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MODERN MEGACHURCH ORGANIZATION IN THE UNITED STATES (2005-2013): AN EXPLORATORY ORGANIZATIONAL STUDY OF THE AMERICAN MEGACHURCH PHENOMENON

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In Applied Sociology

Department of Sociology
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DEDICATION

This dissertation is dedicated to my wife

Tricia Elaine Shelby

who has supported my quest for knowledge and understanding.
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ABSTRACT

MODERN MEGACHURCH ORGANIZATION IN THE UNITED STATES (2005-2013): AN EXPLORATORY ORGANIZATIONAL STUDY OF THE AMERICAN MEGACHURCH PHENOMENON

Robert L. Shelby, Jr.

August 2, 2016

This dissertation study explores the applicability of two for-profit organizational theories on a non-profit sector. Theoretical concepts from organizational ecology (OE) and new institutional sociology (NIS) provide the framework for exploring modern megachurches as an organizational phenomenon in the United States between 2005 and 2013. Modern megachurches are modern in the sense they really began to be an organizational population starting in the 1970s and 1980s. These churches are distinctively from the Protestant Christian tradition having 2,000 or more attendees (Thumma & Travis, 2007; Hartford Institute for Religion Research, n.d.). Three empirical chapters test several hypotheses germane to these aforementioned theoretical paradigms.

The dissertation consists of five chapters. Chapter One argues that megachurches closely resemble for-profit businesses making them worthy of organizational research. Chapter Two explores OE’s density dependence theory – how or if legitimacy and competition effects megachurch founding events. Chapter Three explores the applicability of OE’s inertia and niche width, and NIS’s isomorphism effects on
megachurches with one geographic location (a.k.a. single-site megachurch or SSM) switching to a megachurch with two or more geographic locations (a.k.a. multi-site megachurch or MM). Chapter Four explores niche width interactions with concentration and their effects of being on Outreach Magazine’s 100 Fastest-growing Churches list as a proxy for church growth.

The results from the empirical chapters did not support many of the hypotheses. However, Chapter Two did show that density was broadly significant as a predictor, but it operates differently for megachurches. Chapters Three and Four showed partial support for diversity measures suggesting the effects of niche width is greatly limited when applied to megachurches. Chapter Four also failed to support many of the interaction hypotheses, suggesting the transfer of generalism and specialism is not as clear for megachurches as it is for businesses. I conclude that modern megachurches in the U.S. require greater exploration using OE and NIS theoretical concepts. Nuanced application of these organizational concepts will be indicative of understanding modern megachurches as organizational populations.
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CHAPTER I
INTRODUCTION TO MODERN MEGACHURCH ORGANIZATIONS IN THE UNITED STATES

Partly due to the pervasiveness presence of globalization, societies are experiencing greater cross-cultural and cross-national interactions that place dominant economic systems at the center of attention. Although different forms of government co-exist in the global arena, nation-states desiring economic growth must come to grips with the pervasive nature of capitalism. Notwithstanding its most negative outcomes for exacerbating inequalities at the local and world systems level, and everything between, people in capitalist societies generate organizational models that can produce needed outcomes. More specifically, people in the United States, being constrained by the thriving capitalist economic system, have produced very large organizations that produce ever larger returns on investment for the shareholders of for-profit organizations.

Organizational leaders are well-aware of the multinational firm, the conglomerate, and more recently, the global ubiquity of the American fast-food restaurant (e.g., McDonald’s) and “Big-Box” retailer (e.g., Walmart) models. However, in the American context, many small organizations have learned how to accommodate constituents’ needs (felt or real) by offering more for less. Arguably, these sentiments are no longer just motivating factors in for-profit firms; some researchers and commentators have argued that some religious organizations have followed suit (White & Yeats, 2009; Leadership
Journal, Feb. 2008). Religious organizations situated in the capitalist milieu have to contend with challenges relating to competition, legitimacy, change, and growth in ways that are very similar to their for-profit counterparts. American Protestant churches are not immune to the individualist sentiment, capitalist economics, and materialist tendencies that pervade American society. The emergence of megachurches shows that the religious sector is fully a part of the larger trends among organizations more generally.

Hartford Institute for Religion Research (HIRR) defines megachurch as the term given to a cluster of very large, Protestant congregations that share several distinctive characteristics. According to HIRR these churches generally have:

- 2000 or more persons in attendance at weekly worship
- A charismatic, authoritative senior minister
- A very active 7 day a week congregational community
- A multitude of social and outreach ministries
- A complex differentiated organizational structure. (p. 1)

Thumma and Travis (2007) add that the megachurch is also distinctively a Protestant Christian phenomenon, because they are “organized and led” differently from Catholic and Orthodox churches (p. xviii).

Close Patterning between Megachurches and For-Profit Businesses

At the very least, for-profit businesses (firms of the corporate variety) are organizations designed to acquire increased financial resources. Admittedly, megachurches are religious organizations and not for-profit businesses. However, how much are megachurches conforming to for-profit businesses? While it is uncertain how thoroughly megachurches might conform to for-profit businesses, there is an appearance suggesting some contagion is present. Megachurches can often feel and look more like
large American businesses than they do their smaller church counterparts. For instance, megachurches use marketing to attract attendees, provide an array service options and programs for affinity groups (i.e., grouping people based on shared interests or life stages), and offer many retail-like amenities (i.e., bookstores, coffee shops, libraries, exercise facilities, athletic league play, counseling services, etc.) (Shelby, 2014).

Furthermore, most megachurches maintain affiliations with local and national organizations to respond to pressing social issues not traditionally directly addressed by the church. For example, community development corporations (CDCs) have been established by some megachurches to provide safe and affordable housing for members and nearby communities. Still other megachurches have partnered with organizations like Habitat for Humanity to address similar community housing concerns. This is very similar to the way some for-profit businesses create foundations or partner with other organizations to improve community health, work against poverty, provide healthy food for children, etc. as a form of corporate social responsibility (McWilliams & Siegel, 2001; McWilliams et al., 2006).

Megachurches have also established a specialized division of labor (senior pastor, teaching pastor, executive pastor, human resources/personnel director, etc.) that closely mirrors the myriad executive officers found at for-profit businesses. Megachurches use similar hierarchical reporting structures with executives at the top, middle managers in the center, and other staff, secretaries, and administrators at the bottom. While for-profit businesses have executive boards, megachurches employ elder boards, advisory councils, or executive leadership boards to make decisions relating to strategic planning for the church. Megachurches, like for-profit businesses, require financial resources to remain
viable and use these resources in similar ways: to pay salaries, keep the day-to-day operation running, and start new ventures. New ventures include megachurches establishing other locations in different communities (or markets) to reach new people (Shelby, 2014; Shelby, 2011). Schaller (1999) asserts that multisiting among megachurches is merely an outgrowth of multisiting in other industries, like banking, higher education, and health care (pp. 174-175).

However, the many similarities between megachurches and for-profit businesses do not mean that the two organizational types are the same. For example, while both establish and disseminate mission statements and tend to develop 3, 5, and 10 year goals for the organization, financial profit motivates for-profit businesses while changing lives motivates megachurches. Additionally, many of the identified common forms and functions are not only found in megachurches. Small and medium-sized churches also market and manage their brand, collaborate with other organizations, and have a specialized division of labor (albeit a more compressed hierarchical structure) and board structures. What is unique about megachurches is the sheer size of the organization and their ability to take these similar characteristics and extend them due to economies of scale.

_Trends in secular culture, religious culture, and new attendee consideration of megachurches_

There are several social and cultural trends that lead attendees to consider megachurches over smaller, more traditional types of churches. First, in American society, where a sense of individualism is strong, individual choice becomes paramount in daily living. The autonomy to make decisions without overly involved state oversight is one great promise of individualist societies, like the United States. However, just as
trends toward greater individualism (my needs and desires over those of other people) persist, there is an increasing desire for community or connection with other people. At the most basic level, megachurches are addressing both of the trends. Another aspect of individuality in American society suggests, like many areas of social life Americans want greater flexibility from their organizations. Megachurches respond to social calls for flexibility by appealing to convenience and accommodating members and would-be-attendees. If busyness is real or perceived, people want ease of use and access from their organizations. Having a banking account is helpful for maintaining financial stability; and yet, if banks did not offer standard hours of operation extended by ATM accessibility they would lose customers. Megachurches also have standard operating hours and extended hours with people on call and access to resources outside normal hours of operation.

Second, a high sense of spirituality is another growing cultural trend in the United States (Masci & Lipka, 2016; Alpers, 2015). Barring alternative explanations for central existential questions of human existence, religion, in general, and megachurches in particular (as it relates to this study) provide responses to questions like; “Why am I here?,” “How did the world/universe come to be?,” “Why does evil exist?,” and “What happens when I die?” Even if inhabitants are displaying declining levels of religiosity, there still appears to be a dominant sense of spirituality within the American context. For example, as some Protestant denominations experience declining attendance (a push away from formal religion) there remains interest in spiritual matters as individuals express finding meaning in life, being connected to others, or how they live absent guidance from institutional religion. Perhaps institutional/organized religion, represented
by mainline Protestant Churches, is experiencing large numbers of people walking away from many of these time-honored traditions. Leaving the church has not resulted in a commensurate loss of spiritual interest (Funk & Smith, 2012; White, 2014). Many megachurches aim to help people struggling to answer these kinds of questions and create some semblance of social belonging. Solitary internalization of answering these worldview questions has taken on immensely large individualized dimension.

Third, capitalist economics is another major trend that leads prospective attendees to consider megachurches. In capitalist economies, inhabitants come to expect general outcomes from their organizations (e.g., measurable results, achievable goals, notable performance). Many times customers/constituents/attendees view large organizations as successful. While recent examples of unethical business practices in the for-profit and religious sectors can lead people to have considerable skepticism of large organizations, their success at consistently attracting large numbers of people seems to maintain the attractiveness of megachurches. Ritzer’s (2013) primary thesis of McDonaldization is particularly helpful here. Ritzer claims that the spread of McDonald’s restaurants around the world is more than a novel business plan. McDonald’s has changed the way many organizations organize and how outsiders engage them. Ritzer argues that efficiency, calculability, predictability, control through nonhuman technology, and irrationality of rationality are key characteristics of the McDonaldization of society. Ritzer (2013) links McDonaldization to other for-profit organizations and even included a brief commentary on megachurches. Ritzer argues that megachurches demonstrate key concepts of McDonaldization (i.e., efficiency, and predictability) through multisiting and shared
televised sermons (p. 90). These expressions of McDonaldization among megachurches serve as key instruments in attracting people.

Many parallels between megachurches and McDonaldization can be drawn. Megachurches exemplify efficiency by reducing worship services to one hour and ensuring start and stop times are staggered to avoid parking problems before and after services. Megachurches demonstrate the principle of calculability by having a large number of programs for attendees and members that may lack quality. Megachurches offering more programs gives the impression of an active community meeting the needs of all its people, but the quality of these programs can range from excellent to poor in achieving this primary goal. Thus quantity of the programs supersedes the quality of the programs. Just as with McDonald’s when they offer a supersized meal at minimal cost only for the quality of the inexpensive and convenient food to be slightly better than poor. However, more food (quantity) is more important that quality of the food. Predictability in megachurches could be evidenced in “mass producing” the worship service itself so each meeting is indistinguishable from each other. Multi-site megachurches (MMs) use predictability to ensure that attendees have the same “feel” at each of their locations. Regardless of the location, a MM attendee can expect the same liturgy down to the second (i.e., opening song, prayer, two more songs, prayer, offering, sermon, etc.). Control through nonhuman technology is exemplified in the simulcast sermon. The precise timing of the televised sermon to each location requires a scripted length and finely tuned sermon format. For example, telling a story to “hook” the listener, reading or referencing the Bible (“book”) to glean principles or truth, communicating how said principles or truths apply to life (“look”), and an invitation for personal expression of the
lesson learned (“took”) (Parrett & Kang, 2009). Such formulae remove or reduce “uncertainty, unpredictability, and inefficiency” and thus control those involved. (Ritzer, 2013). All of the equipment necessary for delivering the sermon, and even the sermon itself would be considered non-human technologies according to Ritzer. Appelrouth and Edles (2012) defined irrationality of rationality as “the dehumanization of individuals and social relationships that result from anonymous, superficial, scripted interactions between employees and customers” (p. 776). In some megachurches each seating section has section greeters who welcome people sitting within a certain number of rows with a scripted introduction, other scripted interactions follow when these same section greeters collect tithes and offerings (donations), and serve attendees communion during each weekly service. According to Appelrouth and Edles (2012), this kind of social interaction can feel dehumanizing because it lacks genuine concern for others.

**Applicability of Organizational Ecology and New Institutional Sociology for the study of megachurches**

This study focuses on organizational ecology (OE) and new institutional sociology (NIS) repeatedly. OE is an organizational theoretical paradigm that explains how environmental conditions (i.e., social, political, technological, and economic) bring about different organizational types and how these organizations change over time (Hannan & Freeman, 1977; Carroll & Hannan, 2000; Baum, 1999). NIS, as the name and context imply, takes the sociological view that organizations are institutions that encourages new organizations to start and shapes ongoing structures and practices (Meyer & Rowan, 1977) Furthermore, NIS argues that organizations change through tripartite forces of coercive, normative, and mimetic isomorphism (DiMaggio & Powell,
OE and NIS are good organizational theories to apply to the study of megachurches because they both focus on organizational change and on the importance of the environment in the life trajectory of organizations. The theories are well-designed to examine organizations like single-site megachurches (SSMs) and MMs as both types of churches are experiencing concerns about legitimacy, growth and/or decline, and change.

For both OE and NIS, environments consist of other organizations (including competitors), natural actors (customers), political structures, technologies, and physical environments (OE), investors, customers, competitors, government regulators, and industry norms. Elements of the environment can exert external pressure that shapes internal organizational structures and strategies.

In the church context, the environment consists of other churches, other non-profit organizations (e.g., Boy Scouts and Girl Scouts, YMCA, etc.), and even some for-profit organizations (e.g., utility companies, local restaurants, etc.). Perhaps the most recognizable part of the church environment are the “natural actors,” who are not customers, but members and attendees (the latter being people who only attend but are not formal members). Churches interact with local and federal political structures via government (e.g., zoning board/commission, IRS- to maintain 501 c3) and some denominational bodies or other affiliations, when applicable. A segment of the external church environment includes technology. From the use of TELCO equipment and services to satellite, microwave, and Internet technologies, churches rely heavily on what technologies are available to maintain the organization and engage in its primary outward activity of communication. The geographic locations of churches are also part of the
environment (i.e., community/neighborhood, zip code, city, county, state, region, country). Environments provide much needed resources for church organizations.

Resources are tangible and intangible things needed for organizational survival. It is like nutrients found in food. Food itself is just a means to get much needed nutrients into the body. For organizations resources include finances, people, skills and expertise, and the aforementioned environment because it usually supplies the resources. Resources for churches include people (a.k.a. attendees and members, or converts), money (i.e., tithes and offerings), and skills (i.e., talents used for acts of service inside and outside the church).

*Organizational Ecology (OE)*

Density dependence in the natural sciences is defined as when “the population growth rate varies as a causative inverse function of population size or density” (Hixon & Johnson, 2009). Density dependence theory, a theory under OE, posits that organizational change is the result of tensions arising from legitimation and competition effects, which themselves are by-products of the number of similarly-structured organizations in a social setting (Carroll & Hannan, 1989). In other words, the growth (and death) rate is contingent on the existing number of organizations (density), and density itself is predicated on the effects of legitimacy and competition (Carroll & Hannan, 1989). As organizational forms become more widely used (suggesting acceptance), legitimacy is gained. Rising levels of legitimacy, in turn, lead to additional foundings of other similarly-structured organizations. However, additional foundings also lead to increased competition, which eventually accumulates to the point where later foundings become much more difficult. In their infancy, populations of organizations are
more concerned with establishing legitimacy (i.e., shedding the negative effects of illegitimacy), while mature populations are more concerned with the effects of competition (Hannan, 1986; Carroll & Hannan, 1989; Singh & Lumsden, 1990; Hannan & Carroll, 1992; Carroll & Swaminathan, 1992).

Generally, legitimacy for organizations may be defined as “the acceptance of the organization by its environment” (Kostova & Zaheer, 1999). All organizations require positive environmental responses in order for them to persist in that given environment. It is unknown if legitimation in for-profit businesses and non-profit churches is identical. In the for-profit sector, legitimacy is present when consistent sales and profits are gained. In the church sector, one may think of legitimacy being present when attendance levels consistently increase.

Competition may also be defined for both the for-profit and church sectors. In the for-profit sector competition means vying for customers through differences in price, product features, product quality, etc. In the church sector, competition means vying for attendees (converts are the ideal) through program offerings, quality worship services (e.g., dynamic preaching and engaging music). For churches, the presence of and definition of competition is somewhat different. Competition is a term that is not readily admitted among church organizations in part because it is counter to the overall mission of churches to reach and help people. But the notion behind competition supposes that limited resources are available within the organizational environment and thus organizations must compete for those limited resources to survive. The primary resource for churches is people. People supply other resources like loyalty, finances, and service—just to name a few—that come from the environment. Human resources become
absolutely crucial to the needs of voluntary organizations like churches. Therefore, if competition exists among churches, it occurs as churches vie for new attendees who will hopefully become members, within their physical environments.

OE maintains a macro-level approach to its research agenda. Instead of looking at one solitary organization (case study) or interaction between two organizations and attempting to extrapolate organizational meaning for the population, OE begins with macro-level categories (i.e., members, subunits, individual organizations, populations, community of organizations- Hannan & Freeman (1977)). OE scholars usually use longitudinal studies to examine founding rates, the characteristics of organizational decline, organizational change, and mortality rates. The current study on megachurch organizations does not examine failure rates, but the remaining characteristics are examined in exploratory fashion. Much of these concerns are addressed using OE’s theoretical contexts of density dependence, inertia, niche width, resource partitioning, and concentration. Organizational turnover (i.e., industry change) occurs through the powerful mechanism of environmental selection. Those structural forms in sync with their various environments are selected for retention. Selection occurs in-part because internal and external inertial pressures create stability, an organizational attribute that often allows organizations to survive. In a very real sense, at least according to OE, only the strongest organizations survive. The megachurch analysis conducted for this study reflects efforts to examine these organizations as bonafide organizational populations worthy of study.

OE also focuses on how new organizations change an industry. Firstly, change does not come by adaptation, as argued by NIS. Rather, change is brought on as new
organizations, with innovative approaches battle through a “liability of newness,” gain legitimacy, and gain enough market share to compete with older established organizations in the same industry. In this view, if older organizations do not outcompete the newer rivals they will face certain death. OE argues that industries change when organizational turnover occurs. Thus, from the OE perspective it is particularly important to focus on new organizational forms; my focus on the relatively recent emergence of multi-site megachurches therefore matches well with OE theory.

New Institutional Sociology (NIS)

NIS tends to focus on industry norms that shape organizational reality. NIS argues that industries are constructed and given meaning through institutionalization. In this ongoing process industries are affected by various internal and external norms that provide discernable legitimacy within industries while creating and maintaining organizational structural constraints. Internal norms might come about not because they serve specific goals and outcomes, but because they generate recognizable structures and functions seen in similar industries. External accrediting bodies, legal governing organizations, and the like, establish conduits for organizations to gain access to and exit from their respective industries. NIS is therefore concerned about how organizations interact with their organizational and social environments to produce and respond to norms and expectations. Given these theoretical dimensions, NIS argues that institutionalized norms within industries positively produce legitimacy and result in isomorphism (i.e., organizations using similar methods and practices or having similar structure to other organizations).
For NIS, isomorphism within industries occurs through adaptation. Organizational leaders are assumed to be limited in their knowledge (at the very least), but they are responsible for bringing about organizational change nonetheless. Organizational leaders or powerful consortiums scan their respective environments to discern/read the market. Isomorphism occurs when likeminded organizational leaders within industries read the environment in very similar ways and make similar adjustments to it. While industries do impose standards on member organizations by expanding or curtailing the means by which they can implement needed changes, industries also institutionalize those means and provide the mechanisms for making them diffuse.

**Central Aim of this Study**

This is an exploratory quantitative study of megachurches in the United States during the period of 2005 to 2013. It is exploratory in the sense that relationships between variables amid the megachurch phenomena are suspected as causal or at the very least associational. Cause and effect relationships are not usually pursued in the social sciences; however, presupposing and exploring cause and effect relationships when exploring organizations is appropriate. Consider how OE’s density dependence theory argues that the number of organizations affects growth rates because of legitimacy and competition effects. While I do not aim to make strong claims about cause and effect relationships, I do examine the presence of associations between these variables and posit implications from the outcomes of this empirical work. I caution the reader not to view the findings herein as prescriptions for church growth. Instead it is prudent to see these results as instructive for initiating an understanding of what is happening among the megachurch organizational population. The study is chiefly concerned with three broad
areas; (1) how density dependence (legitimacy and competition) impacts megachurch founding events, (2) if or how inertia and isomorphic pressures impact megachurch decisions about switching to the MM format or not, and (3) how niche width structure and organizational concentration impact megachurch growth. The study is not designed to provide the definitive answer to all organizational phenomena particular to megachurches. However, the study is designed to test several hypotheses that were derived from the organizational and church research literatures. The effort to operationalize OE and NIS theoretical concepts has the potential to inform future research on church organizations. This study will seek to determine whether the similarities between for-profit businesses and non-profit megachurches are strong enough to support the genuine usefulness of established organizational theories.

Outline of the chapters

Chapter 2 examines the spread of modern megachurches in the United States between 2005 and 2013. A major part of this chapter hypothesizes, analyzes, and discusses findings related to density dependence theory using city-year as the unit of analysis. Using MM founding events as the dependent variable, the effects of competition (number of single-site megachurches (SSM) and multi-site megachurches (MMs) at the city level) and legitimacy (number of single-site megachurches (SSM) and multi-site megachurches (MMs) at the nation level) were explored. Population density, median age, racial and ethnic representation, median income, and education level were used as demographic covariates for the chapter. Generalized Estimating Equations (GEE) were used to analyze these data.
Chapter 3 explores inertia, niche width, and isomorphism among a sample of SSMs (with SSM-years being used as the unit of analysis) over the same time period used for Chapter 2 (2005-2013). The event of interest for this chapter was whether a SSM remained single-site or switched to multi-site. The focal independent variables included (1) measures of inertia (i.e., church age, church size, church growth, and denominational association), (2) niche width measures (i.e., educational, racial, and ethnic diversity), (3) measures of isomorphism (i.e., pastor’s education level, church affiliations, and number of MMs in the nation), and (4) several control demographic control variables (population density, median age, race and ethnicity percentages, median income, and adult educational attainment). GEEs were again used to analyze these data.

In Chapter 4 I examine the interaction between niche width structures and megachurch concentration on megachurch growth. Megachurch-year was used as the unit of analysis for the study (with both SSM and MM forms being included in the analysis). The niche width focal independent variables used the number church locations, the number of church worship services, three demographic diversity measures (education, race, and ethnicity), and three demographic “match” measures (again, based on education, race, and ethnicity) to measure the presence of generalism and specialism among these megachurches. Megachurch concentration was measured by number of megachurches in a city relative to population. The covariates used in the analysis were the number of megachurches (SSMs and MMs) at the city-level, organizational stability (age of the church and pastor’s tenure), organizational accessibility (presence of a formal assimilation program), and market/environmental demographics (population, median age, and adult income levels).
In Chapter 5 a broader discussion is offered about the entire study. There, I assess what has been learned about the application of organizational theories to the megachurch context. In this final chapter I also assess the overall implications of the study for church researchers and practitioners, and organizational researchers.
CHAPTER II

SPREAD OF MODERN MEGACHURCHES IN THE UNITED STATES

Megachurches have been part of the American religious milieu for some time; however, research did not begin in earnest until the turn of the 21st century. Efforts to determine when and where megachurches began reveals a spotty research record. There is far less clear research on the spread of modern megachurches in the U.S. In other words, how megachurch organizations, as an organizational phenomenon, took root and expanded across the US religious sector. At best, we can explore founding dates as detailed below.

