-income and size in congregations of 1,000 or more was observed – see Table 3) and for attending a church with 1,000 or more attenders.

Once in the larger category, high income remains positively correlated with attending a larger congregation, but low income is no longer a significant predictor. Take a middle-income individual in a congregation of 500 and 1,000 people. If their household income is over $100,000 per year (in 1998 dollars), they are predicted to attend congregations of 683 and 1,972. Once across the threshold, college degree is *negatively* related with

size. Take a person with a college degree in a 500 and 1,000 participant church. Take *away* the degree (and leave other characteristics the same) and the predicted size is 599 and 1,208. The difference between the GSS and the NCS in the relationship between college degree and the size of church one attends is related to the fact that key informants tend to overestimate the proportion with a degree.

DISCUSSION AND CONCLUSIONS

Church size is highly correlated with the proportion of people in the congregation with higher SES. Larger churches contain greater proportions of people with high incomes and college educations. This is not due to the fact that large churches are found in more advantaged locations. The relationship between high income and size holds in census tracts with relatively high levels of poverty. Size and SES composition derive from factors external to the suburban milieu.

   The results failed to reveal any significant differences in the size-SES composition relationship across major Protestant traditions. In spite of the historical connections the Black Church shares with disadvantaged communities (Raboteau, 2004), the high SES–size connection remains significant. In mainline Protestant congregations, the relationship between high SES and size is weaker. Researchers have long-established the association between mainline Protestant congregations and higher-SES individuals (Hoge & Carroll, 1978; Laumann, 1969; Nelsen & Potvin, 1980). In mainline Protestant churches, a ''ceiling effect'' may exist – i.e., across the board these congregations are already, on average, significantly higher-SES and do not have as much variation across size categories as other groups. Pentecostal congregations do not differ from non-Pentecostal churches.

   The question remains, why is church size and SES composition related? Beyond the location of the building, these data do not allow me to assess other possible explanations behind this relationship. One candidate is time use. Previous research shows that SES is correlated with an increased real and perceived time crunch. Two-earner income families have higher household incomes, but significantly less discretionary time than other family types. They experience the so-called ''time-squeeze'' more acutely (Goodin, Rice, Bittman, & Saunders, 2005; Jacobs & Gerson, 2004; Leete & Schor, 1994). This effect is magnified for people in managerial and professional occupations. Labor costs for highly trained professionals are high and firms have incentives to attempt to minimize the number of

professional positions by increasing the time demands on them (Jacobs & Gerson, 2004). How does this tie into church size? Large congregations may create an environment where the participant has greater freedom to set the terms of their involvement (Chaves, 2006). It is harder in small congregations to remain anonymous and avoid recruitment into a more active role. In larger churches, people experience greater anonymity. In larger churches there are also more likely staff people performing time-consuming leadership functions, meaning that individuals with professional and/or managerial experience are less prone to be targeted for intensive volunteer positions. This may also make people in higher-SES households favor larger churches.

The marketing technologies employed by churches provide another possible explanation. Large churches, because they have access to a larger amount of absolute resources, can make greater use of expensive mass media and marketing technologies to attract ''customers'' – everything from direct-mail marketing, sophisticated Internet sites, organized community events, neighborhood canvassing, and radio and television programs. To the extent congregations make use of emerging media and marketing technology, the more likely they will draw disproportionately from younger and more affluent populations. These populations are much more likely to use these types of technology than older and less-affluent individuals – the so-called ''digital divide'' (Graham, 2002; Mossberger, Tolbert, & Stansbury, 2003; Norris, 2001). Processes of homophily may amplify this effect (McPherson, Smith-Lovin, & Cook, 2001).

These results raise an intriguing historical question. Have larger churches in the United States always been more likely to possess individuals of higher socioeconomic status? H. Paul Douglass's 1926 study provides suggestive evidence in this regard (Douglass, 1926). In this book he notes that what he terms ''unadapted churches'' are the smallest congregations and possess the highest proportion of people in poverty (pp. 113, 224). The largest churches in his study –''the highly adapted churches'' – appear more solidly middle class than other types. These results hint that the size–socioeconomic relationship is an enduring feature of American congregations.[12]

One important topic for further research is how racial and ethnic composition is related to size. Martin Luther King Jr. famously called Sunday morning ''the most segregated hour in this nation'' (King Jr., 1963). Segregation patterns at the level of social institutions have implications for broader societal segregation patterns (Blanchard, 2007). Do King's sentiments apply to congregations of all sizes? Are racial dynamics the same in large, medium, and small congregations? Is Pentecostal affiliation associated with different race–church size relationships (Martin, 2002)?