Many researchers claim the inception of the megachurch phenomenon is anchored between the 1st century church described in the New Testament of the Bible and the 1970s era. Large Protestant churches existed prior to the 1970’s, but it appears megachurch took on characteristics that resembled for-profit businesses only in the last couple of decades. In other words, megachurches began utilizing higher education degree programs for the specialized division of labor (e.g., MBA degrees) likely brought on by the bureaucratization of the megachurch organizational form. Perhaps it is also during this period that researchers begin to observe “a complex differentiated organizational structure” (HIRR) exacerbated by broader influences of McDonaldization. According to Hartford Institute for Religion Research (HIRR; 2000) “Megachurches are both an old and new phenomenon” (Megachurches Today, 2000). Amid these poles researchers continue to make claims that U.S. megachurches of modern notoriety are not new. Some
Evangelical scholars consider these churches are an extension of the first church established in Jerusalem, which was itself a megachurch (D. E. Eagle, 2015).

By way of contrast, other researchers suggest megachurch foundings prior to 1945, as depicted in Figure 1 (adapted from Thumma & Travis, 2007, p. 15), shows the largest percentage of megachurches were founded before 1945 (29%). However, considering the expanse of time being measured (i.e., no starting point to this section is mentioned) the results demonstrate slow founding rates. The five year period from 1975 to 1984 saw the largest founding percentage of any period before or after it with 20%. Additional founding percentages range from 16% (1985-1994), 12% (1955-1964), 8% (1965-1974 and 1995-2005), and 7% (1945-1954).

Figure 1: Percentage of Megachurch Foundings by Year (Adapted from Thumma & Travis, 2007, p. 15).

There were 50 megachurches in 1970 and by 1980 only 100 megachurches were added. In 1990, the number of megachurches had doubled again to 300. In 2005 there were approximately 1,300 megachurches and in 2011 an estimated 1,600 megachurches were
in operation (Warf & Winsberg, 2010; Thumma, Travis, & Bird, 2005; Thumma & Bird, 2008; Bird & Walters, 2010; Bird & Thumma, 2011).

As reported in Figure 2, megachurches were primarily found in the South and West regions of the US; a trend that continued until 2012 with the most recent data collected (Thumma, 2001; HIRR, 2009 & 2012). There remained a presence of megachurches in thriving urban, suburban, and later exurban areas (Thumma, 1996; Thumma & Bird, 2008; Warf & Winsberg, 2010; Tucker-Worps, 2011).

Figure 2: Percentage of Megachurches by Region (Adapted from Thumma, 2001; HIRR, 2009, 2012)

These research realities concerning megachurch organization contribute to the thrust of this paper. Thus, the primary research question is what factors correlate with the spread of megachurches? In other words, what factors are associated with the cities and times where megachurches emerge? Organizational ecology theory (OE) has been used in the past to examine these kinds of questions in for-profit sectors; thus, OE is used to address similar concerns in a religious non-profit sector. This paper sets out to answer this
question by (1) defining megachurch and providing a typology based on church size (number of attendees) and number of sites/locations. Next, the literature on density dependence theory – a component of OE – is outlined and discussed.

**Megachurches in the American Context**

*Definitions and Typology*

The distinction between megachurches and non-megachurches is primarily based either on the number of attendees or on the total congregational membership. Some scholars delineate further by classifying small churches (35-249), medium churches (250-499), large churches (500-999), emerging churches (1,000-1,999), megachurches (2,000-9,999) and gigachurches (10,000 and up). However, organizational distinctions are primarily discussed between the non-megachurch and megachurch categories. I define non-megachurches as those with fewer than 2,000 attendees and megachurches as those with 2,000 or more attendees.

The Hartford Institute for Religion Research (HIRR) corroborates and then expands the general megachurch definition\(^1\). The term megachurch is the name given to a cluster of very large, Protestant congregations that share several distinctive characteristics. According to HIRR these churches generally have:

- 2000 or more persons in attendance at weekly worship
- A charismatic, authoritative senior minister
- A very active 7 day a week congregational community
- A multitude of social and outreach ministries
- A complex differentiated organizational structure. (p. 1)

\(^1\) Although HIRR defines megachurch as having a 2,000 attendee threshold, its online database frequently includes churches with fewer than 2,000 attendees.
From HIRR’s more extensive definition, Thumma and Travis (2007) offer a number of clarifying points. Thumma and Travis (2007) contend that the megachurch is a distinctively Protestant phenomenon, because they are “organized and led” differently from Catholic and Orthodox churches (p. xviii). It is important to mention that this specific definition excludes other Christian traditions from the megachurch organizational form. For instance, large Catholic, Orthodox, and Mormon churches are not included because they are organized and led differently than their Protestant counterparts (Thumma et al., 2007). More pragmatically, the first portion of the term “mega” focuses squarely on the number of people attending services at the particular church. Secondly, the term “church” is used by Thumma & Travis (2007) and others to mean, “…an organization that sees itself as a distinct group of believers in a particular locale” (p. xviii; Ellingson, 2007; Wuthnow, 2010). Many, like Thumma and Travis (2007), use the term megachurch to describe the phenomenon among Protestant churches and interchange the term congregations with megachurch in their literature (Ahlen and Thomas 1999; Ellingson 2007). Congregations are “a particular local body of believers” (Thumma & Travis 2007, p. xix). However, mega-congregation does not roll off the tongue as readily as megachurch. Amid the discussion on defining the term megachurch, Thumma and Travis (2007) admit “…the definition of exactly what a megachurch is continues to be pushed by the rapid growth of multi-site and multi-venue churches that have more than one primary meeting place” (p. xxi).

Since the number of church locations also varies, I classify churches with one location as single-site churches. Some single-site churches plant new churches; this is a different growth strategy than multisiting. The clearest difference between church
planting models and multi-site models is the intended relationship to the establishing 
church. Church plants are intended to be autonomous (e.g., finances and leadership), 
whereas multi-site churches are intended to remain connected to the establishing church. 
Churches with more than one geographic location are grouped as multi-site churches. 
Bird and Walters (2010) define multi-site as “one church in two or more locations” (p. 2). 
Many multi-site churches use the mantra, “One Church, with Multiple Locations” (e.g., 
Lifechurch.tv in Edmond, Oklahoma; Forest Park Baptist Church in Joplin, Missouri; 
Trinity Church in Watseka, Illinois; New Hope Church in Durham, North Carolina). 
Other researchers have an expansive definition of multi-site that includes churches with 
more than one worship service. Multiple worship services may include different times, 
different languages, different venues at the same address, and/or different styles. In my 
estimation, these are not multi-site churches because some function as autonomous 
churches renting space from other churches or churches with stylized worship services, as 
noted above, that are geographically locked. 

Bird and Walters (2010) found that multi-sites were gaining legitimacy and were 
more numerous than megachurches (p. 2). First, Bird and Walters (2010) note, 

There are approximately 1,500 U.S. churches with worship 
attendance of two thousand or higher, known as megachurches. 
But there are now more multisite churches than that. And the 
number of multisite churches is growing faster than the number of 
megachurches. (p. 2)

According to Surratt, Ligon, and Bird (2009), approximately 3,000 Protestant 
megachurch and non-megachurch varieties use the multi-site model (p. 217). The 
migration from a one-stop-worship gargantuan location is being overtaken by, perhaps, 
multiple smaller campus locations.
Second, Bird and Walters (2010) believe the multi-site model has entered the mainstream. Bird and Walters (2010) conclude, the multi-site model:

…once dominated by very large churches, continue to inch downward in average size. Attendance at multisite churches – all campuses, all services, counting both adults and children – currently ranges from the low 100s to over 20,000. The most common size (median) between those two extremes is a church with an attendance of 1,300. (p. 2)

If we merely examine the number of attendees at multi-site churches, the former megachurch definition no longer agrees with the actual phenomenon. To clarify, multi-site church is not synonymous with megachurch, but serves as a church growth strategy for churches regardless of church size.

In sum, several considerations remain; firstly, an American Protestant Church with two thousand or more attendees, regardless of the model used, is a megachurch by definition. Secondly, the multi-site model is not exclusive to megachurches and multi-site churches should not be automatically classified as megachurches. Thirdly, if a church leader is charismatic and authoritative, it does not mean he or she is leading a megachurch. Fourthly, multi-site churches may or may not have a “very active 7 day a week congregational community” (Thumma and Travis 2007). A less taxing community schedule may provide for greater involvement among attendees of multi-site churches. Fifthly, Protestant churches, in general, have a host of “social and outreach ministries”. Finally, both megachurches and those using multi-site models have “a complex differentiated organizational structure” (Thumma and Travis 2007).

For the purposes of this study, a single-site megachurch (SSM) is defined as a charismatically led Protestant Christian congregation in one geographic location with 2,000 or more weekly attendees who are socially active and outreach oriented. A multi-
megachurch (MM) is a charismatically led Protestant Christian congregation in two or more geographic locations with minimum of 2,000 weekly attendees across the church network who are socially active and outreach-oriented.

Table 1 depicts a typology of four church categories based on the number of church attendees (Size) and number of sites (1, 2 or more). Churches with fewer than 2,000 attendees and only 1 church location fit the single-site non-megachurch (SSNM) category. Churches with the same number of attendees but with two or more locations are labeled the multi-site non-megachurch category (MNM). Single site churches with 2,000 or more attendees are single-site megachurches. Finally, churches with multiple sites and 2,000 or attendees are classified under the multi-site megachurch category (MM).

Table 1: Church Typology - Church Size (Attendees) and Number of Locations/Sites

<table>
<thead>
<tr>
<th>Size (Attendees)</th>
<th>1 Location/Site</th>
<th>2 or More Locations/Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>35-1,999</td>
<td>Single-site Non-Megachurch (SSNM)</td>
<td>Multi-site Non-Megachurch (MNM)</td>
</tr>
<tr>
<td>2,000 or More</td>
<td>Single-site Megachurch (SSM)</td>
<td>Multi-site Megachurch (MM)</td>
</tr>
</tbody>
</table>

Density Dependence Theory: Understanding Organizational Spread

The spread of megachurches and multi-site churches as organizational forms within the U.S. suggests the need to understand and explain why these phenomena have occurred. As noted above, industry researchers provide information on the presence of and changes within these organizations; however, little work has been done to provide a theoretical basis for understanding the expansion of these churches within the American

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2 Bird (2014) extrapolated from Duke University’s National Congregations Study (NCS) that there are 8,000 multisite churches in the U.S. (p.3).
context. In an effort to address this latter concern, organizational theories were considered, with density dependence theory appearing to be the most suitable approach.

Density dependence theory (DDT), an organizational theory under the larger Organizational Ecology Theory (OE) framework, addresses how organizations spread within particular environments. Density dependence theory posits that organizational change is the result of tensions arising from legitimation and competition effects, which themselves are by-products of the number of similarly-structured organizations in a social setting. As organizational forms become more widely used (suggesting acceptance), legitimacy is gained. The rising levels of legitimacy, in turn, lead to additional foundings of other similarly-structured organizations. However, additional foundings also lead to increased competition, which eventually accumulates to the point where later additional foundings become much more difficult. In their infancy, populations of organizations are more concerned with establishing legitimacy (i.e., shedding the negative effects of illegitimacy), while mature populations are more concerned with the effects of competition (Hannan, 1986; Hannan & Freeman, 1989; Singh & Lumsden, 1990; Hannan & Carroll, 1992; Carroll & Swaminathan, 1992).

*The Opposing Effects of Legitimacy and Competition*

In the sections that follow, I will review the existing research that speaks to the opposing forces of legitimacy and competition (the focus of the present paper). The focus will be primarily on how these factors influence organizational founding rates. Many of the factors that are discussed herein are subset issues of DDT that have been, in-part or whole, within the wider OE literature. The extensive literature on the factors that affect organizational failure rates will not be touched upon since megachurch failure is not my
present focus. In fact, the present study on megachurches attends only to founding events. Figure 3 shows OE’s model for density dependence theory.

Figure 3: Organizational Ecology’s Density Dependence Theory

![Organizational Ecology’s Density Dependence Theory Diagram]

The successful exploration of organizational populations using density dependence research is predicated on events germane to these organizations. The dependent variables examined under a density dependence theory framework are organizational founding events and failure (mortality) events. The association between legitimacy and the spread of an organizational form has been found to be non-linear (i.e., there are diminishing returns to legitimacy gains as an organizational population expands). Initially, population density is low and the legitimation effect rules the day, as shown in Figure 3. At this time in an organizational population’s development, increases in legitimacy have a profound (positive) effect on subsequent founding rates (and also suppress mortality rates). At moderate density levels, however, founding rates continue to increase, moderately, and mortality rates are low. Once the numbers of similarly-structured organizations (i.e., the density of an organizational form) reaches a high level,
additional gains in legitimacy have almost no effect on subsequent foundings (or failures).

The association between competition and organizational spread is also non-linear (i.e., as the organizational population reaches its peak, competition tempers foundings and increases mortality rates). There is limited competition with the early foundings of organizational populations. The only battle taking place at low population densities is the struggle for legitimacy. At moderate density levels, as legitimacy increases so does competition among these organizations. Finally, at high density levels competition is its fiercest causing the older and/or weaker organizations to die off.

When the effect of legitimacy and of competition are considered together, what emerges is a non-linear association between population density and the likelihood of further organizational foundings. When density is low additional organizational foundings, legitimacy, and competition are low. When density is moderate additional foundings, legitimacy, and competition increase. When population density is high, competition overtakes legitimacy, resulting in increased mortality rates and decreased founding rates. Thus, there should be a non-linear effect on founding and mortality rates because of the tenuous relationship between legitimacy and competition (Hannan & Freeman, 1989). Since testing of the theory in the 1980s, scholars continue to find empirical support in various cases.

Hannan and Carroll (1992) tested the veracity of the density dependence formulation for various populations (i.e., American labor unions, American life insurance companies, Manhattan commercial banks, San Francisco Bay Area newspaper publishers, and American brewing firms). They found statistically significant support that initially
low densities were characterized by low legitimacy and low competition. As additional foundings occurred (increasing density) so did legitimacy and competition, to the point that competition was the primary characteristic leading to failure of some organizations. The collective results demonstrated repeatability of the models, leading Hannan & Carroll (1992) to conclude that the models reveal a pattern of growth to a threshold carrying capacity, the “stronger the effect is [at founding density], the bigger the declines and cycles will be [in the carrying capacity]” (p. 187).

Carroll, Preisendoerfer, Swaminathan, & Wiedenmayer (1993) conducted a comparative analysis of German and American brewing industries because they displayed similar evolutionary characteristics of slow entry over a long period, an explosive expansion period, and then decline. Carroll, et al. (1993) observed that in the early going of industry foundings (e.g., American and German breweries), density had a consistent outcome on mortality rates. Although both industries experienced higher mortality rates during founding periods of high density in comparison to those of low-density periods, US breweries were more negatively affected by the threat of higher mortality (p. 181).

Wade (1996) conducted a community level analysis on microprocessor firms from 1971 to 1989. Wade (1996) concluded that at the beginning of the microprocessor industry’s history increased density corresponded with increased legitimacy. “As numbers grow, the capital market increasingly sees the industry as viable, and access to capital increases” (p. 1240). Following the traditional outcome for density dependence, the microprocessor industry, is then “taken for granted, and competition dominates” resulting in the decline of “new sponsors with original designs” (p. 1240).
Greve’s (2002) research on the Tokyo banking industry from 1894 to 1936 proposed a theory of spatial evolution as an extension of Hannan & Freeman’s temporal evolution theory. Greve (2002) found strong support for “the number of organizations within a geographical area has an inverted-U-shaped effect on the rate of organizations entering the area” (p. 853). However, Greve (2002) also found robust evidence of contagion theory where “the number of organizations within a geographical area is positively related to the rate of organizations entering the area” (p. 851). These results led Greve (2002) to conclude that he could not differentiate between the two, but both were present.

Finally, a contingent of scholars offer contextual examinations where two or more competing populations demonstrate positive correlations of low density and innovation prior to the onset of high density and competition (Barnett and Carroll, 1987; Dobrev, Ozdemir, and Teo, 2006; Barron, West, and Hannan, 1994).

Barnett & Carroll (1987) found that mutual organizations (those who improve one another’s viability) and commercial organizations (those maintaining some form of competitive relationship) support density dependence predictions of legitimacy for newer organizations (establishing networks) and competition for established commercial organizations.

Dobrev, et al. (2006), as an extension of Barron, et al.’s. (1994) New York credit union research, investigated Singapore’s finance industry. Dobrev, et al. test their theory of organizational interdependence (i.e., the positive and negative effects of emerging financial co-ops and established banking). They suggest that previously established density effects (i.e., legitimacy and competition) are present especially when “the
violation-by-comparison [overlapping identity space between emergent and established organizations] effect is integrated into the model” (p. 593; bracketed information added).

Barron, et al. (1994) although directly examining organizational age and size for credit unions (State-chartered and Federal) in New York, found support for density dependence for the overall credit union population. For instance, when SCUs faced low density early in its history and FCUs gained greater regulatory support, there was a positive effect for SCUs as well (i.e., legitimacy). Additionally, competition favored the older and larger credit unions regardless of brand (SCU or FCU). In short, as the New York credit union population gained legitimacy, and thus additional foundings, legitimacy then became less important and was overtaken by competition between SCUs and FCUs. Barron, et al. argue that such competition benefited credit unions of both varieties, with increased liability of smallness.

OE concludes that legitimacy development has a lengthy time horizon as an outcome of increased density. Inherently, the theoretical assumption posits that when populations reach a specific threshold legitimacy follows.

It is important to note that within Organizational Ecology, density dependence theory continues to evolve. Hannan, Polos, and Carroll (2007) present an alternative calculus of legitimacy development that downplays the importance of density. In this revised formulation, organizations are viewed as units with cohesive characteristics. Greater diversity in these characteristics leads to increased numbers of organizations with said characteristics, and lead to environmental constituents to acknowledge them as an organizational form. This puts the locus of organizational legitimacy on shared demonstrable characteristics, while moving away from the earlier density-laden
formulation. The reasons for this theoretical shift likely lie in the strong (negative) response received from new-Institutional scholars (Zucker, 1989), who argued that Carroll and Hannan (1989) did not measure legitimacy and competition, but “were replaced in equations with functions of density, defined as ‘the number of organizations in the population’” (Zucker, 1989, p. 542). Secondly, Zucker (1989) argued that Carroll & Hannan (1989) supposed organizational births occurred one at a time and thus hazards start over at each new organizational founding. However, I am applying the older formulation of density-dependence theory because the population in question has never been subjected to the baseline of the density dependence argument. By doing so here, I hope to further understand the spread of the multi-site form as it relates to megachurches.

**Methods**

This chapter addresses density dependence theory as it relates to SSMs and MMs. The unit of analysis is comprised of Core-Based Statistical Area (CBSA)-years. A total of 929 CBSAs were examined, including 388 Metropolitan Statistical Areas (MSAs) and 541 Micropolitan Statistical Areas (μSAs). MSAs consist of a core urban area of 50,000 or more in population and μSA is made up of at least 10,000 in population but less than 50,000. According to the U.S. Census, “[e]ach metro and micro area consists of one or more counties and includes the counties containing the core urban area, as well as any adjacent counties that have a high degree of social and economic integration (as measured by commuting to work) with the urban core” (Census, n.d.). The years included in the analysis cover 2005 to 2013. Although historical delineations of MSAs and μSAs exist from 1950 to 2009, the records only provide Federal Information Processing Standards (FIPS), and CBSA equivalency names (standards prior to 2000 include
Standard Metropolitan Statistical Areas, Metropolitan Statistical Areas, and Consolidated Metropolitan Statistical Areas). However, readily accessible and appropriate data are available only for specific variables for a narrower period (i.e., 2005-2013).

The dependent variable used in the analyses is a MM founding (event) happening in a CBSA-year. It is important to note that a MM founding event may include a church designed to be multi-site from its inception that experiences attendee growth to the point it becomes a megachurch or a SSM that converts to a multi-site model.

The analysis is based on a random sample of 541 megachurches (and thus a random sample of founding events) from the total population of 832 megachurches (see Table 2). The sampling of churches, and hence founding events, occurred due to time constraints and the number of megachurches responding to information requests; given enough time I would collect the necessary organizational information (founding dates, number of locations, etc.), via telephone, from what remains of the 291 megachurches. In short, 541 megachurches were used because the other 291 megachurches did not publicize vital organizational demographic information (via organizational websites), and either did not respond to information requests or were unreachable for formal inquiry.

The 541 megachurches examined consist of 415 SSMs and 126 MMs (with a total of 279 satellite locations). The church list data (street addresses, city, state, and zip codes) provides the necessary geolocation data required to map church locations and proximities to one another. Information on the founding dates for SSMs and for each site of a MM was obtained through Internet searches and phone calls.
Table 2: Number (Percentage) of Megachurches and Churches

<table>
<thead>
<tr>
<th></th>
<th>Compiled List of Churches</th>
<th>Random Sample of Churches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-Site Megachurches</td>
<td>640</td>
<td>415</td>
</tr>
<tr>
<td>Multi-site megachurches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main location</td>
<td>192</td>
<td>126</td>
</tr>
<tr>
<td>Satellite Locations*</td>
<td>472</td>
<td>279</td>
</tr>
<tr>
<td>Total Megachurches</td>
<td>832</td>
<td>541</td>
</tr>
<tr>
<td>Total Church Sites (SSMs + All locations for MMs)</td>
<td>1,304</td>
<td>820</td>
</tr>
</tbody>
</table>

* Satellite locations do not include the central location of the multi-site church network.

The megachurch listing of U.S. SSMs and MMs was compiled from Outreach Magazine’s (OM) 100 Largest Churches (2005-2013), Hartford Institute for Religion Research’s (Hartford) Database of Megachurches in the U.S., and Church Growth Today’s (CGT) 106 of America’s Largest Multi-site Churches (2000-2010).

Outreach Magazine generates an annual list of “America’s Largest 100 Churches”. Outreach Magazine ranks churches by number of attendees and presents key variables – church name, city and state, pastor’s name, website address, founding year, and number of sites (varies from year to year). However, due to sporadic reporting of the number of sites, OM does not always indicate which megachurches are MM vs. SSM.

Hartford does not have archived record of church lists, as in the OM dataset; instead, Hartford’s data are what I would consider “real-time” as of 2014 (hirr.hartsem.edu). Hartford goes beyond the largest 100 churches to a listing of 1,668 churches; however, 115 churches listed have fewer than the defined 2,000 attendee baseline to be considered a megachurch. Harford’s database compiles church name with website link information, city and state, average annual attendance, and denominational
affiliation as variables. I will use the church website access to expand my aggregated
database to include street address, zip code, county, worship service days and times, and
founding date of any additional sites, as available.

CGT’s list provides information on the number of sites, church name, city and
state, pastor’s name, and church affiliation for 106 multi-site churches. The list does not
include the number of attendees per site, founding dates, addresses, and county
information. Therefore, the CGT list is used only to cross-reference other list data.

I acquired and aggregated data from the three megachurch lists to conduct an
organizational examination of the MM population. The newly compiled list provides
information on both MMs and SSMs. The list has the following variables: type of church
(MM or SSM), street address, city, state, county, number of worship services, average
number of weekend attendees (across the church network in the case of MMs), founding
year, pastor’s name and tenure, and denomination/affiliation (if any).

Focal Independent Variables

Organizational density is the focal independent variable for measuring
competition (i.e., the number of SSMs and MMs in the city-level) and legitimacy (i.e.,
number of SSMs and MMs in the nation). Density is divided into local (CBSA/city-level)
and nation (nation-level) because DDT predictions claim that organizational competition
occurs at the local level (i.e., quest for the same limited resources) and legitimacy occurs
at the national level.

This research investigates MM density at the CBSA-level (local) and nation-level
(national). These levels were intentionally segregated because national magazines (e.g.,
Outreach Magazine) and trade organizations (e.g., Leadership Network and MultiSite
Solutions) promote multi-site churches, and thus, suggest that legitimacy effects will occur primarily at the nation-level. Therefore, it makes little sense to talk about legitimacy at the local-level, as suggested by DDT.

Competition effects are anticipated at the local-level because people living in local communities attend and potentially change churches based, in part, on its proximity to their home (Hadaway, 1981; Olson, 1989). Church attendees do not travel across the country to regularly attend church services. Additionally, the potential for changing churches may exacerbate competitive relationships between churches within their localized markets (Finke & Stark, 1998; Iannaccone, Finke, Stark, 1997). Given these local realities, there is little reason for discussing competition at the nation-level because there is no national market for these churches (few MMs are establishing satellite locations across state boundaries, beyond their current CBSAs (e.g., Life.Church). Since this reality supposes localized competition for new attendees, I had to examine this population at the CBSA-level. There should not be legitimacy effects at the local level; rather there should be a clear indication of competition.

I suspect competition both among MMs and between SSMs and MMs in a city since these organizations are looking to attract and recruit the same human resources from the city to bolster the vitality of each organization. However, as SSM density normalizes MM may have a greater founding advantage. This perspective suggests a period when sector growth occurs and then plateaus due to market saturation and the need for these churches to differentiate within their environment (see Hannan & Freeman, 1989).
Legitimacy & Competition Hypotheses

For each hypothesis pairing the following pattern is present. The predictor variable is used as one part of the pairing criteria (i.e., SSM or MM) and then the level (i.e., city or nation). The pairs are being created because each pairing will be tested in the model using a single variable. A summary of the legitimacy and competition hypotheses is given in Table 3. In short, these pairings provide two effectual sides of the same organizational phenomenon. In other words, legitimacy effects work in contrast to competition effects, and vice versa. Therefore, the following city-level hypotheses were created:

**H1:** Since the benefits of legitimacy are hypothesized at the nation-level, additional SSMs in the city will have no effect on MM legitimacy. However, since competition is hypothesized to occur at the city-level, the larger number of SSMs in the city will increase competition. Taken together, additional SSMs in the city should decrease the likelihood of MM founding events.

**H2:** Since the benefits of legitimacy are hypothesized at the nation-level, additional MMs in the city will have no effect on MM legitimacy. However, competition is hypothesized to occur at the city-level. Therefore a larger number of MMs in the city will decrease the likelihood of MM founding events.

When these two hypotheses are combined one would expect that as the number of SSMs in the city increases, the likelihood of a MM founding decreases. One would correspondingly expect that as the number of MMs in the city increases, the likelihood of a MM founding decreases. Because of the “plateau effect” noted earlier, however, one would expect the effect of SSMs on MM founding to be less pronounced than the effect of existing MMs on MM founding.

Conversely, legitimacy of a particular organizational form occurs at the nation-level as more organizations demonstrate survival and numerical growth as a result of using the model. The effect of increasing numbers of SSMs should increase the
legitimacy of both SSM and MM because of their shared characteristics, though a larger proportion of any legitimacy benefit should accrue SSM rather than MM. The increased presence of MMs (and subsequent membership/attendee growth and low start-up costs) might create pressures for SSMs to switch to the MM form with hopes of garnering similar organizational benefits, creating a legitimacy effect that is stronger for MMs. Competition, however, does not occur at the national level since potential attendees would not likely consider churches outside of their local area. As such, additional nation-level hypotheses are proposed:

\( H3: \) Since benefits of legitimacy effects are hypothesized at the nation-level, additional SSMs in the nation will increase legitimacy, and therefore increase the likelihood of MM founding events. However, since competition is hypothesized to occur at the city-level, not the nation-level, additional SSMs in the nation will have no effect on MM founding events.

\( H4: \) Since benefits of legitimacy effects are hypothesized at the nation-level additional MMs in the nation, will increase legitimacy, and therefore increase the likelihood of MM founding events. However, since competition is hypothesized to occur at the city-level, not the nation-level, additional MMs in the nation will have no effect on MM founding events.

The expected SSM density and MM founding event pattern from the combined hypotheses should reflect that as the number of SSMs increases in the nation the likelihood of a MM founding should go up, though only weakly. One would also expect that as the number of MMs increases in the nation the likelihood of a MM should increase.
Table 3: Legitimacy and Competition Hypotheses

<table>
<thead>
<tr>
<th>Hypotheses Location</th>
<th>Hypotheses Labels</th>
<th>Legitimacy</th>
<th>Competition</th>
<th>Net Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSM City</td>
<td>H1</td>
<td>No Effect</td>
<td>Decrease</td>
<td>Competition Only</td>
</tr>
<tr>
<td>MM City</td>
<td>H2</td>
<td>No Effect</td>
<td>Decrease</td>
<td>Competition Only</td>
</tr>
<tr>
<td>SSM Nation</td>
<td>H3</td>
<td>Increase</td>
<td>No Effect</td>
<td>Weak Legitimacy</td>
</tr>
<tr>
<td>MM Nation</td>
<td>H4</td>
<td>Increase</td>
<td>No Effect</td>
<td>Legitimacy Only</td>
</tr>
</tbody>
</table>

Control Variables

The covariates used in the analyses include population density, median age, percentage of people in study areas falling into select race/ethnicity groups (e.g., White, African American, Hispanic, and Asian), median income, and the percentage of people completing certain education levels (e.g., less than high school, 9th-12th (no diploma), high school and equivalent, some college (no degree) associates degree, bachelor’s degree, and graduate or professional degree).

Population density (measured as the number of 1000s of people per square mile) is used as a covariate because spatial availability will have implications for megachurches to be present in the environment. SSMs need more land area to build and expand the sole campus structure. Whereas MMs may begin with a large central location dependent upon more space, but could also thrive in limited land areas. Thus, the following hypotheses are tested in the study.

**H5:** Increased population density will have a positive relationship to MM founding events in the city.
Median age will have an effect on the different megachurch forms. The multi-site model has emerged as the Protestant Church negotiates its relationship with subsequent generations of potential churchgoers. Thus, I anticipate that a lower median age of the population will increase the prevalence of MMs.

**H6**: The lower the median age of the population the more likely the presence of MMs.

I also expected the covariate of race (e.g., White, African-American, American Indian/Native American, Asian, Native Hawaiian/Pacific Islander, Other Race, and Two or More Races) and ethnicity (e.g., Hispanic or Latino of other race) to have different effects on the MM founding events different megachurch types. Conversely, racial and ethnic minorities are likely resistant to the multi-site model due to its lack of organizational and personnel control. These groups might also be considered more collectivist (individual goals relegated to group goals), and thus, espouse organizational structures with geographic centrality and less autonomy (Hofstede, 2001).

**H7**: The greater percentage of a racial minority or ethnic minority group decreases the probability for MM founding events in CBSAs.

Economic and educational levels will likely have an influence on the presence of MMs in the market. Some studies conclude that megachurches, of no particular distinction, consist of people mostly coming from the middle class (Tucker-Worgs, 2011; Kilde, 2002). However, Eagle (2012) found that “larger churches contain greater proportions of people with high incomes and college educations” (p. 301). Thus, the following hypotheses attempt to test the relationship between income and education on the presence MMs.

**H8**: As median income increases the greater likelihood of MM foundings.
**H9:** As the percentage of education level increases the greater likelihood that MMs will increase through founding events.

**Statistical Method**

The variables were analyzed using generalized estimating equations (GEE). A generalized estimating equation (GEE) – similar to binary logistic regression for time series analysis was run to test the hypotheses noted above. GEE and multilevel (hierarchical) models function similarly, with the main difference being GEE’s focus on estimating a non-varying (or average) coefficient in the presence of clustering, whereas MLMs (HLMs) focus on estimating the aspects of the model that vary by group. Collinearity was examined using variance inflation factors (VIFs). Linearity of association between the dependent variable and the nominal and interval/ratio predictors was tested by including squared terms for each variable and examined using scatterplots of each predictor vs. the studentized residuals. Both full and parsimonious models were sought, with the parsimonious model being produced via backwards selection (p>.10 to exit).

There were instances of missing data for the years 2005-2013 in the U.S. Census demographic information. These missing data required a formal process for imputing some of the missing values. Using SPSS syntax, a systematic approach of determining the missing values, their proximity to (prior or subsequent) known data points was used to determine if imputation was warranted. If demographic variables for a particular year had fewer than two data points across the time period, no additional efforts were made to impute the missing values. If a particular variable was missing all but one or two data points the missing values were not extrapolated. For years where variables had two or
more values present, syntax calculations were used. For instance, Abbeville, LA did not have any information on racial groups for years 2005 and 2006 and therefore no data were imputed. In the example below if population values for 2005 were missing, the syntax would look at population data for 2007, subtract 2 (number of years difference), and multiply population data for years 2013 minus 2007, and finally divide the result by the number of years in total (7).

Example: IF (missing(Pop05)) Pop05 = Pop07 - 2 * ((Pop13 - Pop07) / 7).

Results

Descriptive Results

Descriptive statistics are found in Table 4. The typical U.S. city has 1.93 SSMs (Std. Dev. = 2.68) and .50 MMs (Std. Dev. = .75). At the national level, there are an average of 458 (mean; Std. Dev. 23.22) SSMs and 105.22 (Std. Dev. = 39.71) MMs. There were one or more MM founding events in 7.2% of the CBSA-years examined (92.8% with no founding events during the analysis period). CBSA-years had anywhere from zero to nine MMs. 54% of all CBSA-years had no MMs present. Additionally, 34% of all CBSA-years had one MM, 8% had MMs two, 3% had three, 0.8% had four, 0.7% had five, and 1% had seven and nine MMs. Finally, there were no CBSA-years that had six or eight MMs.

The average city had a population density of 290 persons per square mile (Std. Dev. = 247), where the median age was 36 years old (Std. Dev. = 3.63). The typical population within these cities had a median income of $47,933 (Std. Dev. = $8,863.80). Typical populations for adults aged 25 years old and older was comprised of 30.4% high school diploma or equivalent earners (the reference education group for the GEEs). The
rest of the education demographic consisted of 21.6% with some college or no degree, 16.3% with Bachelor’s degrees, 9.2% of adults had 9th to 12th grade without a diploma, and 9.2% had graduate or professional degrees. Those who earned associate’s degrees made up 7.5% and 5.7% had less than 9th grade education.

The average U.S. city was made up of Whites (nearly 80%), African Americans (12%), Asians (2%), American Indians (.7%), Native Hawaiians (.09%), and those of other races (4%). Whites were the reference group for race and were removed from the model. Hispanic ethnicity was accounted for 4% of the average city population.

Table 4: Chapter II Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Central Tendency Measure</th>
<th>Variability Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-site Foundings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Foundings</td>
<td></td>
<td>92.8%</td>
</tr>
<tr>
<td>1+ Foundings</td>
<td></td>
<td>7.2%</td>
</tr>
<tr>
<td>Megachurches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single-site Church (CBSA)</td>
<td>1.93 (mean)</td>
<td>2.68 (Std. Dev.)</td>
</tr>
<tr>
<td>Multi-site Church (CBSA)</td>
<td>.5040 (mean)</td>
<td>.74630 (Std. Dev.)</td>
</tr>
<tr>
<td>Single-site Church (Nation)</td>
<td>457.66 (mean)</td>
<td>23.22 (Std. Dev.)</td>
</tr>
<tr>
<td>Multi-site Church (Nation)</td>
<td>105.22 (mean)</td>
<td>39.71 (Std. Dev.)</td>
</tr>
<tr>
<td>Population Density</td>
<td>290.02 (mean)</td>
<td>246.77 (Std. Dev.)</td>
</tr>
<tr>
<td>Age</td>
<td>36.42 (mean)</td>
<td>3.63 (Std. Dev.)</td>
</tr>
<tr>
<td>Income</td>
<td>$47,933.13 (mean)</td>
<td>$8863.8 (Std. Dev.)</td>
</tr>
<tr>
<td>Education (25 years old and older)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School/Equiv.</td>
<td>30.4%</td>
<td></td>
</tr>
<tr>
<td>Less than 9th Grade</td>
<td>5.7%</td>
<td></td>
</tr>
<tr>
<td>9th – 12th, No Diploma</td>
<td>9.2%</td>
<td></td>
</tr>
<tr>
<td>Some College, No Degree</td>
<td>21.6%</td>
<td></td>
</tr>
<tr>
<td>Associate’s Degree</td>
<td>7.5%</td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>16.3%</td>
<td></td>
</tr>
<tr>
<td>Graduate/Prof. Degree</td>
<td>9.2%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Race</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
</tr>
<tr>
<td>African American</td>
</tr>
<tr>
<td>Asian</td>
</tr>
<tr>
<td>American Native</td>
</tr>
<tr>
<td>Native Hawaiian</td>
</tr>
<tr>
<td>Other Race</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hispanic origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Race</td>
</tr>
</tbody>
</table>

The final regression model is reported in Table 5. The results discussed below will focus primarily on the parsimonious model. Significant predictors of having a MM founding event included the presence of MMs already in the area and its squared variable, total number of SSMs in the nation squared, the total number of MMs squared, the square of population density, median income, the square of associate’s degree, and the squared percentage of African Americans present in the community. The non-significant predictors included the total number of SSMs in the nation, total number of MMs in the nation, population density, income squared, those who earned an associate’s degree, and the percentage of African Americans. The parsimonious model explained half of the unexplained variance of the dependent variable. The quasi likelihood under independence model criterion (QIC) for the intercept only model was 1117.078. Under
the full covariate model the goodness of fit statistic quasi likelihood under independence model criterion (QIC) was 559.651 yielding a pseudo $R^2$ of approximately .5; thus, the model is a good fit.

Table 5: Generalized estimating equations predicting the odds of a MM founding event

<table>
<thead>
<tr>
<th>Variable</th>
<th>Full Model</th>
<th>Parsimonious Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>.019 (.009-.041)</td>
<td>.026 (.015-.046)</td>
</tr>
<tr>
<td>Megachurch Densities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Single-site Churches (City)</td>
<td>1.02 (.848-1.23)</td>
<td></td>
</tr>
<tr>
<td>Number of Single-site Churches (City), squared</td>
<td>.997 (.984-1.01)</td>
<td></td>
</tr>
<tr>
<td>Number of Multi-site Churches (City)</td>
<td>66.35 (23.640-186.25)</td>
<td>35.24 (12.63-98.36)</td>
</tr>
<tr>
<td>Number of Multi-site Churches (City), squared</td>
<td>.521 (.344-.789)</td>
<td>.552 (400-761)</td>
</tr>
<tr>
<td>Number of Single-site Churches (Nation)</td>
<td>1.05 (.731-1.52)</td>
<td>1.129 (.802-1.590)</td>
</tr>
<tr>
<td>Number of Single-site Churches (Nation), squared</td>
<td>1.01 (1.002-1.01)</td>
<td>1.007 (1.002-1.013)</td>
</tr>
<tr>
<td>Number of Multi-site Churches (Nation)</td>
<td>1.01 (.813-1.26)</td>
<td>1.061 (.865-1.301)</td>
</tr>
<tr>
<td>Number of Multi-site Churches (Nation), squared</td>
<td>.997 (.995-1.00)</td>
<td>.997 (.995-999)</td>
</tr>
<tr>
<td>Population (density)$^3$</td>
<td>.241 (.012-4.92)</td>
<td>.677 (.071-6.421)</td>
</tr>
<tr>
<td>Population density, squared</td>
<td>149.9 (6.476-3473.67)</td>
<td>27.18 (1.75-422.36)</td>
</tr>
<tr>
<td>Age</td>
<td>.961 (.838-1.10)</td>
<td></td>
</tr>
<tr>
<td>Age, squared</td>
<td>1.01 (.994-1.02)</td>
<td></td>
</tr>
<tr>
<td>Income$^4$</td>
<td>.957 (.877-1.05)</td>
<td>.934 (.896-973)</td>
</tr>
<tr>
<td>Income, squared</td>
<td>.995 (.992-998)</td>
<td>.997 (.995-1.000)</td>
</tr>
<tr>
<td>Education percentages (High School or Equivalent)$^5$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 9$^{th}$ Grade</td>
<td>1.13 (.900-1.43)</td>
<td></td>
</tr>
<tr>
<td>Less than 9$^{th}$ Grade, squared</td>
<td>.986 (.953-1.02)</td>
<td></td>
</tr>
<tr>
<td>9$^{th}$ – 12$^{th}$, No Diploma</td>
<td>1.14 (.856-1.513)</td>
<td></td>
</tr>
<tr>
<td>9$^{th}$ – 12$^{th}$, No Diploma, squared</td>
<td>.959 (.916-1.003)</td>
<td></td>
</tr>
<tr>
<td>Some College, No Degree</td>
<td>1.07 (.923-1.229)</td>
<td></td>
</tr>
<tr>
<td>Some College, No Degree, squared</td>
<td>1.01 (.993-1.034)</td>
<td></td>
</tr>
<tr>
<td>Associate’s Degree</td>
<td>1.32 (1.028-1.684)</td>
<td>1.15 (985-1.342)</td>
</tr>
<tr>
<td>Associate’s Degree, squared</td>
<td>.907 (.836-985)</td>
<td>.922 (860-988)</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>.979 (.847-1.132)</td>
<td></td>
</tr>
<tr>
<td>Bachelor’s Degree, squared</td>
<td>1.01 (.996-1.023)</td>
<td></td>
</tr>
<tr>
<td>Graduate/Prof. Degree</td>
<td>1.11 (.914-1.349)</td>
<td></td>
</tr>
<tr>
<td>Graduate/Prof. Degree, squared</td>
<td>1.01 (.994-1.019)</td>
<td></td>
</tr>
<tr>
<td>Race Percentages (White)$^6$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>.946 (.897-.998)</td>
<td>.971 (.941-1.001)</td>
</tr>
<tr>
<td>African American, squared</td>
<td>1.002 (1.000-1.003)</td>
<td>1.001 (1.000-1.003)</td>
</tr>
<tr>
<td>Asian</td>
<td>.927 (.461-1.87)</td>
<td></td>
</tr>
<tr>
<td>Asian, squared</td>
<td>1.01 (.990-1.03)</td>
<td></td>
</tr>
<tr>
<td>American Indian</td>
<td>1.25 (.775-2.00)</td>
<td></td>
</tr>
<tr>
<td>American Indian, squared</td>
<td>.986 (.964-1.01)</td>
<td></td>
</tr>
</tbody>
</table>
SSM and MM density at the Local-Level on MM Foundings

The main effects and quadratic effects reported hereafter are probabilities. Seven graphs (i.e., Figure 4 to Figure 10) were created by calculating log odds (see Equation 1) and probabilities (see Equation 2) for each variable remaining in the parsimonious model, where \( x_1, \ldots, x_k \) are a set of predictor variables.

Equation 1: Calculating Log Odds

\[
\text{logit}(p) = \log(p/(1-p)) = \beta_0 + \beta_1 x_1 + \ldots + \beta_k x_k
\]

Equation 2: Calculating Probability

\[
p = \frac{\exp(\beta_0 + \beta_1 x_1 + \ldots + \beta_k x_k)}{1 + \exp(\beta_0 + \beta_1 x_1 + \ldots + \beta_k x_k)}.
\]

As I considered the legitimacy effect of SSMs on MM founding events at the local level I thought there would be no effect whatsoever (\( H1 \)). However, I fully expected to see evidence of competition effects between the two at the local level. In fact, I hypothesized that additional SSMs in a city would have no effect on MM legitimacy (\( H1 \)). The complete picture of \( H1 \) should have shown evidence only for competition...
effects and no legitimacy effects. The results indicated that the number of SSMs in the city was not a significant predictor (the only density test to return such a result). In other words, there was no legitimacy or competition effect present. I can only speculate as to why this has occurred. Perhaps these organizational typologies (SSMs and MMs) do not exhibit legitimacy or competition characteristics because legitimacy and competition are garnered by confounding or interaction variables. Perhaps intra-organizational competition does not occur because there is truly no competition for resources among the population. This is an intriguing problem to consider for future research, but there are no indications why this phenomenon has occurred.

With respect to the association between MM density and MM foundings, I hypothesized \((H2)\) that additional MMs in the city would have no effect on MM legitimacy. In hypothesizing about competition \((H2)\) at the city-level, I expected the presence of MMs at the city-level to decrease the likelihood of further MM founding events. The hypothesis indicated an expectation that as the number of MMs increased in the city, the likelihood of a new MM founding would decrease.

The association between the number of MMs in the city and the probability of a MM founding is shown in Figure 4. The model showed statistically significant results \(p < .10; \text{C.I.} = 12.63-98.36\), with the main effect for the number of MMs in the city being 3.56 and the quadratic effect being -0.594. When no MMs are in the city there is almost no chance that a MM founding event will occur. If one MM is present, there is a slightly increased chance that another MM founding event will take place. However, if two MMs are present it is somewhat likely, a 6 in 10 chance that a MM founding event will occur. There is a steady increase of founding event probability when 3 or 4 MMs are present in
the city (8 in 10 chance). The probability of founding events declines to half when 5 MMs are present and 1 in 10 chances with 6 MMs present. When 7 MMs are already operational in the city there is no chance a founding event will take place. The plateauing effect of MM foundings occurs when 3 and 4 MMs are already present in the city.

Figure 4: Number of Multi-site Megachurches in CBSA and the Probability of Multi-site Megachurch Founding Events

This pattern provides very little support for my legitimacy hypothesis (H2) as discussed above. Clearly, the presence of MMs in the city have some positive, measurable increased effect on additional MM founding events when there are up to 3.5 MMs present. OE theory would suggest this is evidence of an increased legitimacy effect being present. The pattern observed in Figure 4 does show, however, that the hypothesized competition effect is present, becoming visible after roughly 3.5 MM are present. As previously noted, there is a sloping decline when greater than 3.5 MMs are in the city suggesting no competition effect on the organizational population.
**SSM and MM density at the National-Level on MM Foundings**

For Hypothesis 3 (H3), I stated that additional SSMs in the nation would increase legitimacy, and therefore increase the likelihood of MM founding events. For the most part the evidenced pattern of the hypothesis holds true in the results, though the effect was stronger than expected. Figure 5 shows the association between the total number of SSMs in the nation and the probability of MM founding events. As such, the main effect for the number of SSMs in the nation is 1.21 and the quadratic effect is 0.007. The model showed statistically significant results (p < .10; C.I. = .802-1.590). Together these variables demonstrate a pattern of probability discussed below.

Figure 5: Total Number of Single-site Megachurches in the Nation and the Probability of Multi-site Megachurch Founding Events

There is no chance of a MM founding event with approximately 400 to 458 SSMs in the nation. The chances for a MM founding event goes from no chance to being very likely with 460 SSMs in the nation. When 464 or more SSMs are in the nation the chances for MM founding events remains very likely. Interestingly, the pattern kicks into high gear with multisiting when approximately 460 SSMs are present. The competition
aspect of the hypothesis ($H3$), where additional SSMs in the nation would have no effect on MM founding events was supported. The most encouraging, and perhaps curious, evidence in this result is the “flat line” of MM foundings, then the sharp increase beyond 450 SSMs, and then the plateau or normalization of MM founding events from 470 to 500 SSMs. The rapid increase in probability of MMs founding events may indicate that SSMs are switching to MMs at that point. Curious indeed!

I was most eager to see the results for the number of MMs in the nation on MM foundings. Hypothesis 4 ($H4$) argued that additional MMs in the nation would increase legitimacy and therefore increase the likelihood (probability) of MM founding events. I also thought additional MMs in the nation would have no effect on MM founding events (through the competition mechanism).