The sociodemographic composition of American congregations deserves continued attention. While congregations are diverse organizations, I identify systematic differences between Protestant churches of different sizes. These differences are not merely derivative of patterns of residential segregation. In the study of congregations, SES still counts.

NOTES

1. Much of the previous research on the relationship between social composition and size comes from the Megachurches Today surveys ((MT), part of the Faith Communities Today surveys (FACTS)), conducted in 2000 and 2005 (Dudley & Roozen, 2001; Roozen, 2007; Thumma, 1996; Thumma et al., 2005), and the U.S. Congregational Life Survey (USCLS) (Woolever & Bruce, 2002). See Thumma and Travis (2007, pp. 193–197) for a description of the methodology used in the MT surveys and the FACTS surveys; see Appendix 1A of Woolever and Bruce (2002) for the USCLS. Questions about representativeness limit the generalizability of these studies. The FACTS surveys are denominationally based, and while they purport to cover a large majority of American congregations, they are not randomized samples from the total population of U.S. congregations. There is no authoritative list of congregations in the United States. But Thumma and Travis have gone to considerable lengths to create a complete list of megachurches. The MT surveys sample from a constructed list of megachurches; there are no assurances that this represents the entire population. Low response rates also pose a significant problem. The MT 2005 survey sent 1,236 surveys (out of an estimated 1,836 potential megachurch candidates) and received 406 complete responses for a response rate of 32.8 percent. The MT 2000 survey had a response rate of 25.5 percent. The FACTS 2005 survey had a response rate of 28.2 percent. Like the NCS, the USCLS used a GSS-nominated congregations to generate a random sample of congregations; of the 1,214 nominated and verified congregations, 434 (36 percent) returned surveys.

2. In most cases (78.5 and 83.1 percent of congregations in NCS-I and -II), a congregation was nominated by a single individual. Several congregations were nominated by more than one GSS respondent. These congregations are retained in the analysis. Treating duplicate nominations as a single case does not alter the substantive findings of this analysis.

3. In these cases, the NCS investigators calculated this variable using the reported total number of participants and estimating the proportion of children in the congregation.

4. The urban classification scheme is drawn from the U.S. Census Bureau's classification of areas as Urbanized Areas (a continuous cluster of high-density census blocks with more than 50,000 inhabitants), Urban Clusters (continuous high-density cluster of census blocks with at least 2,500 people, but less than 50,000 people), and Rural Areas (those not in an Urban Area or Urban Cluster) (Barron, 2001). The 1990 census was used to construct the level of urbanization for NCS-I and the 2000 census for NCS-II.

5. Missing data presents a problem in this measure (20 percent). I imputed these values following the iterative regression imputation method proposed by Gelman and Hill (2007). Excluding the cases with missing data does not alter the substantive conclusions.

6. The reported percentage of people in the congregation over 60 and under 35 were each divided by 10, to make the coefficients more easily interpretable, and added as a continuous variable. A one unit increase in the variable represents a 10 percent increase. Less than 3 percent were missing on the two age composition estimates.

7. Missing values (4 percent of the sample) were imputed based on the response to the question about whether the congregation is positioned against homosexual behavior. Excluding these cases does not substantively change the results.

8. Principle component factor analysis indicated that these three items are all drawing from a common latent variable (results not shown). There were only a small number of missing values on the social conservatism scale (2 percent of the sample), the missing values were imputed based on responses to other variables.

9. Source: U.S. Census Bureau. Census Regions and Divisions of the United States, retrieved February 22, 2011 from http://www.census.gov/geo/www/us_regdiv.pdf

10. Hurdle models first developed in econometrics (Mullahy, 1986) and are widely used in the analysis of count data with excess zeroes. Long and Freese (2006) describe the estimation of these models and their interpretation.

11. A Poisson was also explored. The Poisson assumes a dispersion of 1, whereas the negative binomial allows other values of dispersion. The negative binomial produced a superior fit.

12. Douglass also finds that "unadapted churches" spend about 75 percent of what highly adapted congregations spend. This suggests that the financing of American congregations has changed significantly since the 1920s, as the NCS analysis predicts large churches spend less. One major change over this period is that clergy salaries have increased disproportionately, making smaller congregations more expensive to run (Chaves, 2006).

ACKNOWLEDGMENTS

REFERENCES

Anderson, S. L., Martinez, J. H., Hoegeman, C., Adler, G., & Chaves, M. A. (2008). Dearly departed: How often do congregations close? *Journal for the Scientific Study of Religion*, *47*(2), 321–328.