When it comes to total number of MMs in the nation the main effect is 0.059 and the quadratic effect is -0.003. Figure 6 shows the total number of MMs in the nation and the probability of a MM founding event. The model showed statistically significant results ($p < .10; C.I. = .865-1.301$). When 40 to 80 MMs are present in the nation there is no chance of additional MM foundings at the national level. The presence of approximately 90 MMs only slightly increases the chances of a founding event.
I was surprised with the results because there is only a weak increased legitimacy effect to somewhat support my hypothesis (i.e., the uphill slant). I zealously assumed there would be consistent and incremental increases in the number of MM founding events, almost indefinitely. Although the model reported the relationship between total number of MMs in the nation and the probability of MMs founding events to be statistically significant, the presence of MMs in the nation has very little increased effect on probability, as shown by the little blip on the x-axis. In addition to showing little support for the national-level legitimacy hypothesis, the further evidence does not support the competition hypothesis (H4). As the discussed above and depicted in Figure 6 below there are weak increased indications of competition effects (i.e., the very small downward slant). Thus, evidence of increased legitimacy and competition effects are both present in the results.
Table 6: Hypothesized and Resultant Effects

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Hypothesis</th>
<th>Hypothesized Effect on Founding Rate</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSM City</td>
<td>H1</td>
<td>No Effect</td>
<td>Competition Only</td>
</tr>
<tr>
<td>MK City</td>
<td>H2</td>
<td>No Effect</td>
<td>Competition Only</td>
</tr>
<tr>
<td>SSM Nation</td>
<td>H3</td>
<td>Increase</td>
<td>Legitimacy Only</td>
</tr>
<tr>
<td>MK Nation</td>
<td>H4</td>
<td>Increase</td>
<td>Legitimacy Only</td>
</tr>
</tbody>
</table>

Control Variables

Figure 7 displays the relationship between CBSA population density (in thousands) and the probability of MM founding events. The main effect for population density is -0.001 and the quadratic effect is 3.55E-06. Together these variables demonstrate a pattern of probability discussed below. For cities with population densities less than 1,100 people per square mile the chances a MM founding event will occur is roughly 1 in 10. As the population increases beyond 1,100 people per square mile there is an increased chance of MM founding events, where cities with 1,500 people per square mile experience nearly a 6 in 10 chance that a MM founding event will take place.

In Hypothesis 5 (H5) I proposed that population density would have a positive association with MM founding events in cities. I find support for the hypothesis, though the overall pattern of the results becomes strongly non-linear once population density reaches 900.
Figure 7: Population Density (people/per square mile) and Probability of Multi-site Megachurch Founding Events

The main effect of median income is -6.64E-5 and the quadratic effect is -2.18E-09. The combined result is displayed in Figure 8. Where cities have median incomes from $24,000 to $33,000 the probability of MM foundings increases from 3.5% to 4.1%, respectively. From this point as median income increases there is little or no chance of MM founding events. This suggests that negligible probability of MM founding events occurs only in cities at lower end of median income range. Conversely, cities with middle and upper median income levels have an adverse effect on the probability of MM founding events.

The results do not support my hypothesis (H8) that as median income increases, the greater probability of MM founding events will occur. Further discussion, below, will shed some light on the possible reasons for this pattern.
The main effect for adults (25 years old and older) who earned an associate’s degree is 0.139 and the quadratic effect is -0.089, and together their result is displayed in Figure 9. The best chance for MM founding events (2.6%) occurs in cities where 8% of adults have earned an associate’s degree. However, on either side of this apex, probabilities for such founding events decrease. In short, there is very little chance that a multi-site founding event will happen in cities that have adults with Associates degrees.

I hypothesized (H9) that as the education level increased, the greater probability that MM founding events would occur. As noted above, the evidence does not support the hypothesis.
Figure 9: Percentage of Associate Degrees (25 year olds and Older) and the Probability of Multi-site Megachurch Founding Events

The main effect for African Americans is -0.03 and the quadratic effect is 0.001, resulting in the displayed percentage of African Americans and the probability of MM founding events in Figure 10. Multi-site Megachurch founding event chances remain below 1 in 10 suggesting very little chance of a founding event in cities where African Americans make up 20% to 35% of African Americans of the population. Beyond this point, and as African American percentages increase, founding event chances slightly increase.

To my disappointment, the hypothesis relating to race and ethnicity was supported. Hypothesis H7 supposed that the greater percentage of racial minority or ethnic minority groups in CBSAs decreases the chances for MM foundings. The results showed that the low percentage of African Americans in the city results in low probability of MM founding events between 0% and 45%. As the African American population percentage reaches and surpasses 50% it results in an increased probability of
MM foundings (i.e., breaking a 1 in 10 chance of a founding event when AA population percentages reach 70%. The pattern found in Figure 7 is intriguing because generalized characteristics about race and ethnic minority groups, and African Americans specifically, are indicative of these findings. The evidence, however, does not support this hypothesis. The hypothesis proposed that greater percentages of other racial minority or ethnic minority groups would decrease the chances for MM founding events. However, these other groups (e.g., Asians and Hispanics) were not significant, and thus were removed from the parsimonious model.

Figure 10: Percentage of African Americans and the Probability of Multi-site Megachurch Founding Events

Limitations

As with all research efforts limitations are part of the realities that must be identified for the sake of an honest discussion on what has actually been accomplished with the current project and how these limitations will be overcome in future research. As such, the following paragraphs identify a number of limitations to my project.
First, a primary limitation of the present research includes an inability to examine SSM founding events as I had originally hoped. The primary reason for omitting this part of the analysis was too few founding events for this organizational type in the sample (n = 12). .6% of CBSA-years had one or more founding events and 99.4% had no founding events. However, there is a hypothesis similar to those asked of MMs that will be tested, in the future, for SSM founding events. For example:

**Hypothesis A**: The presence of greater numbers of SSMs in a city constrains the likelihood of other SSM foundings.

This limitation will be addressed and overcome in future research by collecting organizational demographic information on every church on the aggregated list. In sum, there will be no sample of churches (see next limitation) from the list and, therefore, no sample of founding events.

Secondly, the current research only includes a sample of churches, and therefore, a sample of founding events. This reality limits a more extensive determination of the megachurch organizational form. Additional time to collect organizational demographics for the megachurch population will help to overcome this limitation and sufficiently test density dependence theory. Relatedly, DDT, in addition to an examination of founding events, also includes analysis of mortality events. The lack of mortality information on megachurches exacerbates the research limitation. This is akin to attempting to conduct a human demography project and only knowing birth rates and then trying to discuss what is happening to the population. It is just an incomplete picture of the life-span of the group, or in my case the megachurch population. I will train researchers on how to look
for indications of failed megachurches and how to collect these necessary data for further analysis.

Thirdly, the research was limited by the availability of U.S. Census demographics for particular years. This state of affairs limited the number of years that could be examined. While it is true that free access to more years via U.S. Census is limited, other organizations offer the data at a premium price. However, the rationale for beginning the analysis period at 2005 was the start of the American Community Survey did not begin until 2005. This is also an acceptable starting year because 2005 is when we begin to see multi-siting as a phenomenon begin in earnest.

Fourthly, the unit of analysis for which data are available limits the research. With the current data I am unable to get down to the Census block level and conduct this kind of analysis. Thus, CBSA-year, as a unit of analysis means I cannot examine which areas within a city are more likely to get a MM or not.

Discussion and Conclusion

Discussion of Findings

The density regression model results for MMs and SSMs at local-level and nation-level, as depicted in Figures 4-6, are of considerable interest for this research.

In Hypothesis 4 (H4), I expected MMs in the nation to increase the likelihood of additional MM founding events (i.e., legitimacy). I found a statistically significant relationship between the total number of MMs in the nation and the probability of MMs founding events. However, I also found very little legitimacy effect at the national level. I also found very weak competition effects (H4) at the national level. It is rather curious that legitimacy effects and competition effects are present at the national level. Perhaps
these results are reflective of those MMs that are spreading across conventional CBSA boundaries and establishing locations nationally. This kind of new phenomenon could explain the weak presence of both legitimacy and competition. It is too early to determine if this is the case or not for such findings because there just too few of these examples to examine at this time.

At the local level ($H2$), I expected a purely negative relationship between established MMs and additional MM founding events. I found both legitimacy and competition to be statistically significant. In short, it looks like competition is still present, but the pattern depicts the classic DDT pattern where legitimacy dominates at the early stage and competition dominates at the later stage. Perhaps the local legitimation effect is present because most MMs are locally established based on the historical model that supposes that locally founded churches are more attuned and adept for meeting the needs of the local community. This could lead to earlier sustained congregational growth. Whereas outside MMs could face unintentional opposition by potential new members due to a lack of familiarity and trust resulting in longer time for these to reach anticipated growth potential.

As noted above, the number of SSMs at the local level was not statistically significant. I expected no relationship between SSMs in the CBSA and MM founding events pertaining to legitimacy ($H1$) and that is, in part, what I found. I also expected to find a negative competition effect taking place ($H1$), but instead I found no competition effects.

It is not completely clear what this finding means for DDT at this point. However, I venture to speculate on why these results occurred. First, perhaps these organizational
types (SSMs and MMs) appeal to different demographics within the environment. For instance, as suggested in $H6$, SSMs will appeal to older people while MMs will appeal to younger ones. Also, the hypothesis on race and ethnicity ($H7$) suggested that populations where racial and ethnic minority groups are present in greater percentages would exhibit decreased MM foundings. I also hypothesized that demographic differences in income and education level would contribute to MM founding events. In short, these demographic differences could suggest symbiotic splitting of the market along these demographic features and thus resulting in no competition effects.

Second, perhaps no competition effects are present because some SSMs simply switch to MMs when they get too big. Therefore, no competition effects occur at the local level because a select number of very large SSMs switch to MMs instead of competing with other newly established MMs. Given these possibilities, I put forth a new hypothesis for future research where no competition effects are expected.

Lastly I expected legitimacy effects to be present at the national level when I hypothesized ($H3a$), that increased numbers of SSMs in the nation would increase the probability of MM founding events. Additionally, my competition hypothesis ($H3b$) expected to see no relationship between SSMs already present at the national level and the probability of subsequent founding events. Although the resulting pattern is not linear, as I predicted it does go in the right direction, thus supporting my hypotheses.

As the reader may have noticed, my research investigates MM density at the CBSA-level (local) and nation-level (national). These levels were intentionally segregated because national magazines (e.g., Outreach Magazine) and trade organizations (e.g., Leadership Network and MultiSite Solutions) promote multi-site churches, and
thus, suggest that legitimacy effects will occur primarily at the nation-level. Therefore, it made little sense to talk about competition at the nation-level because there is no national market for these churches (very few are establishing satellite locations across state boundaries, beyond their current CBSAs (e.g., Life.Church)). Since this reality supposes localized competition for new attendees, I had to examine this population at the CBSA-level. There should not have been legitimacy effects at the local level; rather there should have been a clear indication of competition. What was actually present in the results was a huge bell-shaped pattern for MMs at the CBSA level, which suggests that it is not just competition, but a heavier than expected presence of legitimacy working there as well. If it were purely competition effects, I would expect to see a pattern dissimilar to Figure 3. Pure competition effects should show a very high founding rate when local density is low and then it should uniformly decline, at which point as more and more founding events occur it will be more difficult to have additional foundings.

At the national level, where I expected a pure legitimacy effect, there should be a pattern dissimilar to that shown in Figure 5. A pure legitimacy effect would have been reflected in a graph where the probability only increased as MM density in the nation increased. However, I found that when there are very few organizations, founding probabilities do not increase much and subsequently come back down. Unexpectedly, this suggests that somehow there is (a mild degree of) competition at the national level and makes me wonder what is going on here.

3 It is possible that downplaying the realized impact of this kind of organizational phenomenon may not be the best long-term strategy. There are early indications/evidence that suggests the unexpected presence of local legitimacy effects (H3a) and national competition effects (H4b).
As I investigate SSMs and MMs I have the fundamental idea that both are indeed megachurches, and therefore, should be competing. So, why are the number of SSMs in the same city completely unrelated to multi-siting? This should not be the case unless competition is not occurring just as church leaders claim. Perhaps, instead of competition, these organizations are showing signs of mutualism. Nonetheless, my research suggests that MMs are only competing against other MMs and quite frankly this is an odd result. This portion of the study reflects some of my further speculation on the results of the study. Furthermore, cause and effect relationships are not empirically justified at this stage of the study. As the evidence suggests there are indications that selected variables and posited hypotheses require greater measurement and scrutiny to explain the megachurch organizational phenomenon. I caution the reader to suppress desires to take these findings and speculations as prescription for immediate or future organizational strategizing for growth. There are several unknown remaining elements pertaining to this research that must be addressed moving forward.

Discussion with the Literature

Hannan and Carroll (1992) found statistically significant support that initially low densities were characterized by low legitimacy and low competition. As additional foundings occurred (increasing density) so did legitimacy and competition, to the point that competition was the primary characteristic leading to failure of some organizations. As noted above, my findings are not consistent with those of Hannan & Carroll, and suggest more questions about DDT when applied to the megachurch organizational population. First, are the findings inconsistent because something other than DDT’s standard characteristics of legitimacy and competition are present (i.e., mutualism)?
Second, does the inconsistency suggest that DDT, in its current form, does not apply to religious non-profit organizational populations? Third, if DDT’s findings are not sufficient in explaining the spread of MMs, then what organizational theory/theories are better suited to answer these crucial questions?

Carroll, et al. (1993) observed that in the early going of industry foundings (e.g., American and German breweries), density had a consistent outcome on mortality rates. Although both industries experienced higher mortality rates during founding periods of high density in comparison to those of low-density periods, US breweries were more negatively affected by the threat of higher mortality (p. 181). In the particular case of my research, no hypotheses were proposed or evidence collected to determine the relationship between early organizational founding and its impact on later mortality. These particular kinds of questions will be the focus of future continuing research on this organizational population. One foreseeable roadblock to mortality related research for megachurches is the lack of credible data on megachurch failures. One way to address this problem will be the examination of online real estate listings (e.g., loopnet.com) and create a concise database of closed megachurches. The fruitfulness of implementing this strategy is unknown, yet hopeful.

Wade’s (1996) community-level analysis concluded that at the beginning of the microprocessor industry’s history increased density corresponded with increased legitimacy. “As numbers grow, the capital market increasingly sees the industry as viable, and access to capital increases” (p. 1240). Following the traditional outcome for density dependence, the microprocessor industry, is then “taken for granted, and competition dominates” resulting in the decline of “new sponsors with original designs”
(p. 1240). Although my research was not strictly at the community-level, MMs saw increasing density patterns with increased levels of legitimacy at the national level ($H2$ and $H4$) and mixed indications of competition at the local level ($H1$ and $H3$). Thus, my results largely agree with Wade’s findings.

Greve’s (2002) research on the Tokyo banking industry from 1894 to 1936 proposed a theory of spatial evolution as an extension of Hannan & Freeman’s temporal evolution theory. Greve (2002) found strong support for “the number of organizations within a geographical area has an inverted-U-shaped effect on the rate of organizations entering the area” (p. 853). However, Greve (2002) also found robust evidence of contagion theory where “the number of organizations within a geographical area is positively related to the rate of organizations entering the area” (p. 851). These results led Greve (2002) to conclude that he could not differentiate between the two, but both were present.

My research suggests similarities to Greve’s aforementioned explanation. MM’s at the local level indicate an inverted U-shaped pattern, but does not test for the presence of contagion within the shared geographical area. As Greve speculated about the presence of contagion, and thus, the inability to differentiate between legitimacy and contagion effects, I can only speculate on the presence of mutualism effects (to reiterate an earlier point and one that is argued by Barnett & Carroll, 1987 below) which may be bolstered by contagion theory.

Finally, I noted a contingent of scholars offering contextual examinations where two or more competing populations demonstrate positive correlations of low density and
innovation prior to the onset of high density and competition (Barnett and Carroll, 1987; Dobrev, Ozdemir, and Teo, 2006; Barron, West, and Hannan, 1994).

Barnett & Carroll (1987) found that mutual organizations (those who improve one another’s viability) and commercial organizations (those maintaining some form of competitive relationship) support density dependence predictions of legitimacy for newer organizations (establishing networks) and competition for established commercial organizations.

Dobrev, et al. (2006), as an extension of Barron, et al’s. (1994) New York credit union research, investigated Singapore’s finance industry. Dobrev, et al. test their theory of organizational interdependence (i.e., the positive and negative effects of emerging financial co-ops and established banking). They suggest that previously established density effects (i.e., legitimacy and competition) are present especially when “the violation-by-comparison [overlapping identity space between emergent and established organizations] effect is integrated into the model” (p. 593; bracketed information added).

My research was not designed to investigate organizational interdependence, per se, or the relationship specific to violation-by-comparison. However, my unanticipated DDT findings, when applied to modern megachurches in the U.S., could be indicative of the overlapping identity space between established SSMs and emergent MMs.

Barron, et al. (1994) although directly examining organizational age and size for credit unions (State-chartered and Federal) in New York, found support for density dependence for the overall credit union population. For instance, when State Credit Unions (SCUs) faced low density early in history and FCUs gained greater regulatory support, there was a positive effect for SCUs as well (i.e., legitimacy). Additionally,
competition favored the older and larger credit unions regardless of brand (SCU or FCU). In short, as the New York credit union population gained legitimacy, and thus additional foundings. Legitimacy then became less important and was overtaken by competition between SCUs and FCUs. Barron, et al. argue that such competition benefited credit unions of both varieties, with increased liability of smallness.

The recurring theme of a sort of symbiotic relationship between established SSMs and emerging MMs suggests that legitimacy for the former is ushered by that of the former. However, I found no relationship between SSMs and MMs at the local level and furthermore there is little explanation for why SSMs switched to multi-site at the national level.
CHAPTER III
INERTIA, NICHE WIDTH AND ISOMORPHISM AMONG MODERN MEGACHURCHES IN THE U.S.

This section of the study is chiefly concerned with examining those factors that predict organizational adaptation (specifically, here, the phenomenon of SSMs becoming MMs). While it is unknown how often switching occurs, some church researchers have strongly suggested that church growth among this population of organizations is predicated on churches implementing a multi-site strategy. The key theoretical frames applied in this chapter are inertia and niche width as sub-categories of organizational ecology (OE) and isomorphism as a key feature of new institutional sociology (NIS). Before describing and applying these theoretical frames to the megachurch context, however, it is important to define what a single-site megachurch is and the principle problem faced by single-site churches that allowed the multisiting movement to gain traction.

What is a single-site church?

A single-site church, as the name implies, is a church with only one geographic location. Although the multi-site form is spreading throughout the American Protestant Christian landscape, single-site churches remain the most prevalent form of church. Consequently, when single-site churches seek strategies for growth they consider four possible options; (1) church planting, (2) adding additional worship services, (3) building expansion projects, or (4) multisiting.
Church planting as a solution for growth

Church planting, as discussed here, is strictly focused on establishing new churches in the American context. Generally speaking, church leaders and attendees want their churches to grow. Perhaps not all want the same amount of numerical growth, but they recognize the importance of new people becoming part of the church. Church planting in the American context is a viable option for growth of the overall organization in two primary ways. First, all church planting efforts are designed to grow the universal church. In other words, whenever a new church is started and adds new members/attendees/converts The Church, writ large, grows (i.e., organizational population increase). Second, a local church organization benefits from temporary growth. One prominent church planting model requires established churches to send a portion of their congregants with the church start-up. This action creates space in the parent church for new members/attendees/converts, but also – barring building expansion, sets back church growth at the initial church site. The primary issue with church planting as a growth generating model is the newly organized church is only temporarily related to the sending church. Most church planting models have the desired outcome for new churches to be autonomous within a prescribed time period; therefore, with exception to churches in on-going relationships to one another, growth is only temporary.

Multiple worship services as a solution for growth

One longer term strategy for implementing church growth came with the expanded use of church building space. Church leaders responded to potential congregants by providing additional worship services. Changing cultural norms for
church participation, competition for coveted weekend timeslots for sports involvement for children, and extended work hours exacerbated the need for multiple worship services. Innovative churches established Saturday and multiple Sunday services for would-be-attendees and members; and the people responded. So, without investing financial capital in building expansion projects, churches were able to leverage their physical space and benefit from numerical growth. The cost of adding multiple worship services was squarely placed on paid church staff, most notably the preacher. Newly created positions like teaching pastor and executive pastor provided a division of labor allowing senior clergy to reduce their organizational responsibilities to strategic planning and overall direction for the church. Additional normative patterns emerged to alleviate time constraints for pastors such as preaching identical sermons at each worship service, codifying a liturgy in both traditional and non-traditional churches, preaching sermon series that allowed for few sermons to be preached by some senior pastors over 12 months.

Church building expansion as a solution for growth

Starting around 1975, another long term church growth strategy arose as church leaders (clergy and lay) made decisions to build larger buildings to accommodate burgeoning congregations. Instead of using a church planting strategy as the core means for accommodating the influx of new people, these churches decided to purchase large tracts of land and build larger facilities to house their services and activities. This shift in thinking led to the modern megachurch movement in the U.S. This movement was characterized by its monolithic nature – one physically large organizational structure where 2,000 or more people gather to worship.
**Multi-site Organization Phenomenon**

Multisiting is a growth strategy that differs from church planting, adding worship services, and building larger buildings. Unlike church planting, new churches in the multisiting model is primarily designed to be part of the establishing church (i.e., one church with multiple locations). Multisiting also differs from adding services in that it establishes an entirely new church complete with staff and separate meeting location. Clearly, multisiting is different from building bigger (on one geographic site) because the former are offsite locations (as viewed in this study). This unique church growth strategy is the key outcome for this current study.

Researchers regularly define “multi-site church” as a range of growth strategies. One definition includes churches with multiple venues on a single land parcel (with each venue having a worship service tailored to a specific worship style, age group, language group, and/or alternative delivery method) (Thomas & Ahlen, 1999). A second definition includes multi-site churches as those with one or more off-site locations (worship spaces located in different neighborhoods of the same town/city or even in different towns/cities altogether) (Surratt, Ligon, & Bird, 2009; Shields, 2007). A third definition conceptualizes churches with Internet worship services as being multi-site because the space transcends geography and perhaps reaches a demographic of people who would not/could not attend a brick-and-mortar church building (Estes, 2009). However, these different expressions encapsulate a generally agreed upon understanding that a multi-site church is, at its core one church with multiple locations. The current study only views multi-site as a church with more than one distinct geographic location. The multi-site church is also viewed as one with shared leadership and accountability, financial
resources, mission and goals. The shared aspect of these churches still allows for different applications per social and cultural contexts.

Multisiting can happen through the process of a parent church establishing one or more additional locations. But, it can also occur when two or more established churches decide to merge (Tomberlin & Bird, 2012). Recently, however, new church planting projects have been integrated with multi-site strategies making the pairing responsible for a resurgence in church attendance among these churches (Stetzer & Bird, 2010). The change in perspective occurred because formerly competing strategies were now viewed as complimentary as churches aimed to grow the universal church and the local church. Instead of an either/or strategy, the perspective is moving toward a both/and strategy.

The emergence of multi-site churches has, according to the literature, occurred relatively recently. According to Schaller (1994), a prominent church researcher, multi-site churches began in the 1950s (Schaller, 1994). Later, Schaller would note that the organizational development of multi-site churches coincided with the multisiting of other for-profit organizations during the same period (Schaller, 1999). Surratt, Ligon, and Bird (2009) claim that between the 1700s and 1980s there were fewer than 100 multi-site churches in existence. A decade later, they note that the number of multi-site churches doubled to 200, and that the first 9 years of the new century saw multi-site churches go from 300 to 3,000 (Surratt, Ligon, & Bird), p. 217). This historical view suggests that the peak emergence period took place between 2000 and 2009. By 2014, Bird claimed that 8,000 multi-site churches were in operation (Bird, 2014).
Inertia and multisiting

The first element of OE that can be applied to the study of adaptation of megachurches (in the form of becoming multi-site) is the concept of inertia. OE argues, rather clearly, that industry change occurs primarily through organizational turnover rather than adaptation because of inertia. Unchanging organizations within industries die and are replaced by new organizations with new ways of structuring, operating, and engaging. Turnover then, is different from adaptive change in the sense that adaptation suggests that industries change because existing organizations change (and continue to operate).

From the OE perspective, adaptation is difficult for existing organizations because of inertia. For OE researchers, inertia can exist both internally and externally for an organization. For instance, internal inertia includes sunk costs (e.g., physical building, equipment, and personnel), and internal politics that create informal standards for organizations of like-kind. External inertia forces are barriers – sometimes legal – that allow or disallow actions within particular organizational populations (Hannan & Freeman, 1984, p. 149).

OE argues that inertial forces are so strong and determinative that organizations are all but incapable of breaking free. OE argues that this has an unexpected benefit however, since strong inertial pressures produce stability and, in many ways, organizational legitimacy. As noted by OE’s founders; “the modern world favors collective actors that can demonstrate or at least reasonably claim a capacity for reliable performance and can account rationally for their actions” (Hannan & Freeman, 1984, p.153; Carroll & Hannan, 2000). Inertia suppresses adaptation because if organizations can make decisions at all, they must be ones that are commensurate with inertial forces.
Generally speaking, OE maintains that environments and organizations favor inertia because it provides reliability and accountability. Populations of organizations facing market volatility seek to demonstrate reliability in the face of uncertainties. In other words, organizations demonstrate stable, decisive, and accurate responses to change. Accountability is the organization’s ability to “construct rational accounts for [their] actions” (Carroll & Hannan, 2000, p. 364). Both reliability and accountability produce pressure for organizations to maintain high performance or risk not being selected by the environments, resulting in death of the organization.

Hannan, Polos, and Carroll (2004) refined the OE definition of inertia as “persistent organizational resistance to changing architecture [or organizational values (“e.g., form of authority, pattern of control relations, and so forth”)] (given expected costs and benefits of changes)” (p.214). They argued that environmental selection (i.e., environmental choices to retain some organizational populations and/or organizational forms over others) “favors inertia” (p. 214). In other words, environments select organizational populations that exhibit high levels of inertia as a sign for stability.

The strength of selective inertial pressure is relegated by intricacy (complexity), opacity (limited foresight), and asperity (organizational culture). Intricacy is the immense level of organizational complexity that almost requires that organizational populations not change. Such intricacies are not easily or potentially disentangled from every sinew of the organization, and thus, are maintained with vigor. Furthermore, opacity plays an important role in organizational inertia because it highlights the inability for organizations to effectively determine the time required to make changes and estimate the
required costs of said changes. Finally, asperity is reflective of an internal organizational culture that is resistant to change.

*Findings related to inertia*

OE scholars have studied the relationship between organizational age (i.e., life stage of organizations) and the presence of inertia, and have concluded that inertia increases as age increases. This suggests that older organizations within environments present more structural inertia which in turn is favored by those environments (M. T. Hannan & Freeman, 1984; Ruef, 1997; Baker & Cullen, 1993; Ranger-Moore, 1997; Carroll & Hannan, 2000).

Ranger-Moore (1997) was one OE scholar who tested the relationship between inertia and organizational age. Ranger-Moore (1997) investigated the role of structural inertia with age, density, etc. (population characteristics), and environmental impacts (periods characterized by major industry shifts, corruption, and war) in New York life insurance companies. His research was commensurate with Hannan & Freeman (1993), that large organizations exhibited lower failure rates, regardless of period, due to the preponderance of reliability and accountability via established “resources, political power, and the ability to generate stronger competition” (p. 917).

OE conceptions also suggested that organizational size (i.e., organizational growth and decline), along with age, would have a positive relationship to structural inertia (Hannan & Freeman, 1984). Baker & Cullen (1993) examined a sample of 200 four-year colleges and universities (1969-1978) to test the relationship between size (growth & decline), age (young to old life cycle stages), and the role of inertia (i.e., leading to administrative change or demise). They concluded that larger and older (non-
declining) colleges and universities had “the highest levels of reorganization” (p. 1269). This general finding relating to organizational populations, differed from Hannan & Freeman’s (1994) earlier notion. Conversely, older, larger, and declining schools showed less reorganization than their younger declining counterparts. Baker & Cullen reasoned that established resources (technological, political, and investment) may likely contribute to the difference. Thus, a main lesson learned is that environments select organizational populations that are older and larger because they exhibit positive aspects of inertia. This is a stark contrast to notions that organizational managers examine the environmental landscape and adapt to arising changes and shifts (as is posited by NIS).

*Inertia in the megachurch context*

High levels of structural inertia can be expected in both single-site megachurches (SSMs) and multi-site megachurches (MMs). Internal structural inertia may exist in the form of financial investments in land and buildings, and in the presence of specialized personnel working towards spatial expansion and increased membership growth. Churches are reluctant to change because they have invested considerable financial resources in existing land and buildings and/or may not want to spend additional money on new ones. Additionally, churches that have invested in specialized personnel may now find themselves reluctant to change because of the expense to reassign or retrain said personnel. Internal structural inertia may also originate from church members and religiously-educated staff members. I suspect these two groups work together to establish and maintain normative standards within megachurches. Industry standards, such as the norm of high-quality production of worship services, new member and educational programming, and demographically-focused programs – all designed to attract and
socialize new members – make it difficult to deviate from the normative organizational culture.

External structural inertia may occur when SSM repeatedly seek zoning variances for church expansion. Local municipalities may curtail building expansion plans due to the increased burden on infrastructure (e.g., roads, water and sewage, police personnel) that continued expansions begin to cause. External inertia may also occur when denominational associations reinforce theological positions on social issues that constrain megachurches from recruiting who and how they like in their respective markets.

**Niche width and multisiting**

A second element of OE that can be applied to the study of adaptation of megachurches (in the form of becoming multi-site) is the concept of niche width. Niche width theory envisions a spectrum of organizations between two opposed ideal types: the specialist and the generalist. The specialist is an organization that occupies one environmental niche (a niche being defined as resource space needed for organizational populations to exist (Carroll, 1985). The generalist, on the other hand, is an organization that occupies more than one niche. A prototypical example of the difference between a specialist and generalist can be seen in the retail clothing industry, where the specialist is the boutique clothing retailer while the generalist is the department store.

One given characteristic when discussing organizations is the understanding that environments are not static. They can have moments of high volatility, periods of stability, and everything between the two. Populations of organizations find ways to exist and persist in such environments. Environmental volatility usually favors generalists over specialists because they have a wide-array of services, products, and/or skills to handle.
instability. Just as generalists normally thrive in volatile environmental settings, specialists thrive in stable ones. Specialists have a narrow and normally highly specialized and/or unique services, products, and/or skills to offer.

The concept of niche width is most often used by OE to examine organizational survival, but the concept can be extended to the examination of adaptation as well. While large adaptations that fundamentally alter the core structure of the organization are hard to enact due to inertia, organizations can be designed with some (micro-level) adaptive ability when founded. Correspondingly, both specialist and generalist organizations have some ability to adapt to changing environmental conditions built-in from their inception. Compared to generalists, specialists have a smaller latitude for adaptation because they occupy only one niche. A high-end boutique women’s clothier, for example, can change the brands, styles, or sizes they stock, but their new stock must always be expensive and made for women. Generalists, on the other hand, have a larger latitude for adaptation because they occupy more than one niche. A department store, for example, can change brands, styles, or sizes just like the specialist, but they can also shift resources between departments, favoring the menswear or some other department if women’s clothing sales drop. Generalists like department stores can also more easily add new departments (provided they are compatible with their overall identity as a department store, which itself cannot be changed due to inertial forces).

Findings related to niche width

OE’s work on niche width theory shows how, generally, niche width might be measured and what the effects of generalism and specialism are for competing organizations. For example, in a study of technological niche width among automobile
manufacturers (1885-1981) Dobrev, et al. (2002) defined technological niche width as a “range of engine capacity in terms of horsepower across all models produced by each firm at any given point in time” (p. 249). They concluded from the findings that broader niche width (technological) benefitted those corporations by reducing mortality rates reliant on industry mergers (p. 262). They also found that if considerable crowding occurred in a particular niche mortality rates increased.

Swaminathan (1995) studied specialist organizations in the American wine industry from 1941 to 1990. Part of his work examined how niche formation occurred as an expression of consumer preferences (i.e., selection) in the wine industry-consumers interaction. While it is true that Swaminathan also studied density dependence, resource partitioning, and institutional support, niche formation is most germane to the study of SSMs here. Swaminathan argues that small organizations, in general, have a narrow niche width (supported by previous organizational research; see Hannan & Freeman, 1977; Delacroix, Swaminathan, & Solt, 1989; Carroll, Dobrev, & Swaminathan, 2002). Swaminathan concluded that niche formation was supported in his research. Moreover, the findings highlight the importance of “carrying capacity of an organizational population” (p. 675). In other words, specialist organizations, typically small in size, often face strain and/or mortality when consumer environments are less than stable, an argument put forth by Freeman & Hannan (1983). Therefore, carrying capacity enables organizational populations to meet environmental needs and experience lower mortality rates.

Hsu (2006) examined the U.S. film industry’s niche width and audience appeal – via audience responses to movies (i.e., population of organizations relating to
environment) for years 2000 to 2003. Hsu’s findings showed that movies with appeal to broader niches attracts larger viewership. Hsu also affirms previous research that generalist success or failure is due to context (as referenced in Hsu - Freeman & Hannan, 1983; Hannan & Freeman 1989; Dobrev, Kim, & Hannan, 2001, p. 444). However, there is also some evidence to suggest that too broad of an appeal can be detrimental to generalists.

**Niche width in the megachurch context**

The concepts of generalism and specialism transfer well to the church context. In both forms attendees are the resource base providing the link to secondary and tertiary resources (e.g., donations; volunteer hours, service to the broader community) necessary for the survival of voluntary organizations, like churches. While much of the discussion on generalism and specialism is presented in purely dichotomous terms, in the case of churches generalism and specialism are more like the endpoints of a continuum. With their small congregations and focused doctrines, small denominational churches tend to be the most specialized among all churches. Due to their large congregations, both single-site and multi-site megachurches fall more towards the generalist end of the spectrum.

That said, key differences in the structure of single-site and multi-site megachurches suggest the two types are not *equally* generalist. Among megachurches, SSMs are those organizations that have narrower niche width and attendee appeal, making them more specialist than MMs. The presence of multiple sites allows MMs to differentiate (to some degree) the programming offered at different locations; this allows the church as a whole to broaden its appeal to a wider range of attendees. For example, a multi-site satellite location can offer an after school program for neighborhood children.
where a high percentage of single parent families live and shift work is prominent. The main location of the church may not have the kind of programming, but instead offers Sunday School programming for its children. Collectively, the church has expanded offerings for children across myriad of needs. With multiple locations also comes greater diversity (racial and ethnic, income, socio-economic status, educational attainment level, and cultural identity) among attendees. Greater attendee diversity, in turn, provides a reason for the church to engage in a more diverse array of activities. For example, a church may offer motorcycle rider’s club for retirees and adult co-ed volleyball leagues, all with the core goal of building intentional faith communities.

**Isomorphism and multisiting**

In sharp contrast to OE, which views (rare) multisiting adaptations through the lenses of inertia and niche width, NIS sees (regular) adaptations such as multisiting through the lens of isomorphism processes. Isomorphic processes depend on how social groups (church leaders, church attendees) view the legitimacy of existing organizational alternatives. Emerging challenges to the legitimacy of an established organizational format can lead to a collective search for alternative formats. Just as challenges to the legitimacy of small (i.e., non-mega) churches, such as the fear that small church programming was losing its appeal to younger generations, led to the movement toward single-site megachurches, challenges to the legitimacy of single-site megachurches may be creating a movement toward multi-site megachurches.

The challenges to the legitimacy of single-site megachurches stems from three main fronts. First, in context of single-site megachurches, many had been engaged in
church planting, added worship services, and built larger facilities; however, local municipalities began restricting the new building expansion permits. Second, there was rising concern that generations of people, generally Gen-xers but specifically millennials, were beginning to resist larger churches because they represented a perception of institutional religion that was aloof and socially inept. Thirdly, it did not help that megachurches became prime locales for political figures at the federal, state, and local levels to make appearances at these churches during election seasons. In some cases, politicians would have the opportunity to deliver spiritual messages in combination with political overtures. These three factors contributed to a social repulsion among many young people, what some popular church researchers call the “un-churched” (Fuller, 2001; Rainer, 2001) or what other researchers call the religiously unaffiliated (Baker & Smith, 2009; Lim, MacGregor, & Putnam, 2010) Church leaders found a potential solution to these problems in multisiting.

*Industry change through isomorphic adaptation*

According to NIS, when faced with a common organizational problem, organizations within an industry scan for environmental shifts and devise similar, if not identical, solutions. DiMaggio & Powell (1983) outlined three ways in which this occurs. First, at times industry change is enforced by external governing bodies (coercive isomorphism). Second, there are times when change is inculcated through social institutions (normative isomorphism). Finally, at other times, industry change occurs when organizations within the same industry copy the “best-practices” of other organizations to cope with uncertainty (mimetic isomorphism).
Subsequent theoretical work has corroborated this multi-path shift to isomorphism. Mizruchi and Fein (1999) argue that all three forms of isomorphism are serious possibilities, cautioning researchers not to assume that any observed isomorphism is mimetic without giving careful consideration to coercive and normative processes. Beckert’s (2010) theoretical work agrees with DiMaggio & Powell (1983) that isomorphism is present in institutions by using the term “institutional homogenization” (p. 150). However, Beckert, 2010 also believes that subsequent research within NIS has been too narrowly focused on isomorphism itself and excludes other possible reasons for why organizations look alike. Akin to DiMaggio & Powell’s isomorphic typology (i.e., coercive, normative, and mimetic), Beckert proposes power (“push factor”), attraction (complex “pull factor”), and mimesis (“simpler form of imitation”). In addition to these, Beckert argues for the presence of competition (i.e., “competitive pressure leads to the institutional convergence”).

**Findings related to isomorphism**

Strang & Macy (2001), proposed an empirical model derived from two primary theoretical streams, the spread of organizational populations and “institutional mimicry” (i.e., isomorphism). They refrained from discussing the various isomorphic categories found in the classic literature (e.g., DiMaggio & Powell, 1983; Mizruchi & Fein, 1983), but concluded that “adaptive emulation” takes place among these organizations. In other words, organizational responses to presumptive failure results in adoption of “best practices” that are rationalized to bring on successful results among peers (p. 148). Strang & Macy (2001), upon running four experiments, deriving the concepts of “worthless innovations,” “reluctant innovators,” “effective innovations,” and “effective firms,”

Liang, Saraf, Hu, & Xue (2007) examined standard NIS isomorphic effects on implementation and assimilation of enterprise resource planning (ERP) by top organizational management. ERP is a software platform allowing businesses to link all of their behind-the-scenes office functions (e.g., finance, human resources, technology allocation, etc.). Liang, et al. (2007) argued and hypothesized that coercive, normative, and mimetic effects are mediated by human managers at the top of the organization (although my current research on SSMs does not explore the role and interaction with top decision-makers it is concerned with the role of isomorphism as detailed above). Liang et al (2007) found strong support for DiMaggio & Powell’s and Mizurchi & Fein’s notions that isomorphic effects shape what organizations look like; most notably that they resemble one another.

*Isomorphism in the megachurch context*

With respect to megachurches, pathways exist for coercive, mimetic, and normative isomorphism to operate. Coercive isomorphism may occur as megachurches attempt to establish and maintain credibility (i.e., legitimacy) with external financial organizations (e.g., Church Mortgage Alliance, Brotherhood Mutual), accreditation organizations (e.g., ECFA), denominational (e.g., Southern Baptist Convention, The United Methodist Church, The Church of God in Christ) or religious associations (e.g.,
Association of Related Churches, National Association of Congregational Christian Churches. Each of these external entities may exert a spectrum of coercive pressure; from requiring adherence to standards of financial accountability, transparency, fundraising, and board governance, to providing guidance for handling conflict, finding a pastor, and conducting annual meetings.

Mimetic isomorphism may occur when megachurches respond to the uncertainty of how to attract new members in changing environments. These churches look to other (leading) organizations, within the shared environment, to see how they attract new customers or members, and discover organizational strategies of expanding the church by adding more convenient or specialized church locations. Multiple megachurches that are repeatedly identified as highly successful have gone multi-site (e.g., Southeast Christian Church in Kentucky and Indiana, and The Rock Church in California), providing the key “beacon” for other churches to follow for the mimetic isomorphism process to happen.

Normative isomorphism may be less of a force among megachurches because of how the professionalization of church personnel takes place. Formally, Bible colleges and seminaries are largely responsible for training PC clergy, and less formally, some denominational groups allow local churches to train and ordain clergy. However, these formal educational institutions may rarely prepare clergy and administrators for operating in a multi-site church structure. Most of these schools are associated with larger denominations who in turn promote more established forms of church organization. Thus, seminaries are charged with training clergy for service in denominationally established church forms. Although the multi-site strategy is by now well-known, theological curricula may not yet reflect these changes. However, another potential source of
normative isomorphism may exist through external organizations like Leadership Network (LN) and MultiSite Solutions (MSS), both of which function similarly to industry trade groups in the for-profit environment. Both organizations provide ongoing training to church leaders and both have publicly promoted the multi-site strategy. Thus, church leaders who participate in one or both of these trade groups may collectively become convinced that multisiting is the norm of the future.

**Description of the present study**

The purpose of this paper is to examine what church and community characteristics are associated with a single-site megachurch switching to the multi-site megachurch format. I considered the two primary categorical possibilities for organizational change presented by OE and NIS when applied to the megachurch switching phenomenon (i.e., from single-site to multi-site). As argued by OE, the study explores non-switching events as clear indications of inertial pressures and niche width. While the presence of switching gives evidence of NIS’s isomorphic adaptation within the industry.

There is at least two-fold value to this study. First, churches will be better equipped to further understand the relationship between organizational change and current church growth strategies. For too long church decision-makers have relied too heavily on pragmatic solutions to growth that work in some contexts and fail miserably in others. Second, organizational researchers will gain value from this study because this work extends the organizational literature and theory into an institutional domain that is relatively new and is evolving.
Methods

As noted above, this chapter examines structural inertia, niche width, and isomorphism as they relate to likelihood that a SSM will become a MM.

Unit of Analysis, Examination Period, and Sampling

The period of observation for this study is 2005 to 2013. Although the earliest indications from the literature suggest the “experiment” with switching began during the 1970s (McIntosh, 1997, pp. 138-140), very little data exists to support such proposed research here, thus 2005 will serve as the starting point. The year 2005 is important for this research because megachurch list data begins at this point. The previously compiled megachurch list data offers additional megachurch information on denomination and/or affiliation relationships for the organizational population.

The study focuses on the 498 megachurches that were single-site as of the start of the observation period (2005). In total, these 498 churches provided a total of 4292 church-years of data for the analysis. These 498 megachurches were obtained by first drawing a random sample of 541 churches from the larger list of 832 megachurches. Of these 541 originally sampled, 43 were already multi-site churches as of 2005 and were thus eliminated from the analysis. The main purpose for relying on a sample for this analysis was the need to obtain individualized church data from individual websites in a timely manner. This information included the exact date at which a church went multi-site, which was critical for constructing the dependent variable. The fact that the analysis is based on church-year data means the results tell us the odds (and from the odds, the probabilities) that a SSM will switch to a MM in a given year rather than over the course of the entire study period.
Dependent Variable

The dependent variable (DV) was a church transition event (adaptation). Megachurch transition events were measured as 0 when SSM remained a SSM and as a 1 when a SSM switched to a MM. Data used to create the DV originated from the megachurch list which was a compilation of OM’s 100 Largest Churches (2005-2013) and HIRR’s online Megachurch list. It was verified via church websites and rightly concluded that SSMs reporting only one location were indeed SSMs. It was also noted on the list if a church had become a MM. Since the 9-year period was captured for the study I was able to determine (1) if a church was SSM or MM, and (2) at which point a church transition to MM occurred.

Focal Independent Variables

The focal independent variables (IVs) for the analysis correspond to the OE and NIS concepts identified in the literature review: inertia, niche width, and isomorphism. Inertia was measured in four ways. First, the age of the church helped to measure one dimension of inertia, as OE posits that older organizations will be more tied to their existing ways of operating. Second, whether the church was among the largest in the nation helped to measure a second dimension of inertia, as OE posits that larger organizations find it harder to adapt. Third, whether the church was among the fastest growing in the nation helped to measure a third dimension of inertia, as those churches that are growing rapidly are logically those that have the least inertia, since they must (as a function of their rapid growth) be adapting to rapid growth itself. Finally, inertia was measured indirectly by capturing the denominational association to which each church belongs. Many Protestant church denominations have churches with 2,000 or more
attendees, making them megachurches by size. However, some denominations have greater representation among MMs than others, indicating that those that less representation may have formal ways of constraining switching among their member churches. In this sense, not switching due to denominational constraints (e.g., not advocating such innovations or making theological arguments that suggests switching is akin to syncretism) is an expression structural inertia. Niche width was assessed indirectly by measuring the racial, ethnic, and educational diversity of the ZIP code in which the church was located. Isomorphism was measured by capturing church affiliation with selected organizational associations and by measuring the number of MMs in the nation. SSMs affiliated with organizations that seem to support or advocate multi-siting as a practice may serve as an influence for switching to the strategy. Likewise, as the number of MMs grow in the nation and are portrayed as the reason why churches are growing, SSMs might feel strong pressure to conform to a multi-site form.

**Inertia measures**

Church age was calculated from the church founding dates obtained from the church list data and church website searches. According to OE a commonly held idea is that older organizations do not change due to immense inertial pressures. Thus, the following hypothesis was tested for this study. However, researchers highlight that multisiting increases with church size (Bird, 2014; Bird & Walters, 2010). The following hypothesis is stated according to the argument made by OE:

**H1:** As church age increases in years, chances will decrease for SSMs switching to MMs (i.e., increased age leads to increased inertia).

To address church size as an independent variable, I examined OM’s 100 Largest Churches list for 2005 to 2013. The multi-site literature reports that multi-site churches
come in all sizes. It also argues that being a megachurch is not a prerequisite for adopting a multi-site strategy. Bird and Walters (2010) discovered the average multi-site church size to be 1,300 attendees and that churches with as few as 100 attendees were going multi-site. However, researchers also admitted that larger churches are more likely to be multi-site (Bird & Walters, 2010; Bird, 2014). Figure 1 from Bird & Walters’ adaptation of Thumma & Bird research shows 35% of the smallest megachurches reporting between 2,000 and 2,999 attendees, 48% between 3,000 and 4,999 attendees, 69% between 5,000 and 7,999, and 86% with 8,000 and more attendees were multi-site. By 2014, as shown in Figure 2, with slightly different size categories the positive trend remains (Bird, 2014).

Figure 11: The Larger the Church, the More Likely to be Multi-site (2010)*

*Thumma & Bird, 2008 as adapted and cited in Bird & Walters, 2010
It is known that every MM was once a single-site church. Two aforementioned studies have also shown that larger megachurches are more likely to be multi-site. However, the relationship between SSMs switching to MM and church size was unknown. Given this curiosity, I expected to see increased chances for larger SSMs switching to MMs. Thus, the following hypothesis seeks to investigate these study trend results as they relate to multi-site switching among SSMs:

**H2:** As SSM size increases, the likelihood of switching decreases (i.e., increased size leads to increased inertia).

In addition to producing an annual list of the 100 largest churches in the US, Outreach Magazine also publishes a listing of the top 100 fastest growing churches. For the purposes of this study I collected fastest growing megachurch lists for 2005 to 2013. General characteristics for churches on the list were maintained (e.g., church name, rank, location); however, the lists underwent some methodological changes over the examination period. For instance, in 2005 rankings were exclusively based on the number
of attendees gained. By 2008 researchers starting using a different ranking strategy that included growth by number and growth by percentage.