Baldassare, M. (1992). Suburban communities. *Annual Review of Sociology*, *18*, 475–494.

Barron, W. G. (2001). Urban area criteria for census 2000 – proposed criteria. *Federal Register RIN Number 0607–XX63, Bureau of the Census*.

Bird, W. (2007). *Megachurches as spectator religion: Using social network theory and free-rider theory to understand the spiritual vitality of America's largest-attendance churches*. Ph.D. thesis, Fordham University, New York, NY.

Blanchard, T. C. (2007). Conservative Protestant congregations and racial residential segregation: Evaluating the closed community thesis in metropolitan and nonmetropolitan counties. *American Sociological Review*, *72*(3), 416–433.

Chaves, M. (2006). All creatures great and small: Megachurches in context. *Review of Religious Research*, *47*(4), 329–346.

Chaves, M. (2007). *National Congregations Study*. Durham, NC: Duke University.

Chaves, M., & Anderson, S. (2008). Continuity and change in American congregations: Introducing the second wave of the National Congregations Study. *Sociology of Religion*, *69*(4), 415–440.

Chaves, M., Konieczny, M. E., Beyerlein, K., & Barman, E. (1999). The National Congregations Study: Background, methods, and selected results. *Journal for the Scientific Study of Religion*, *38*(4), 458–476.

Dochuk, D. (2011). *From Bible belt to sunbelt: Plain-folk religion, grassroots politics, and the rise of evangelical conservatism* (1st ed.). New York, NY: W.W. Norton.

Douglass, H. P. (1926). *1000 city churches: Phases of adaptation to urban environment*. New York, NY: George H. Doran Company.

Dudley, C. S., & Roozen, D. A. (2001). *Faith communities today: A report on religion in the United States today*. Technical Report. Hartford Institute for Religious Research, Hartford, CT.

Finke, R. (1994). The quiet transformation: Changes in size and leadership of Southern Baptist Churches. *Review of Religious Research*, *36*(1), 3–22.

Frenk, S. M., Anderson, S. L., Chaves, M., & Martin, N. (2011). Assessing the validity of key informant reports about congregations social composition. *Sociology of Religion*, *72*(1), 78–90.

Gelman, A., & Hill, J. (2007). *Data analysis using regression and multilevel and hierarchical models*. Cambridge: Cambridge University Press.

Goodin, R. E., Rice, J. M., Bittman, M., & Saunders, P. (2005). The time-pressure illusion: Discretionary time vs. free time. *Social Indicators Research*, *73*(1), 43–70.

Graham, S. (2002). Bridging urban digital divides? Urban polarisation and information and communications technologies (ICTs). *Urban Studies*, *39*(1), 33–56.

Hertel, B. R., & Hughes, M. (1987). Religious affiliation, attendance, and support for 'pro-family' issues in the United States. *Social Forces*, *65*(3), 858–882.

Hoge, D. R., & Carroll, J. W. (1978). Determinants of commitment and participation in suburban Protestant churches. *Journal for the Scientific Study of Religion*, *17*(2), 107–127.

Jackson, K. T. (1985). *Crabgrass frontier: The suburbanization of the United States*. New York, NY: Oxford University Press.

Jacobs, J. A., & Gerson, K. (2004). *The time divide: Work, family, and gender inequality*. Cambridge, MA: Harvard University Press.

Karnes, K., McIntosh, W., Morris, I. L., & Pearson-Merkowitz, S. (2007). Mighty fortresses: Explaining the spatial distribution of American megachurches. *Journal for the Scientific Study of Religion*, *46*(2), 261–268.

Keister, L. A. (2003). Religion and wealth: The role of religious affiliation and participation in early adult asset accumulation. *Social Forces*, *82*(1), 175–207.

Kellstedt, L. A., & Green, J. C. (2003). The politics of the willow creek association pastors. *Journal for the Scientific Study of Religion*, *42*(4), 547–561.

Kilde, J. H. (2002). *When church became theatre: The transformation of evangelical architecture and worship in nineteenth-century America*. Oxford, UK: Oxford University Press.

King Jr., M. L. (1963). *Questions & answers – Dr. Martin Luther King's 1963 WMU speech found – archives – WMU Libraries*. Retrieved from http://www.wmich.edu/library/archives/mlk/q-a.html. Accessed on March 14, 2011.

Laumann, E. O. (1969). The social structure of religious and ethnoreligious groups in a metropolitan community. *American Sociological Review*, *34*(2), 182–197.