**H3:** *SSMs making it on the 100 Fastest-growing churches list (2005-2013) have increased chances of switching to MMs (i.e., increased growth leads to decreased inertia).*

Denominational affiliation information was collected from OM’s 100 Largest Churches listings (2005-2013), HIRR’s online largest churches list, and individual church websites. Numerous zip codes were represented in the study which means that a diverse number of denominations were likely present. To avoid suspected problems with multicollinearity, the 48 individual denominations were collapsed into six groupings (Black Protestants, Evangelical Protestants, Mainline Protestants, Nondenominational Protestants, Other Protestants, and Unknown Protestants). See Appendix A for specific church denominations assigned to one of these six groups. The six groupings have become the standard by which religion researchers categorizes American Protestant churches (Steensland et al., 2000); Association of Religion Data Archives, Association of Statisticians of American Religious Bodies). Admittedly, some of the churches represented in this megachurch study did not fit clearly within Steensland et al.’s (2000) typology, so I assigned these denominations to specific groups based on my knowledge gained through exposure and interactions with these churches.

Some denominations have resisted the adoption of the multi-site model on grounds relating to theology, ideology, or church polity (e.g., some mainline denominations). Other denominations have embraced multisiting and are proponents for extending the strategy whenever possible (e.g., evangelical protestant denominations).

**H4:** *SSMs in relationship with certain denominational groups (e.g., Mainline Protestants) will have a decreased likelihood of switching (i.e., certain denominational groups will have greater inertia).*
Niche Width Measures

The U.S. Census American Fact Finder provided specific zip code data for areas surrounding each SSM in the sample. For race, Census data was obtained on the percent of a ZIP code population that was White, African American, American Native/Native Indian, Asian American, Native Hawaiian/Pacific Islander, other races, and two or more races. For ethnicity, Census data was obtained on the percent that was Hispanic/Latino and non-Hispanic. For educational attainment, Census data was obtained on the percent of adults, age 25 years old and older, with an education of less than 9th grade, 9th-12th grade- no diploma earned, high school and equivalent, some college – no degree earned, bachelor’s of arts/science degree, master of arts/science degree, and professional degree (i.e., JD, MD).

Race, ethnicity, and educational niche width measures were calculated from these percentages using a one-way $\chi^2$ statistic. The reported percentages were used as the observed values for this calculation. The expected values (percentages) were calculated by dividing a total of 100% by the number of categories present for each respective attribute (i.e., 100% divided by 7 for the race expected values; 100% divided by 2 for the ethnicity expected values; 100% divided by 7 for the education expected values). Each of the three separate $\chi^2$ statistics were then calculated using the following formula:

$$\chi^2 = \sum \frac{(Observed\ Percentage - Expected\ Percentage)^2}{Expected\ Percentage}$$

It is important to note that, conceptually, diversity is at its greatest when each category of a variable is represented equally. Therefore, diversity is at its highest when the observed percentages equal the expected percentages. Thus, lower $\chi^2$ values correspond to higher levels of diversity while higher $\chi^2$ values correspond to lower diversity.
I suspected that greater educational attainment diversity in the areas surrounding SSMs would lead to these churches switching to MMs. Although megachurch members tend to have more education than do members of other types of churches (Thumma & Bird, 2009), multi-site churches tend to attract more diverse groups along socioeconomic, age, race, marital status, and language lines (Shields, 2007). Therefore, SSMs in close proximity to more diverse populations would be more likely to switch to MM to attract these groups. Furthermore, I reasoned that as diversity of education levels increased so too the chances for SSMs switching to MMs would also increase. This positive relationship would be an expression of generalism or the presence of a wider niche width. Similarly to educational attainment level diversity, I suspected that racial and ethnic diversity would have a positive relationship to a SSM switching to MM. These notions led me to hypothesize the following:

**H5:** As diversity [heterogeneity] (educational or racial or ethnic) in a SSM’s surrounding area increases, there is an increased chance of switching to multi-site.

**Measures of Isomorphism**

Measures of isomorphism were investigated by examining the educational attainment level of the senior pastor for each church, church’s organizational affiliations (i.e., trade groups), and through the number of MM locations in the nation.

DiMaggio & Powell (1983) argued that normative isomorphism comes from “professionalization” (p. 152). DiMaggio & Powell (1983) defined professionalization as the “collective struggle of members of an occupation to define the conditions and methods of their work to control” what workers produce “and establish a cognitive base and legitimation for their occupational autonomy” (p. 152). Formal education is one seminal way normative isomorphism occurs within professions (e.g., “universities and
professional training institutions”) (p. 152). Institutional norms (e.g., ideas, values, beliefs, theories, and practices) via universities spread as students carry them to their respective places of employment. As such, it is believed that megachurch clergy (i.e., senior pastors) have attained some form of formal education that would lend itself to shaping decisions about organizational structure.

Each church (lead) pastor’s educational attainment level was documented by Thumma, Travis & Bird (2005) who received survey responses from 406 megachurches where a question was asked about the senior or lead pastor’s highest level of education. The churches responded that 2% had high school or GED, 6% had some college or technical school, 19% had a college bachelor’s degree, 37% had a Master’s degree (including M.Div), and 35% had a doctoral degree (Ph.D., D.Min.- excluding an honorary doctorate) (p. 6). Thumma et al. examined pastor’s education level with growth rates and discovered that “as educational levels of the pastors decreased, the rates of growth increased” (p. 15). In 2011, the study was repeated among 336 megachurches with only slight changes in pastor’s education level; the some college level had dropped to 4%, Master’s degrees dropped to 36%, and doctoral degrees increased to 39% (Thumma & Bird, 2011). This specific leadership characteristic was not examined further in the 2011 study. Although additional specific research on megachurch pastors’ educational level and church growth does not exist, there is a sound reason for considering the relationship for the purposes of this present research project. As noted above, formal learning institutions serve as conduits for normative isomorphism among church pastors. In brief summary, megachurch pastors trained through formal educational means are inculcated with normative organizational structural ideas, and thus, will
implement these structures accordingly. This non-size related isomorphic feature of megachurches assumes that notions about switching to MM originated during a pastor’s formal educational experience. Therefore, I hypothesize the following:

**H6:** As *SSM pastor’s educational attainment level increases, the chances for SSM switching event to MM will also increase* (normative isomorphic effect).

Church affiliations (i.e., trade groups such as MultiSite Solutions (MSS), Evangelical Council for Financial Accountability (EFCA), and Willow Creek Association (WCA)) have influence for and against switching to multi-site. Similar to denominational associations, other affiliations can constrain or encourage switching behavior.

Data on megachurch affiliations was systematically gathered from Willow Creek Association (WCA), the Evangelical Council for Financial Accountability (ECFA), and MultiSite Solutions. These three organizations were chosen because they either placed several advertisements in Outreach Magazine’s annual issues (2005-2013) on the Largest 100 Churches (ECFA), or were known for pioneering the megachurch and multi-site phenomena (WCA), or work help churches transition to multi-site (MSS) that rhetorically advocated in favor of multisiting. While it would have been ideal to have church membership data from Leadership Network, an organization that has produced research on multisiting for several years, their membership data was not publically accessible and they denied requests for the information.

Each of the three church associations examined supports the concept of multisiting in different ways. WCA is a self-described network of churches who regularly gather to discuss leadership, and church growth. WCA is the denomination-like organization created by Willow Creek Community Church, one of the first modern megachurches and multi-site pioneers in the US. WCA boasts a church membership of
more than 8,000 churches. ECFA founded in 1979, provides membership and accreditation to Christian non-profit organizations. ECFA provides financial industry standards and support for their members. MSS is a non-profit consulting organization that also serves as a trade organization. Churches do not maintain membership with MSS per se, but instead contract with MSS to assess and guide the multi-site switching process. After numerous consultations conducted by the diverse team of church organization experts, best practices have been published in popular news outlets, books, and conferences. MSS maintains a publicly accessible list of current clients who are multi-site organized churches and often-times megachurch in size. The compiled church sample was compared to MSS’s published list to determine which churches were former clients of the organization. The key operating assumption is that past clients are convinced through MSS’s work that organizing their church in a multi-site structure is paramount to the organizations future growth. Although not a subject for this current study, MSS is well-known for identifying church mergers as a form of multi-site among churches. In fact, MSS founder and president, Jim Tomberlin, co-authored the primary book on church mergers in 2010. Therefore,

**H7:** SSMs affiliated with WCA, MSS, and/or ECFA will increase the likelihood of switching (i.e., normative isomorphism).

Finally, there is a suspected relationship between the number of MMs in the U.S. and how that number contributes to isomorphic behavior (Hannan & Freeman, 1989; DiMaggio & Powell, 1983). Popularity of multisiting and the preponderance of published evidence showing successful growth rates for churches “going multi-site” it is conceivable that more SSMs will switch over to multi-site. Furthermore, if SSMs experience declines or plateaus in church growth, they may be compelled to switch or
face difficult decisions about downsizing, or closing. These considerations suggested the following testable hypothesis that used a squared term to examine non-linearity. The hypothesis states:

\[ H_8: \text{As the number of MMs increase in the nation, the likelihood of switching to MM increases for SSMs (mimetic isomorphism).} \]

**Control Variables**

Zip code-level data on population density, median age, the percentage breakdown by race and ethnicity, median income, and the percentage breakdown for adults by educational attainment were used for control variables in this study. Population density in a church’s ZIP code area, measured as 1,000 people per square mile, is a spatial IV meant to control for the pressure for SSMs to switch to MMs because of land use and building expansion restrictions. In other words, crowding in the ZIP code will make it hard to expand an existing building, therefore, a church is more tempted to go multi-site.

Therefore, I suspected that:

\[ H_9: \text{As population density increases so will the chances of SSM switching events.} \]

The median age in a church’s ZIP code area was included to control for deduced differences in preferences between single-site and multi-site megachurches by age. Older populations, primarily those representing the baby-boomer generation (born between 1946 and 1964), gravitated to the SSM when its efforts were geared toward the spiritually curious adult who resisted organized religion. This group was termed “seekers” and many SSM leaders structured their organizations and programs to appeal to this group. As this population and the church’s senior leadership continues to age, they are more likely to not embrace organizational change (Wuthnow, 2010). Conversely, the younger
population, primarily represented by the millennial generation (born between 1980 and 2000), engages organized religion on different terms than their parents. Van Gelder (2008) argued “They [millennials] tend to seek out the local and the particular, with a focus on the coherence of community life and the development of organic relationships, both enhanced by their use of information technology” (p.247). As such, this generation is drawn to organizations that reflect their values. Perhaps in response to population needs, SSMs make adjustments; in this case adjustments via switching to multi-site. Thus, the following hypotheses will be tested in this part of the dissertation.

**H10:** Older median age in the population increases inertia in SSMs.

The percentage of the population in a church’s ZIP code belonging to one of seven racial categories (White, African American, American Native/Native Indian, Asian American, Native Hawaiian/Pacific Islander, other races, and two or more races) and one of two ethnicity categories (Hispanic/Latino and non-Hispanic) were used to control for cultural differences in preferences for single-site versus multi-site churches. On one hand, the dominant racial group in the population (Whites/European Americans in the U.S. context) is suspected of being more amenable to the SSM switching phenomenon. I believe this to be so because this group tends to be the progenitors of both modern megachurch and multi-site organizational forms. This dominant racial group, with higher degrees of individualism than their minority counterparts, might leverage resources to grow organizations through maintaining market share, expanding influence and structure, and spurring innovation. On the other hand, racial and ethnic minorities may retain SSM structure for fear of losing community or social cohesion based on these characteristics. Furthermore, these groups might be more collectivist than their White counterparts.
resulting in the view that the multi-site form will contribute to increased individualism and destabilization of the organization (Freeberg & Stein, 1996; Gaines et al., 1997). These potential reasons helped supply the following hypotheses relating to race and ethnicity as a covariate to SSMs switching.

**H11**: The greater percentage of the population falling into racial/ethnic minority groups increases the likelihood that a SSM will switch to a MM.

The median income in a church’s ZIP code area and the percentage of the adult population in the ZIP code belonging to one of seven educational categories (less than 9th grade, 9th-12th grade- no diploma earned, high school and equivalent, some college – no degree earned, bachelor’s of arts/science degree, master of arts/science degree, and professional degree) were used as the final control variables. It is well-documented that those with higher incomes and higher education have more exposure to new ideas. It is therefore plausible that increased knowledge and exposure to innovative “best practices” contribute to a higher likelihood that such church members will advocate for a SSM to switch to a multi-site format to facilitate organizational growth. Therefore, I hypothesized that as median income and the percentage of the population at higher education levels increase the chances of SSMs switching to multi-site increase.

These hypotheses succinctly state:

**H12**: As the median income increases, the likelihood that a SSM will switch to a MM also increases.

**H13**: As the percent of certain educational levels (i.e., undergraduate and graduate) increase, the likelihood that a SSM will switch to a MM also increases.
Statistical Method

The variables were analyzed using generalized estimating equations (GEE). A generalized estimating equation (GEE) – similar to binary logistic regression for time series analysis – was run to test the hypotheses noted above. I think of GEE and multilevel (hierarchical) models as basically the same thing, with the main difference being that GEE’s focus on estimating a non-varying (or average) coefficient in the presence of clustering, whereas MLMs (HLMs) focus on estimating the aspects of the model that vary by group. Collinearity was examined using variance inflation factors (VIFs). Linearity of association between the dependent variable and the nominal and interval/ratio predictors was tested by including squared terms for each interval/ratio variable. Both full and parsimonious models were sought, with the parsimonious model being produced via backwards selection (p>.10 to exit).

Results

Descriptive Results

Descriptive results for SSMs across the 9 years in the U.S. are shown in Table 7. As outlined in the methods section, the data analyzed consisted of 498 single-site megachurches followed over a 9-year period (2005-2013), resulting in a total of 4292 church-years for analysis. Thus, when interpreting the descriptive statistics, it is important to keep in mind that all statistics are based on church-years rather than churches. For the dependent variable, 97.9% of SSM-years were single-site and 2.1% were multi-site (2.1% of 4292 church-years is equal to 90 church years. Since a church exits the data right after becoming multi-site, this means 90 of the 498 megachurches switched).
<table>
<thead>
<tr>
<th>Variable</th>
<th>Central Tendency Measure</th>
<th>Variability Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent variable</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single-site Megachurch switch to Multi-site²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td></td>
<td>97.9%</td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td>2.1%</td>
</tr>
<tr>
<td>Church Age (years)</td>
<td>61.0 (mean)</td>
<td>45.75 (Std. Dev.)</td>
</tr>
<tr>
<td>Church listed on Outreach Magazine’s Top Largest Churches List</td>
<td></td>
<td>2.9%</td>
</tr>
<tr>
<td>Church listed on Outreach Magazine’s Top 100 Fastest-Growing Churches List</td>
<td></td>
<td>3.2%</td>
</tr>
<tr>
<td><strong>Inertia measures</strong></td>
<td>Denominational Association</td>
<td></td>
</tr>
<tr>
<td>Black Protestant</td>
<td></td>
<td>15.2%</td>
</tr>
<tr>
<td>Evangelical Protestant</td>
<td></td>
<td>29.9%</td>
</tr>
<tr>
<td>Mainline Protestant</td>
<td></td>
<td>8.5%</td>
</tr>
<tr>
<td>Nondenominational Protestant</td>
<td></td>
<td>28.9%</td>
</tr>
<tr>
<td>Unknown Protestant</td>
<td></td>
<td>1.8%</td>
</tr>
<tr>
<td>Other Protestant</td>
<td></td>
<td>15.7%</td>
</tr>
<tr>
<td>Racial Diversity</td>
<td>346.81 (mean)</td>
<td>57.87-591.64 (min.-max.)</td>
</tr>
<tr>
<td>Ethnic Diversity</td>
<td>63.14 (mean)</td>
<td>28.55 (Std. Dev.)</td>
</tr>
<tr>
<td>Educational Attainment Diversity</td>
<td>47.89 (mean)</td>
<td>11.04-384.60 (min.-max.)</td>
</tr>
<tr>
<td><strong>Isomorphism measures</strong></td>
<td>Pastor’s Educational Attainment</td>
<td></td>
</tr>
<tr>
<td>High School/Equivalent</td>
<td></td>
<td>0.8%</td>
</tr>
<tr>
<td>Bible College</td>
<td></td>
<td>2.8%</td>
</tr>
<tr>
<td>Bachelors of Arts/Science</td>
<td></td>
<td>4.8%</td>
</tr>
<tr>
<td>Master of Arts/Science</td>
<td></td>
<td>2.9%</td>
</tr>
<tr>
<td>Seminary &amp; DMin</td>
<td></td>
<td>55.2%</td>
</tr>
<tr>
<td>PhD/JD/MD</td>
<td></td>
<td>2.7%</td>
</tr>
<tr>
<td>Unknown</td>
<td></td>
<td>30.7%</td>
</tr>
<tr>
<td>Affiliation Memberships⁴</td>
<td>Willow Creek Association</td>
<td></td>
</tr>
<tr>
<td>Evangelical Council for Financial Accountability</td>
<td></td>
<td>4.8%</td>
</tr>
<tr>
<td>MultiSite Solutions</td>
<td></td>
<td>2.3%</td>
</tr>
<tr>
<td>Number of Multi-site Megachurches in Nation³</td>
<td>73.8040 (mean)</td>
<td>26.16 (Std. Dev.)</td>
</tr>
<tr>
<td><strong>Control variables</strong></td>
<td>Population Density⁴</td>
<td>32113.53 (mean)</td>
</tr>
<tr>
<td>Median Age (years)</td>
<td></td>
<td>36.52 (mean)</td>
</tr>
</tbody>
</table>
Percent of Population by Race

<table>
<thead>
<tr>
<th>Race</th>
<th>Percent (mean)</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>66.9%</td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>20.1%</td>
<td>25.75</td>
</tr>
<tr>
<td>Asian</td>
<td>5.3%</td>
<td>7.75</td>
</tr>
<tr>
<td>American Native</td>
<td>0.57%</td>
<td>1.03</td>
</tr>
<tr>
<td>Native Hawaiian</td>
<td>0.12%</td>
<td>.283</td>
</tr>
<tr>
<td>Other Race</td>
<td>4.4%</td>
<td>6.02</td>
</tr>
<tr>
<td>Two or More Races</td>
<td>2.6%</td>
<td>1.43</td>
</tr>
<tr>
<td>Hispanic origin</td>
<td>13.7%</td>
<td>16.03</td>
</tr>
</tbody>
</table>

Median Income ($US)

<table>
<thead>
<tr>
<th>Median Income ($)</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>59,517.77</td>
<td></td>
</tr>
<tr>
<td>26,214.12</td>
<td></td>
</tr>
</tbody>
</table>

Percent of Population by Education Level (25 years old and older)

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Percent (mean)</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School/Equiv.</td>
<td>23.6%</td>
<td></td>
</tr>
<tr>
<td>Less than 9th Grade</td>
<td>5.1%</td>
<td>5.18</td>
</tr>
<tr>
<td>9th – 12th, No Diploma</td>
<td>8.1%</td>
<td>5.20</td>
</tr>
<tr>
<td>Some College, No Degree</td>
<td>21.8%</td>
<td>4.68</td>
</tr>
<tr>
<td>Associate’s Degree</td>
<td>7.1%</td>
<td>2.12</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>21.5%</td>
<td>9.69</td>
</tr>
<tr>
<td>Graduate/Prof. Degree</td>
<td>12.8%</td>
<td>8.34</td>
</tr>
</tbody>
</table>

1 All variables were mean centered prior to the regression; n = 4292 SSM-year (498 SSMs for 9 years). Not all SSMs were present for all 9 years.

2 The outcome of interest (DV) for the General Estimating Equation

3 Single-site and Multi-site megachurches at the national level

4 Population density was calculated by dividing the total number of people in each CBSA by the CBSA’s land area (miles); measured in number of people per square mile.

5 Each church-year is the percentage for each race/ethnicity/education category. Therefore, taking all the church-years together, an average percentage remains.

6 Median income measured in $1,000 U.S. dollars

With respect to the measures of inertia, on average, churches were 61 years old (Std. Dev. = 45.75). OM’s lists of the Largest 100 Churches and Fastest-Growing Churches for 2005-2013 showed that few megachurch-years in the sample were on either list; 2.9% and 3.2%, respectively. Of the numerous church affiliations (denominations) representing American churches, the most prevalent was the Evangelical Protestant group (30%). Evangelical Protestants were closely followed by Nondenominational Protestants (29%). Other Protestant churches and Black Protestant churches were represented by 15.7% and 15.2%, respectively. Rounding out the sample, Mainline Protestants made up 8.5%, and 1.8% of churches had unknown affiliations.
For the measures of niche width, educational diversity was a $\chi^2$ measure that produced a mean of 47.89 (Std. Dev. = 25.85). Racial diversity in ZIP code areas resulted in $\chi^2$ measures ranging between 57.87 and 591.64, with a mean of 346.56. This moderately high $\chi^2$ average suggests less diversity within these ZIP codes (i.e., smaller niche width). Conversely, educational attainment within ZIP codes (again, a $\chi^2$ measure) exhibited a range of 11.04 to 384.60 and a mean of 47.9266. The mean of the $\chi^2$ suggests a smaller average representing greater diversity. As such, a small $\chi^2$ mean for education suggests greater educational level diversity (i.e., wider niche width). The $\chi^2$ range for Hispanics/Latinos goes from 0 to 50, and has a mean of 31.6 this moderately sized $\chi^2$ suggests limited diversity, as it relates to the presence of Hispanics/Latinos, within the sample, and thus, smaller niche width.

For the measures of isomorphism, pastor’s educational attainment consisted of seven categories. Less than one percent of church-years represented in the sample had pastors with high school or equivalent as the highest level of education completed (.8%). Nearly 3% of church-years had pastors that earned a Bible college degree and about 5% that earned a bachelor’s of arts or science in a non-ministry related field. Another 3% of church-years had pastors that earned a master of arts or science in a non-ministry specific discipline. Not surprisingly, 55% of church-years in the sample had pastors that completed seminary training or a doctorate of ministry degree. There was no reported education information for pastors for about one-third of church-years in the sample. There were three primary church affiliations explored for this study, Willow Creek Association (WCA), Evangelical Council for Financial Accountability (ECFA), and MultiSite Solutions (MSS). Most megachurches were not part of these associations;
16.7% belonged to WCA, 4.8% associated with ECFA, and 2.3% had worked with MSS. An average of 74 MMs (Std. Dev. = 26.16) existed in the nation during the period under examination.

For the control variables, the average ZIP code had a population density of 32,113 people per square mile (Std. Dev. = 15,551), and the average median age was 36.5 years (Std. Dev. = 5.11 years). The average church was located in a ZIP code that was 66.9% White, 20.1% African American, 5.3% Asian, 0.6% American Native, 0.1% Native Hawaiian, 4.4% some other single race, and 2.6% those with two or more races. The Hispanic and Latino ethnic group of other race accounted for 13.7%. The sample had a mean median income of $59,517 (Std. Dev. = $26,214.12). The average church was located in a ZIP code where the educational attainment (for adults, aged 25 years old and older) was 23.6% high school diploma or equivalent earners. The rest of the educational attainment demographic consisted of 21.8% with some college but no degree, 21.5% with Bachelor’s degrees, 12.8% earned graduate or professional degrees, and 8.1% of adults had 9th to 12th grade without a diploma. Those who earned associate’s degrees made up 7.1%, and 5.1% of adults had less than 9th grade education.

Table 8 shows the full regression model and the resulting parsimonious model. The results discussed below focus on the parsimonious model. Significant predictors of a multi-site switching event occurring included inertia measures – church age (p = .000) and the square of church age (p = .000), 100 Fastest-Growing Churches (p = .000). Niche width measure for racial diversity measures (p = .000) was a significant predictor for a multi-site switching taking place. Isomorphism measures also had representation in pastors with PhD, JD, and MD education (p = .032), and megachurch affiliation with
WCA (p = .000) and MSS (p = .001). The following control variables were significant predictors: percent of African Americans in zip codes surrounding SSMs (p = .003), and its squared counterpart (p = .013), median income (p = .021), the percentage of adults with less than 9th grade education (p = .041), adults with associate’s degrees (p = .000) and its squared counterpart (p = .094).

Table 8: Generalized estimating equations predicting the odds of a single-site megachurch switching to a multi-site format

<table>
<thead>
<tr>
<th>Variable</th>
<th>Full Model</th>
<th>Parsimonious Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>.054 (.005-.597)</td>
<td>.032 (.016-0.646)</td>
</tr>
<tr>
<td>Church Age (years)</td>
<td>.993 (.985-1.002)</td>
<td>.994 (.987-1.000)</td>
</tr>
<tr>
<td>Church Age (years), squared</td>
<td>1.000 (1.000-1.000)</td>
<td>1.000 (1.000-1.000)</td>
</tr>
<tr>
<td>Church listed on Outreach Magazine’s Top Largest Churches List</td>
<td>1.955 (.698-5.474)</td>
<td></td>
</tr>
<tr>
<td>Church listed on Outreach Magazine’s Top 100 Fastest-Growing Churches List</td>
<td>6.346 (3.076-13.091)</td>
<td>6.525 (3.417-12.457)</td>
</tr>
<tr>
<td>Denominational Association</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black Protestant</td>
<td>1.346 (.477-3.804)</td>
<td></td>
</tr>
<tr>
<td>Evangelical Protestant</td>
<td>1.020 (.517-2.014)</td>
<td></td>
</tr>
<tr>
<td>Mainline Protestant</td>
<td>1.474 (.593-3.662)</td>
<td></td>
</tr>
<tr>
<td>Nondenominational Protestant</td>
<td>.671 (.052-8.722)</td>
<td></td>
</tr>
<tr>
<td>Unknown Protestant</td>
<td>1.256 (.536-2.940)</td>
<td></td>
</tr>
<tr>
<td>Other Protestant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Racial Diversity</td>
<td>1.004 (988-1.019)</td>
<td>1.006 (1.003-1.010)</td>
</tr>
<tr>
<td>Ethnic Diversity</td>
<td>1.004 (988-1.021)</td>
<td></td>
</tr>
<tr>
<td>Educational Diversity</td>
<td>1.031 (963-1.104)</td>
<td></td>
</tr>
<tr>
<td>Isomorphism measures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pastor’s Educational Attainment (High School &amp; Unknown)4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bible College</td>
<td>.882 (.271-2.871)</td>
<td>1.003 (.378-2.659)</td>
</tr>
<tr>
<td>Bachelors of Arts/Science</td>
<td>.310 (.067-1.436)</td>
<td>.359 (.085-1.522)</td>
</tr>
<tr>
<td>Master of Arts/Science</td>
<td>.866 (.268-2.791)</td>
<td>.823 (.267-2.540)</td>
</tr>
<tr>
<td>Seminary &amp; DMin</td>
<td>.570 (.324-1.004)</td>
<td>.676 (.414-1.104)</td>
</tr>
<tr>
<td>Niche width measures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Multi-site Megachurches in Nation2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi-site Church (Nation), squared</td>
<td>1.009 (1000-1.018)</td>
<td></td>
</tr>
<tr>
<td>Control variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population Denisty5</td>
<td>1.000 (1.000-1.000)</td>
<td></td>
</tr>
<tr>
<td>Population Density, squared</td>
<td>1.000 (1.000-1.000)</td>
<td></td>
</tr>
</tbody>
</table>
### Median Age (years)
- 1.023 (0.953-1.098)

### Median Age (years), squared
- .998 (0.995-1.002)

### Percent of Population by Race (White)

<table>
<thead>
<tr>
<th>Race</th>
<th>Odds Ratio</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>1.033</td>
<td>(0.927-1.151)</td>
</tr>
<tr>
<td>African American, squared</td>
<td>.999</td>
<td>(0.997-1.001)</td>
</tr>
<tr>
<td>Asian</td>
<td>1.005</td>
<td>(0.829-1.218)</td>
</tr>
<tr>
<td>Asian, squared</td>
<td>.996</td>
<td>(0.989-1.003)</td>
</tr>
<tr>
<td>American Indian</td>
<td>1.065</td>
<td>(0.571-1.985)</td>
</tr>
<tr>
<td>American Indian, squared</td>
<td>.982</td>
<td>(0.938-1.027)</td>
</tr>
<tr>
<td>Native Hawaiian</td>
<td>.297</td>
<td>(0.017-5.074)</td>
</tr>
<tr>
<td>Native Hawaiian, squared</td>
<td>.769</td>
<td>(0.053-11.232)</td>
</tr>
<tr>
<td>Other Race</td>
<td>1.082</td>
<td>(0.890-1.314)</td>
</tr>
<tr>
<td>Other Race, squared</td>
<td>.998</td>
<td>(0.992-1.003)</td>
</tr>
<tr>
<td>Two or More Races</td>
<td>.860</td>
<td>(0.608-1.217)</td>
</tr>
<tr>
<td>Two or More Races, squared</td>
<td>1.019</td>
<td>(0.959-1.083)</td>
</tr>
<tr>
<td>Hispanic origin</td>
<td>.991</td>
<td>(0.946-1.038)</td>
</tr>
<tr>
<td>Hispanic origin, squared</td>
<td>1.000</td>
<td>(1.000-1.001)</td>
</tr>
<tr>
<td>Income</td>
<td>1.000</td>
<td>(1.000-1.000)</td>
</tr>
<tr>
<td>Income, squared</td>
<td>1.000</td>
<td>(1.000-1.000)</td>
</tr>
</tbody>
</table>

### Percent of Population by Education Level – 25 years old and older (High School or Equivalent)

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Odds Ratio</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 9th Grade</td>
<td>1.207</td>
<td>(0.931-1.565)</td>
</tr>
<tr>
<td>Less than 9th Grade, squared</td>
<td>.995</td>
<td>(0.986-1.004)</td>
</tr>
<tr>
<td>9th – 12th, No Diploma</td>
<td>1.216</td>
<td>(0.952-1.553)</td>
</tr>
<tr>
<td>9th – 12th, No Diploma, squared</td>
<td>.995</td>
<td>(0.983-1.007)</td>
</tr>
<tr>
<td>Some College, No Degree</td>
<td>1.063</td>
<td>(0.936-1.207)</td>
</tr>
<tr>
<td>Some College, No Degree, squared</td>
<td>.992</td>
<td>(0.980-1.005)</td>
</tr>
<tr>
<td>Associate’s Degree</td>
<td>1.574</td>
<td>(1.210-2.046)</td>
</tr>
<tr>
<td>Associate’s Degree, squared</td>
<td>.954</td>
<td>(0.914-.996)</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>1.046</td>
<td>(0.958-1.142)</td>
</tr>
<tr>
<td>Bachelor’s Degree, squared</td>
<td>.998</td>
<td>(0.989-1.006)</td>
</tr>
<tr>
<td>Graduate/Prof. Degree</td>
<td>1.086</td>
<td>(0.931-1.267)</td>
</tr>
<tr>
<td>Graduate/Prof. Degree, squared</td>
<td>1.000</td>
<td>(0.931-1.267)</td>
</tr>
</tbody>
</table>

---

1 Based on n = 4292 church-years (498 Single-site Churches); pseudo $R^2 = .057$ for the parsimonious model; numbers shown are odds ratios (95% Confidence Interval in parentheses); all independent variables are mean-centered and some are squared so the constant may be interpreted as the overall mean odds of having a single-site church become a multi-site church in a given year. All dummy variables were only mean-centered and not squared.

2 Parsimonious model produced using backward selection (p>.10 to exit)

3 Church affiliations and associations were mean-centered to provide odds for the typical church.
The non-significant predictors of multi-site switching retained in the final model (to retain the original reference group for a series of dummy variables) included the isomorphism variable results for pastor’s educational attainment – (Bible College, p = .995; Bachelor’s of Arts and Science, p = .165; Master of Arts and Science, p = .735; Seminary and D.Min, p = .118).

The parsimonious model explained about 5.7% of the unexplained variance of the dependent variable, thus, the model is not a good fit. The quasi-likelihood under independence model criterion (QIC) for the intercept only model was 883.406. Under the full covariate model the goodness of fit statistic quasi-likelihood under independence model criterion (QIC) was 832.862 (the 5.7% drop in the QIC yielding a pseudo $R^2$ of .057).

*Inertia Results*

Church age and its squared counterpart remained in the final model because both were statistically significant at the .10 level (p = .064 and p = .087, respectively). The main effect for church age was -0.006 and the quadratic effect was 6.382E-05, and their combined result is displayed in Figure 13.
I was eager to see the effect of church age on MM switching. I hypothesized that as church age increases in years, chances would increase for SSMs not switching to MMs (i.e., not switching as an indication of inertia). The age span for SSMs ranged from 0 to 281 years, and yet, odds of SSMs switching to MMs is generally under 10%. The highest chance of switching (14%) occurs from ages 280 to 281. The findings show that the probability of switching declines slightly as church age increases until a church reaches 150 years old, and then the probability increases as churches age. The OE hypothesis is therefore not fully supported by the findings. It was a bit surprising that the oldest churches had the greatest likelihood for changing to MM.

The odds of a SSM switching to MM and making it to OM’s 100 Fastest-Growing Churches list between 2005 and 2013 was 1.876 times the odds for a SSM not on the list. As shown in Figure 14, this translates to a probability of switching to MM of 14.2% (for those on the list) versus 2.8% (for those that did not make the list). The hypothesis stated,
SSMs making it on the 100 Fastest-growing churches list (2005-2013) have increased chances of switching to MMs. The hypothesis was supported by these findings.

Figure 14: Probability of Multi-site Switching Events by Top 100 Fastest Growing Churches Lists (2005-2013)

I hypothesized that as diversity [heterogeneity] (education attainment or racial/ethnic) in a SSM’s surrounding area increased (more generalist – suggesting a wider variety of needed resources), there would be an increased chance of switching to multi-site. However, when these variables were included in the model only racial diversity (p = .000) remained in the parsimonious model. The significance threshold was exceeded for educational diversity (p = .492) and ethnic diversity (p = .989), both of which were subsequently removed from the model. Each 1 unit increase in the \( \chi^2 \) measure of racial diversity (increasing values of which correspond to decreasing real-world diversity) was associated with a 0.6\% increase in the odds of a SSM switching to MM in
a given year. Thus, the hypothesis was not supported for the remaining racial diversity variable.

Isomorphism Results

I hypothesized that as SSM pastor’s educational attainment increased, the chances for SSMs switching to MMs would also increase, suggesting an isomorphic effect. High School or equivalent and unknown educational attainment levels were combined and left out of the model. The remaining six dummy variables were retained in the final model, but only pastors with professional degrees was statistically significant (p < .10). Compared to megachurches with pastors who have a high school (or unknown) education level, the odds of switching to MM in a given year was 216% higher for megachurches with pastors who have a PhD, MD, or JD. Though the group differences are relatively small, Figure 15 shows probabilities of 2.9% and 8.2%, respectively. In sum, the hypothesis was at least partially supported by the findings because the highest pastor’s education category (PhD, MD, or JD) was associated with higher odds of going MM.
The three church affiliates in the parsimonious model included Evangelical Council for Financial Accountability (ECFA), MultiSite Solutions (MSS), and Willow Creek Association (WCA). ECFA was not statistically significant (p = .156) and was removed from the model. The remaining mean-centered independent variables demonstrated important results for the study. I hypothesized that church affiliation with these religious organizations would increase switching. However, as shown in Figure 16 the results are the opposite of the hypothesis. Surprisingly, SSMs had greater chances for switching if they were not associated with these organizations. Non-affiliation with MSS (an organization that helps churches become multi-site) showed a 3.1% chance for switching, per year. Single-site megachurches affiliated with MSS shows less than 1% chance for switching (.7%); an unanticipated detrimental result for MSS. Those SSMs not affiliated with WCA had 3.6% chance of switching to MM and affiliated SSMs had a 1.2% chance of switching to MMs, per year.
Control Variable Results

The study sample represented several different racial categories of adults. Whites were used as the reference variable and was removed from the model. The remaining groups in the model included African Americans, Asian Americans, American Indians/American Natives, Native Hawaiians/Pacific Islanders, other races, and two or more races. The main African American variable and its squared counterpart were the only race variables remaining in the parsimonious model. All of the other pairings exceeded the significance threshold of .10. The main effect for African Americans was 0.052 and the quadratic effect was -0.01, and their combined result is displayed in Figure 17. As the results show, the best chance for SSMs switching to MMs (.06 probability) is when surrounding areas have 40-50% of African Americans.
I hypothesized that the greater percentage of the population falling into racial minority groups would increase the likelihood of switching to MM. Although the probabilities are generally low, the hypothesis is partially accurate as increased concentrations of African Americans go from 0% to 50% (i.e., left to right until 50% is reached). Additionally, because the unit of analysis is SSM-years, the calculated probabilities reflect the chances a church will switch in a given year. As the earlier descriptive statistics showed, 2.1% of church-years were associated with a switch to MM meaning that 90 out of 498 of the megachurches switched at some point during the period. Therefore, the highest point on the graph is .06 (6%) for switching in any given year. Over the 9 year period, a church in a ZIP code with 40%-50% African Americans would have to resist this 6% yearly for all 9 years for it to remain a SSM. For the entire 9 years, therefore, the probability of remaining SSM is .94 raised to the power of 9 = 0.57. In other words, there is only a 57% chance that a church in a ZIP code like this would
remain single-site (i.e., there is actually a 43% chance of it switching at some point over the 9 year period).

The main effect of median income is 2.277E-05 and the quadratic effect is -1.792E-10. The combined result is displayed in Figure 18. SSMs in zip codes with median incomes between $103,000 and $143,000 have a 6.0% likelihood of switching to MMs. The results partially support my hypothesis that as median income increases, the greater probability of SMMs switching to MMs will increase. Initially, the pattern for the hypothesis holds true as median income increases from $6,000 (with a probability of .44%) to $143,000 (~6.0%). However, the hypothesis has little support as chances drop starting at $144,000 (5.4% likelihood of SSM switching to MM) to $206,000 (1.8% likelihood of switching taking place).

Figure 18: Probability of Multi-site Switching Events by Median Income (Dollars)

The main effect for adults (25 years old and older) who earned an associate’s degree was 0.248 and the quadratic effect is -0.034, and their combined result is
displayed in Figure 19, below. There is minimal evidence for the likelihood of SSMs switching to MMs (less than 10%). The greatest chance for SSMs switching (5%) from single-site to multi-site occurs when 10% to 11% of adults in the ZIP code areas have associate’s degrees.

Figure 19: Probability of Multi-site Switching Events by Percentage of Associate’s Degrees (25 years old and older)

Adults with less than 9th grade education was the only other educational attainment control variable to remain in the final model. The main variable was significant (p = .041) and the squared variable was not significant at (p = .222). The main effect of .134 and the quadratic effect of -.004 are displayed in Figure 20. At its peak, SSMs have an 8.2% likelihood of switching to MMs when 21% to 23% of the adult population in ZIP code areas has associate degrees.

I hypothesized that as the percent of certain educational levels (i.e., undergraduate and graduate) increased, chances of SSM switching to MMs would also increase. As
shown in Figures 19 and 20, both variables have an effect on switching. However, these results do not support the hypothesis because ZIP codes comprised of adults with less than 9th grade education improve the chances for SSMs switching over those with associate’s degrees. Even when accounting for the unit of analysis of church-year, both have an effect, but perhaps a reformulated hypothesis would serve more usefully in future research. It is important to remember the unit of analysis for the study is church-year.

Figure 20: Probability of Multi-site Switching Events by Percentage of Adults with Less than 9th Grade Education (25 years old and older)

Unsupported Hypotheses

For one of the inertia measures I hypothesized that the chance of switching for smaller SSMs is low. As SSM size increased to be very large and did not already switch during the examination period, inertia would also increase (i.e., not switching). I used OM’s list of 100 Largest Churches in America from 2005 to 2013 to serve as a proxy to test this hypothesis. I discovered that making it on the list was not statistically significant, meaning that simply making the list was not an indication of SSMs switching to MMs.
This inertia hypothesis was not supported by the findings. In another inertia measure I hypothesized that SSMs in relationship with certain denominational groups (e.g., Mainline Protestants) will increase inertia (i.e., no switching). As seen in the parsimonious model results (Table 8), none of the denominational groups were significant, and therefore, were removed from the model.

For isomorphism I hypothesized that as the number of MMs increased in the nation, the likelihood of switching to MM increases for SSMs. The IV representing MMs in the nation was not retained in the model, suggesting a non-significant relationship between increases in MMs in the nation and its effect on SSMs switching to MMs. This hypothesis was not supported in the findings.

For control variables the suppositions about population density and switching events were unsubstantiated in the findings. The process of producing the parsimonious model, the population density was removed from the model because the main variable and its quadratic counterpart exceeded the p-value of .10. Thus, as the number of MMs increase in the nation, the likelihood of switching to MM increases for SSMs was not supported.

The hypothesis about the probability of SSMs switching to MMs and the average median age was not supported in the model. I argued that higher average median age in the population would increase the chance of SSMs not switching to MMs. As with the previous control IV, the median age variable (and its squared counterpart) exceeded the p-value of .10 and subsequently removed from the model. This serves as sufficient evidence for not supporting the proposed hypothesis.
Limitations

The church affiliation variables included in this study showed an opposite impact on SSM switching. While it is clear these organizations have different predictive effects on switching, other organizations might be better predictors of the phenomenon. Since church scholars report Evangelical Protestants as representing a larger percentage of megachurches, it follows that including national Evangelical associations might render more substantial results on the switching phenomenon. Three such organizations that should be added to future models include The Association of Related Churches (ARC), National Association of Evangelicals (NAE), and Acts 29. It would also be beneficial to design a survey instrument to deliver to megachurches and ask specific questions about affiliations with national organizations.

Secondly, niche width analysis would have been strengthened by including variables that expressed the economic, political, and social state of the environment during the period under examination. As noted in OE’s niche width literature, generalists tend to thrive when environments are unstable and specialist populations when they are less stable. Perhaps the addition of these variables would better identify the impact of the environment on switching events.

Thirdly, the megachurch study did not include organizational decline so I was unable to test Baker & Cullen’s finding that older, larger, and declining schools showed less reorganization than their younger declining counterparts. Megachurch data is difficult to acquire or collect. More challenging still is collecting data on megachurch decline. The ideal way to collect this data would be to work with an organization like Leadership Network, which regularly collects standard and novel data on megachurches.
in their network. If this option is not possible, I will expand one of my previously
designed survey instruments focused on small group involvement in multi-site
megachurches to include church growth questions.

Fourthly, although I argued there were many similarities between megachurches
and for-profit businesses in Chapter 1, I did not include an empirical measure that could
capture that assumption. Perhaps one way to address this limitation would be to conduct
comparative analyses of megachurches and malls to see what kinds of isomorphic effects
might be present. It would be equally intriguing to explore how the rise of multi-site
megachurches might coincide with the spread of “Big-box” retailers creating smaller
store fronts to accommodate specialized customer needs (e.g., Best Buy’s smaller mall
stores that sell only smartphones and tablet computers).

Fifthly, a Type I error may be present in the results. Perhaps what has resulted
from the study, as shown from the number of unsupported hypotheses, is that the Type I
error has rejected the null hypotheses even when true and falsely accepted the research
hypotheses when it was due to chance. At a 95% confidence level, one would expect 1 in
20 variables to be significant purely due to chance. With 55 variables in the model, this
suggests that about 3 might be significant by pure chance. However, with 8 significant
variables overall it is highly unlikely that the findings are completely erroneous, even
with the relatively low level of model fit. Furthermore, measurement issues may have
limited the study. For instance, using ZIP code areas to ascertain megachurch
demographics could be problematic. Racial and ethnic diversity is somewhat present in
megachurches, however, there are still racially segregated churches. Thumma (1996)
argued that the majority of megachurches consist of White attendees, but there is “considerable degrees of diversity found in these large gatherings.”

Sixthly, the pseudo $R^2$ showed the parsimonious model explained 5.7% of the unexplained variance of the dependent variable. Thus, the parsimonious model was not a good fit. This could have occurred due to measurement issues and the presence of Type I error, as noted above.

Lastly, these findings continue to raise the question about cause and effect relationships within the study. While there are no provable cause and effect relationships taking place, there are indications that some degree of association is present for the supported hypotheses. However, these glimmers of association do not mean strategies and wholesale organizational changes should be instituted based on these findings. These findings are a substantial first step in gaining better organizational understanding of the megachurch phenomenon.

**Discussion and Conclusion**

OE argues that organizational populations have high levels of internal and external inertia because the stability inertia creates can make them attractive for selection within their environments. However, inertia also makes organizations resistant to major changes. NIS, on the other hand, argues that isomorphic adaptation is common among organizations. OE scholars, studying various for-profit organizations, argued that inertia increased as organizational age increased. Once more, the presence of inertia was indicative of environments selecting these organizational populations. The efforts of this study to test the relationship between SSMs not switching to MMs and organizational age had mixed results. The age of sampled megachurches ranged from 0 and 271 years, and
the early pattern (0 to 149 years old) supported my hypothesis that as megachurch age increased the chances for SSMs switching to MM would decrease. Therefore, this result also supported OE’s conclusion as well. However, the rest of the story counters OE’s classic finding and my hypothesis when the results showed SSMs switching to MMs as they got older (150 to 271 years old).

These interesting findings appear to agree with conclusions reached by Baker & Cullen (1993) who claimed that larger and older (non-declining) colleges and universities had “the highest levels of reorganization” (p. 1269). Findings from their colleges and universities research and this study on megachurches differed from Hannan & Freeman’s initial conclusion. Connections between the two studies gives credibility to the findings.

The youngest megachurches in the study displayed increased chances for switching to MMs (5%). According to OE this occurs because a young organization has little inertia making it more able to change.

Another explanation for the youngest SSMs (ones founded in 2005) switching to MMs could be that multisiting is part of the initial structure and long-term strategy. An evolution argument like this suggests that SSMs had multisiting in their organizational DNA from the beginning. Bird (2004) verified this possibility when asking 12 innovative and influential churches “what prompts a church to become multi-site (multiple venues or locations)? Two options were discovered; (1) churches planned to be multi-site from the very beginning of their existence, and (2) the choice was made “along the way” due to overcrowding, their desire to reach new people, the fact that the multi-site strategy was congruent with their existing mission, and that the decision helped clarify their mission
The last point supports the earlier statement that switching for some churches was not a drastic move.

An attempt to discover the relationship between switching and organizational size proved to be not statistically significant and did not remain in the final model. However, this non-significant result means that size-based inertia did not exert an effect.

I posited that high levels of structural inertia would be expected in megachurches. Internal and external inertia would be clear, first, when SSMs would be reluctant to change because of substantial investment in existing land and buildings and, second, when local municipalities constrained SSMs from expanding on existing grounds. Additional internal inertia may arise as SSMs are unable or unwilling to reassign/retrain specialized personnel. I also posited that denominational associations might exert inertial pressure, but there was no evidence of the relationship to analyze because the variable was dropped from the model. These results indicate weak inertia effects for SSMs which then makes them more able to change.

**Niche Width**

Hannan (2005) stated that “Niche width is closely tied to organizational diversity. If niches are typically broad, then a small number of types of organizations can come to dominate a field of activity. Conversely, if niches are more constrained, then diversity flourishes” (p. 64). I hypothesized that as diversity in educational level, race, or ethnicity increased in SSMs’ surrounding areas, there would be increased chance of switching to MM. My study found no support for this hypothesis. Educational level and ethnicity were removed from the model because they were not statistically significant. The race variable remained in the model, but did not provide evidence to support the hypothesis. Diversity
was measured with $\chi^2$, where a higher $\chi^2$ means lower diversity. Therefore, the resultant positive association between the $\chi^2$ and switching runs counter to the hypothesis. Diversity was with chi-square ($\chi^2$), where higher $\chi^2$ means lower diversity and lower $\chi^2$ means higher diversity. This is why a positive association between the $\chi^2$ and switching runs counter to the hypothesis. The results did show that for every 1 unit of $\chi^2$ in racial diversity was equal to 0.6% increase in the odds of a switch.