Leete, L., & Schor, J. B. (1994). Assessing the time-squeeze hypothesis: Hours worked in the United States, 1969–89. *Industrial Relations*, *33*(1), 25–43.

Lenski, G. E. (1961). *The religious factor: A sociological study of religion's impact on politics, economics, and family life*. Garden City, NY: Doubleday.

Long, J. S., & Freese, J. (2006). *Regression models for categorical dependent variables using Stata* (2nd ed.). College Station, TX: StataCorp LP.

Martin, D. (2002). *Pentecostalism: The world their parish*. Oxford, UK: Blackwell Publishers.

Massey, D. S. (1996). The age of extremes: Concentrated affluence and poverty in the twenty-first century. *Demography*, *33*(4), 395–412.

McGaw, D. B. (1979). Commitment and religious community: A comparison of a charismatic and a mainline congregation. *Journal for the Scientific Study of Religion*, *18*(2), 146–163.

McGaw, D. B. (1980). Meaning and belonging in a charismatic congregation: An investigation into sources of neo-Pentecostal success. *Review of Religious Research*, *21*(3), 284–301.

McPherson, M., Smith-Lovin, L., & Cook, J. M. (2001). Birds of a feather: Homophily in social networks. *Annual Review of Sociology*, *27*, 415–444.

Mossberger, K., Tolbert, C. J., & Stansbury, M. (2003). *Virtual inequality: Beyond the digital divide*. Washington, DC: Georgetown University Press.

Mullahy, J. (1986). Specification and testing of some modified count data models. *Journal of Econometrics*, *33*(3), 341–365.

Nelsen, H. M., & Potvin, R. H. (1980). Toward disestablishment: New patterns of social class, denomination and religiosity among youth? *Review of Religious Research*, *22*(2), 137–154.

Norris, P. (2001). *Digital divide: Civic engagement, information poverty, and the Internet worldwide*. Cambridge: Cambridge University Press.

Oliver, M. L., & Shapiro, T. M. (2006). *Black wealth, white wealth: A new perspective on racial inequality*. New York, NY: Routledge.

Putnam, R. D., & Campbell, D. E. (2010). *American grace: How religion divides and unites us*. New York, NY: Simon & Schuster.

Raboteau, A. J. (2004). *Slave religion: The "invisible institution" in the antebellum South*. New York, NY: Oxford University Press.

Reimer, S. (2007). Class and congregations: Class and religious affiliation at the congregational level of analysis. *Journal for the Scientific Study of Religion*, *46*(4), 583–594.

Roozen, D. A. (2007). *American congregations 2005*. Technical Report, Hartford Institute for Religious Research, Hartford, CT.

Schwadel, P., & Dougherty, K. D. (2010). Assessing key informant methodology in congregational research. *Review of Religious Research*, *4*(51), 366–379.

Stark, R., & Finke, R. (2000). *Acts of faith: Explaining the human side of religion*. Berkeley, CA: University of California Press.

Steensland, B., Park, J. Z., Regnerus, M. D., Robinson, L. D., Wilcox, W. B., & Woodberry, R. D. (2000). The measure of American religion: Toward improving the state of the art. *Social Forces*, *79*(1), 291–318.

Thumma, S. (1996). *Exploring the megachurch phenomena: Their characteristics and cultural context*. Technical Report. Hartford Institute for Religious Research, Hartford, CT.

Thumma, S., & Travis, D. (2007). *Beyond megachurch myths: What we can learn from America's largest churches*. San Francisco, CA: Jossey-Bass.

Thumma, S., Travis, D., & Bird, W. (2005). *Mega churches today 2005*. Technical Report. Hartford Institute for Religious Research, Hartford, CT.

von der Ruhr, M., & Daniels, J. P. (2010). *Examining megachurch growth: Free riding, fit, and faith*. Working Papers and Research 2010-07. Department of Economics, Marquette University, Milwaukee, WI.

Wilcox, C., & Jelen, T. (1990). Evangelicals and political tolerance. *American Politics Research*, *18*(1), 25–46.

Wollschleger, J., & Porter, J. (2011). A Walmartization of religion? The ecological impact of megachurches. *Review of Religious Research, 53*(3), 279–299.

Woolever, C., & Bruce, D. (2002). *A field guide to U.S. congregations: Who's going where and why* (1st ed.). Louisville, KY: Westminster John Knox Press.

Wuthnow, R. (1988). *The restructuring of American religion: society and faith since World War II*. Princeton, NJ: Princeton University Press.

Wuthnow, R. (2002). Religious involvement and status-bridging social capital. *Journal for the Scientific Study of Religion*, *41*(4), 669–684.