The niche width analysis was meant to show the fundamental niche relationship between SSMs and their surrounding ZIP code areas. Perhaps, at the fundamental niche level, this study intimates why SSMs persist in the midst of growing multi-site foundings across the Protestant Church sector. Previous niche width research surmised that larger niche width organizational populations reduced mortality (Hannan & Freeman, 1977; Hannan, Carroll, & Polos, 2003; Dobrev, et al., 2002; Hsu, 2006), which suggests that churches with broader niche width in their areas should seek to become broader (i.e., multi-site) themselves. Exploration of niche width measures at the demographic level demonstrated no support for this claim.

Another important dimension to the niche width results considered the importance of niche formation. As noted from the literature, Swaminathan (1995) focused on specialist organizations and consumer preferences (i.e., selection) in the wine industry, among other analyses not applied to this study. First, although a significant predictor for switching events, racial homogeneity was present and diversity was not present. Second, this translates to attendees living in areas surrounding these SSMs prefer single-site over multi-site.
Limited Isomorphism?

This present study found an intriguing mix of evidence on isomorphism. First, I hypothesized that as SSM pastor’s educational attainment level increased, the chances for SSM switching to MM would also increase. The results showed that the odds of switching were 216% higher for senior pastor’s with PhD, MD, or JD degrees than their high school educated (or unknown) counterparts. Therefore, the hypothesis was partially supported because the highest pastor’s education category (PhD, MD, or JD) was associated with higher odds of switching to MM. I say support was only partial, however, because the pattern was not consistent across the educational attainment spectrum as it increased.

Consideration of these possibilities supports DiMaggio and Powell’s (1983) normative isomorphism argument. Although not conclusive, senior pastors with PhD, MD, and JD degrees leading SSMs have greater chances of switching to MMs. This evidence suggests that institutions of higher education play a role in megachurch organizational change. This seems to also substantiate Liang, et al. (2007) argument that isomorphic mechanisms (e.g., normative isomorphism) is mediated by organizational leaders. In the case of this megachurch research, senior pastors would mediate such changes. Future research would have to examine if these academic degrees were earned at religious universities or not. It is conceivable that senior leaders with decrees earned from secular universities are more likely to lead SSMs in switching to MMs. Furthermore, future research should consider alternate categories for degrees (e.g., instead of having seminary (M.Div.) with D.Min. placing D.Min with PhD, MD, and JD).

Perhaps this evidence highlights the isomorphic process that considers how church leaders view legitimacy of MM as an alternative to SSM. It could be that
Multisiting has emerged as a norm for this group because higher-level degree programs promote innovation and entrepreneurship. Through an organizational lens, multisiting can be viewed as the newest innovation for American Protestant churches over the last decade. Senior church leaders of large churches could be considered religious entrepreneurs, so this might suggest that leading innovative organizations like MMs might require necessary entrepreneurial skills developed through formal advanced degree programs.

The other normative isomorphism hypothesis produced findings opposite of what I expected. I hypothesized that SSMs affiliated with WCA, MSS, and/or ECFA would increase chances for SSMs switching to MMs. Membership in the ECFA, however, had neither a positive nor negative affect on switching. Furthermore, the results showed that belonging to groups advocating multisiting (MSS and WCA) reduced the chances of going multi-site. This is not to say that members of these associations do not switch to the MM form at all; rather, it suggests that those who join them, on average, take longer to become multi-site than those that do not join them. If this is the case, why do SSMs switch to being MMs? Perhaps this result indicates the presence of coercive isomorphism (what Beckert called power). It could be these findings are suggesting that MSS and WCA are discredited and there are/is other organizations propagating MM as a new organizational design alternative to SSM (DiMaggio & Powell, 1983; Beckert, 2010). Future research should aim to find other potential organizations advocating MMs (perhaps Leadership Network) to see if the evidence changes.

Until that work can be accomplished I can at least conclude that megachurch leaders do not enter into such significant organizational shifts without considerable
forethought and some kind of influence, and yet, my study finds inconclusive evidence of why the changes occur.

Perhaps SSMs switch to MMs because there is an intense need to innovate and grow the organization. Stetzer (2014), discussing Bird’s (2014) “Multi-site Church Scorecard,” suggested that multi-site strategies enable a church to grow. Stetzer advocates for the strategy and says it needs to continue and be maintained because it has the potential to exceed its current growth outcomes.

Rainer (2015) offered six reasons why churches, in general are or should be multi-site.

(1) Millennials are moving away from large worship gatherings
(2) Government restrictions on building and land
(3) Difficulty in finding large plots of land
(4) Can take advantage of existing facilities (can be cheaper)
(5) Acquisition of churches
(6) Reach people the main campus never able to reach

The challenges with these various reasons for switching to multi-site are very difficult to operationalize and empirically test. For instance, although some researches have mentioned government restrictions on building and land (a point also discussed in this study), very little evidence has been presented so the extent of the phenomenon can be truly known.

The hypothesis attempting to examine mimetic isomorphism stated that as the number of MMs increased in the nation, the likelihood of switching to MM would increase for SSMs. Unfortunately, this variable was removed from the parsimonious model.

In sum, the results of this study show that inertia and isomorphism are both present in some way. However, it appears that inertia was more important than
isomorphism. The low level of model fit suggests factors not explored in existing theories need to be sought.
CHAPTER IV

RESOURCE PARTITIONING THEORY AND NICHE STRUCTURE IN MODERN MEGACHURCHES IN THE U.S.

Within the American Protestant church traditions, organizational growth is desirable for churches because it carries profound implications for accomplishing the mission of the church. Some churches believe they have the chief charge to make disciples through the propagation of the message of Jesus Christ (i.e., the gospel). These churches also view evangelism as the primary means by which the gospel is communicated to all people. While it is accurate to say that not all Protestant churches agree on issues pertaining to liturgy, worship styles, and tradition, all have some expression for reaching other people as their mission. Reaching out to attract new attendees and adherents has the tangible effect of organizational sustainability. In other words, the religious mandate to make disciples (not just attendees) brings new people into the church, and thus, existentially new converts enter into relationship with God while in a tangible sense it adds to the overall sustainability and vitality of the church organization. Organizational growth has double, yet not necessarily equal, benefit for Protestant churches.

The megachurch research literature, almost exclusively focused on single-site churches and among its other interests, has documented the level of church growth during recent years. In 2000, 153 megachurches reported “an average growth rate of 90 percent” (Thumma, 2000). Since 1995, “weekly attendance for three-quarters of these
congregations grew by 10 percent or more” and 12% lost members (Thumma, 2000). While megachurch growth occurred between 1980 and 2000, it had slowed in the latter part of the 1990s. Between 2000 and 2005, the megachurch average growth rate was 57% among 529 surveyed churches (of which 133 I would not classify as megachurches because they had fewer than 2,000 attendees) (Thumma, Travis, & Bird, 2005).

By 2008, with an increasing trend among megachurches toward going multi-site in place, researchers reported 50% growth and approximately 10% “showing stagnation or decline (Thumma & Bird, 2008). Bird & Thumma (2011) reported that “a steady growth pattern remains evident, with these churches [336 churches surveyed] averaging 8% growth per year” between 2005 and 2010 (p. 3). What is subtly apparent by comparing growth rates across time is that megachurch growth, generally, has slowed down.

However, other research has suggested that slow growth may be confined to single-site megachurches, while multi-site ones continue to grow healthily. A recent study on multi-site churches revealed that “new campuses grow by 28% the first year and 25% the second year—on average (median),” that “85% of multisites in our survey are growing,” and that “multisites grow at an impressive 14% per year” (Bird, 2014, p. 5). However, growth rates (and the determinants thereof) among single-site and multi-site churches are still not well documented or understood.

Where are new attendees/members drawn from?

Churches vie for members from two categories: transfer members from other churches and new convert members. A 2014 case study indicates one particular MM was
aware of transfer growth, with 56% of its new member population coming from this source (Shelby, 2014). However, this example MM would not concede this source of growth as intentional or indicative of competition with other churches. Those church leaders losing members to the MM would acknowledge this problem, if only in private, and speculate the losses were due to competition with a MM’s larger programs, extensive resources (e.g., field experts, money, space), and higher technology-driven production value (i.e., high-definition video systems, high-fidelity sound systems, concert style seating and lighting).

Churches in the Protestant Church (PC) sector are also competing within their respective communities for new converts to Protestant Christianity. While churches expect transfer growth, their chief recruitment goal is to increase the number of new converts. The PC sector focuses its programming efforts to attracting and developing new converts into devoted followers of Jesus Christ and committed participants in the church (i.e., disciples). The PC sector also does not acknowledge competition for new converts. Instead, churches see their new convert recruitment as a collective effort to grow the Christianity more broadly.

New attendees and members are drawn from different places relative to church locations. In the time of neighborhood churches and high transportation costs church attendees turned church members came from surrounding neighborhoods. It was not uncommon for communities to have several different church traditions represented with places of worship within close proximity to one another. Prior to lower cost of and greater accessibility to automobiles people in these communities could walk or use other transportation means to attend church worship services. With the rise of urbanization and
suburbanization, and technological innovations – primarily automobile transportation and highway systems churches can draw attendees and members from longer distances than historically experienced. Although not a focus for this current project, more recent technological innovation relating to the Internet has added another dimension for churches reaching new people. Some churches offering online worship services have begun counting these attendees in their weekly attendance numbers.

*Promoting growth and accommodating new attendees/members*

Churches promote growth by accommodating attendees and new members through devising different flexibility strategies. These strategies include planting new churches, increasing the number worship services offered, building expansion (leading to additional worship venues and the megachurch phenomenon), and establishing additional worship sites, otherwise known as multisiting.

Church planting has been the historical response for the desire for church growth. Although several models have been created and implemented, the general church planting strategy calls for churches to raise financial and human support to establish a new church in a different location. A percentage of the church membership (perhaps those living within close proximity to the new church) are asked to form the core of the new church community. Once members leave to establish the new church, space is open for new people to (potentially) attend and join at the original church location as well. This type of growth expands The Church (i.e., a net gain for the church institution), though it does not necessarily expand the original church because the efforts can easily only result in an exchange of people at the original location. It is also important to mention that this
church planting model aims for the new church to be self-sustaining and self-governing within a predetermined timeframe.

Expanding worship service meeting times also serves as a method for accommodating attendees and new members (at the potential cost of disrupting individual church equilibrium). Instead of offering worship services during the traditional 11:00 am hour, churches began providing multiple identical and/or affinity worship services at various times during the weekend. For example, a church might accommodate the work and life schedules of new members and church attendees by offering a contemporary worship service (using different music style from the traditional hymns) on Saturday evenings, and two traditional worship services on Sunday mornings (8:00 am and 11:00 am). This allows the church to reuse the space, which could be limited due to the increased number of attendees, and accommodate the lifestyle of attendees and members.

Some churches took another step in accommodating attendees and members by completing building expansion projects. In this case, churches raised money to expand the worship meeting space (sanctuary, chapel, or some kind of multi-purpose space) to accommodate growth. Now more people can meet at once and - if used in tandem with multiple worship services affinity groups (i.e., college-age, traditional liturgy, etc.) - can be simultaneously accommodated. The building expansion strategy contributed to the rise of the modern megachurch phenomenon in the U.S.

With imposed restrictions on further building expansion, churches established another strategy that built on all of the previously discussed strategies. The multi-site strategy, a church with more than one geographic location, allowed churches to maintain a larger portion of current attendees and members, while offering flexible worship
meeting times, and overcoming building expansion roadblocks. Additionally, a multi-site location could allow some members and attendees to worship at their church at a more convenient location.

**OE (niche and resource partitioning) and the location of organizational growth**

Hannan and Freeman (1977) provide a foundational definition of niche width theory. Thus, “the (realized) niche of a population is defined as that area in constraint space (the space whose dimensions are levels of resources, etc.) in which the population outcompetes all other local populations. The niche then consists of all those combinations of resource levels at which the population can survive and reproduce itself” (Hannan & Freeman, 1977, p. 947). Resource partitioning theory (RPT), applied to human organizations, assumes the market environment consists of a spectrum of niches, each with a unique combination of customer preferences, geographic characteristics, etc. (Carroll, 1985). Certain niches are denser with potential customers, and thus are thought of as “central” in the environment. Other niches with fewer resources are peripheral. Those populations choosing to occupy more than one niche are “generalists” while those that occupy only one niche are “specialists.”

Hannan & Freeman (1977) highlight three alternative scenarios: First, when environment is stable, specialists win. Second, generalists win when environment is rapidly changing (i.e., fine grain) and alternate environmental conditions are relatively similar; however, specialists win when environment is rapidly changing and alternate environmental conditions are dissimilar. Third, generalists win in two related scenarios – when environment changes slowly (i.e., coarse grain) and alternate environmental conditions are relatively similar and when environment is slowly changing and alternate
environmental conditions are dissimilar (p. 952). There are also possible cases of long duration in variation and volatile environmental conditions, what Hannan & Freeman (1977) call “polymorphism” (p. 953). The concepts of fundamental niche (abstract resource space boundaries) and realized niche (observed resource space boundaries were added to clarify the relationship between generalism and specialism, organizational size, and resource boundaries (Carroll, 1985, p. 1267; Carroll & Hannan, 1995; Baum & Amburgey, 2002; Hannan, Polos, & Carroll, 2007, pp. 198-207).

RPT provides a dynamic view of the evolution of competition between generalists and specialists over time. In new markets, organizations tend to be specialists at first. Competition is fierce, particularly at the center of the market. As a result, generalists begin to emerge in the center, largely due to mergers among competing organizations. In order to reduce competition among themselves, generalists tend to differentiate from one another quickly, each keeping near the center of the market but avoiding high levels of overlap with other generalists. Specialists near the center of the market are either forced out of business or merge with the dominant generalists. Once specialists have been eliminated from the center of the market, competition between generalist organizations increases as the point of market saturation or reaching carrying capacity is reached. At these moments of high market instability, specialist organizations emerge at the periphery to capture neglected market niches. Specialists begin to gain market share, pressuring older generalists to innovate, consolidate, or die. In this way, market environments come to have both generalist and specialist organizations.

In a mature market, the degree to which generalists are concentrated at the center of the market is therefore correlated with the relative prospects of generalists and
specialists. According to the resource partitioning model, higher levels of concentration decrease the viability of generalists (due to heightened competition) while simultaneously freeing up peripheral resources for specialist organizations (Carroll, 1985). Growth, in this model, happens for generalists when concentration is relatively low, allowing them to retain a central market position and steal resources (customers) away from smaller organizations (likely specialists) who are “too close” to the center. Growth happens for specialists when generalists become over-concentrated in the center of the market and become predominately occupied with competing with each other; resources at the periphery of the market are inadvertently abandoned when this occurs, which allows specialists to prosper there and even to “steal back” customers relatively close to the periphery.

OE literature on generalism, specialization, and concentration

Carroll’s (1985) newspaper industry research produced three axioms that are foundational to the RPT. First, “as concentration increases, generalist papers die faster and specialist papers die more slowly” (p. 1276). Second, “concentration has a greater effect on specialist newspaper organizations” (p. 1276). Third, the size of the “market may affect the competitive process” (p. 1277). The seemingly counterintuitive hypothesis put forth by RPT is that increased concentration/domination of the market center by generalists actually improves the life chances of specialists at the periphery niches (Carroll, 1985). Studies have found support for RPT’s hypothesis that increased generalist concentration (which increases generalist mortality rates) decreases the mortality rate (and increases the founding rate) for specialists.
Carroll & Swaminathan’s (1992) U.S. brewing industry research concluded mortality rates of specialists decline with industry concentration. Swaminathan’s (2001) U.S. wine industry research agreed with Carroll’s (1985) earlier conclusion about generalist crowding in the center of the market, while arguing that specialist organizations are negatively impacted when they lose sight of their organizational identity. Additionally, when generalist organizations develop an expansive identity, allowing for greater market penetration by occupying specialist and generalist spaces in the market simultaneously, specialist organizations suffer (also see Hsu & Hannan, 2005).

Dobrev, Kim, & Carroll (2002) conducted an event history analysis of organizational concentration and niches in the U.S. automobile industry. The findings showed support for low market concentration leading to low organizational mortality; conversely, high market concentration led to slower mortality effects on small organizations with narrower niche widths. Second, there was also evidence for market concentration movement from low to high resulting in corresponding high and low chances of organizational failure as they “from the market center” (p. 257).

Boone, van Witteloostuijn, and Carroll (2004) tested the basic premise of RPT in the Dutch Daily Newspaper context. The researchers found cause for agreement via empirical evidence that higher degrees of shared and concentrated environmental resources in the market results in “higher concentration of large generalist organizations competing on the basis of scale” (p. 408). Additionally, Boone, et al. discovered that specialists also thrived in concentrated markets, “at least when resources are not fully homogenized” (p. 408).
Al-Amin, Zinn, Rosko, & Aaronson (2010) predicted and confirmed that market resources made available by closing general hospitals (generalist organizations) would contribute to increased foundings of specialist hospitals (specialist organizations). Their findings were commensurate with RPT’s core argument that generalists crowding the center of the market limit further generalist foundings (due to competition) while making room for specialist organizations to acquire unattended resources on the market periphery.

Sikavica & Pozner (2013), investigating the question “of how and why markets may partition in a stable way,” concluded that identity movements (e.g., organic movement in U.S. farming industry akin to micro-brews and micro-radio) may or may not exhibit evidence of partitioning, “depending on their ability to generate sharp specialist form identities” (p. 623)

OE applied to the church context

The concepts of generalism and specialization transfer well to the church context. In both forms attendees are a key resource conduit to additional resources (e.g., donations; volunteer hours, service to the broader community) necessary for church survival. As I argued in Chapter 3 generalism and specialization are not purely dichotomous states, in the case of churches; more likely generalism and specialization are more like the endpoints of a continuum. Small denominational churches tend to be the most specialized among all churches and megachurches tend to be more generalist.

Furthermore, I argued in Chapter 3 that single-site and multi-site megachurch types are not equally generalist. SSMs have narrower niche width and attendee appeal, making them more specialist than MMs. The presence of multiple sites allows MMs to
differentiate (to some degree) the programming offered at different locations; this allows the church as a whole to broaden its appeal to a wider range of attendees. Multiple locations can garner greater diversity (e.g., racial and ethnic, etc.) among attendees. Therefore, greater attendee diversity can encourage the church to engage in a number of different activities to meet the needs of attendees.

Support for the application of OE’s RPT to the megachurch context can be seen by looking at interactions between megachurches (both SSM and MM) and smaller churches in the same city. RPT would predict that the rise of megachurches would have to necessarily coincide with merger activity, since resource space near the center of the religious market is cleared of competing specialists (traditional, small churches) to accommodate the growth of megachurches. Indeed, some church researchers argue that church mergers are on the rise, with the most typical cases involving thriving churches taking over declining churches (Tomberlin & Bird, 2012; Bird, 2014).

Because MM are more generalist than their SSM counterparts, one should expect concentration to have an effect on church performance. Concentration, in this context, can be translated to mean the proportion of church attendees that go to generalist (SSM and MM) churches rather than smaller ones. If concentration is high, competition will become intense among the megachurches, which in turn should translate to differences in church performance. With the expectation, because they are more generalist, that MMs will be more crowded toward the “center” of the religious market and the corresponding expectation, because they are relatively more specialist, that SSMs will be (relatively) more toward the periphery of the same religious market, we would expect that a higher
level of concentration in the religious sphere will hinder the growth of MMs while facilitating the growth of SSMs.

**The aim of the current analysis**

This analysis aims to explore the potential presence and impact of niche width and concentration among megachurches on church growth. These established sub-theoretical domains within OE are tested in an organizational type (non-profit religious sector) that may resemble the for-profit sectors most often researched by OE scholars, but is markedly different from the central unit of analysis. By engaging in this study church scholars and organizational scholars will gain key insights to the presence of ecological characteristics and realities for churches. By examining church growth as it relates to niche width structures, resource partitioning, and concentration church scholars and leaders will benefit from a new perspective on the underpinnings of the modern Protestant megachurch and multi-site phenomena. This study also aims to explore the possibility that OE is organizationally and theoretically relevant to understanding modern religious organizations.

**Methods**

This chapter tested several hypotheses (focal and covariate) relating to church growth or church growth rates.

*Unit of analysis, dependent variable, examination period, and sampling*

The period of observation for this study is 2005 to 2013. Although the earliest indications from the literature suggests the “experiment” with switching began during the 1970s (McIntosh, 1997, pp. 138-140), very little data exists to support such proposed
research here, thus 2005 will serve as the starting point. The year 2005 is important for this research because megachurch list data begins at this point. The previously compiled megachurch list data offers additional megachurch information on denomination and/or affiliation relationships for the organizational population.

A complete megachurch listing of U.S. SSMs and MMs was compiled from Outreach Magazine’s (OM) 100 Largest Churches (2005-2013), Hartford Institute for Religion Research’s (Hartford) Database of Megachurches in the U.S., and Church Growth Today’s (CGT) 106 of America’s Largest Multi-site Churches (2000-2010). Outreach Magazine generates two annual lists, “America’s Largest 100 Churches” and “100 Fastest-growing Churches”. Outreach Magazine ranks churches by number of attendees and presents key variables – church name, city and state, pastor’s name, website address, founding year, and number of sites (varies from year to year). However, due to sporadic reporting of the number of sites, OM does not always indicate which megachurches are MM vs. SSM.

Hartford does not have archived record of church lists, as in the OM dataset; instead, Hartford’s data are what I would consider “real-time” as of 2014 (hirr.hartsem.edu). Hartford goes beyond the largest 100 churches to a listing of 1,668 churches; however, 115 churches listed have fewer than the defined 2,000 attendee baseline to be considered a megachurch. Harford’s database compiles church name with website link information, city and state, average annual attendance, and denominational affiliation as variables. Church attendance numbers are important in this current study because churches have been known to overestimate membership by not removing past members from the rolls. Counting attendees allows for the inclusion of members and non-
members alike. Church websites were then used to collect information on street addresses, zip codes, counties, number of worship services, online presence of new member programs, tenure of the pastor, and church founding dates, when available.

CGT’s list provides information on the number of sites, church name, city and state, pastor’s name, and church affiliation for 106 multi-site churches. The list does not include the number of attendees per site, founding dates, addresses, and county information. Therefore, the CGT list was used to cross-reference verify data from the other lists.

I acquired, aggregated, and verified data from the three megachurch lists. The present study focuses on a sample of 481 megachurches from this population (see Table 1), consisting of 415 SSMs and 126 MMs (with a total of 279 satellite locations). These 541 churches provided a total of 4247 church-years of data for the analysis. The main purpose for relying on a sample for this analysis was the need to obtain individualized church data from individual websites in a timely manner.
Table 9: Number (Percentage) of Megachurches and Churches

<table>
<thead>
<tr>
<th></th>
<th>Compiled List of Churches</th>
<th>Random Sample of Churches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-Site Megachurches</td>
<td>640</td>
<td>415</td>
</tr>
<tr>
<td>Multi-site megachurches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main location</td>
<td>192</td>
<td>126</td>
</tr>
<tr>
<td>Satellite Locations*</td>
<td>472</td>
<td>279</td>
</tr>
<tr>
<td>Total Megachurches</td>
<td>832</td>
<td>541</td>
</tr>
<tr>
<td>Total Church Sites (SSMs</td>
<td>1,304</td>
<td>820</td>
</tr>
<tr>
<td>+ All locations for MMs)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Satellite locations do not include the central location of the multi-site church network.

The dichotomous dependent variable used for the study (whether or not a church was identified as among the “fast growing”. The church growth variables were captured using Outreach Magazine’s (OM) lists of the 100 Fastest-growing Churches (2005-2013). Importantly, the fastest-growing lists underwent some alterations during the examination period. For instance, in 2005 researchers included rank, the number of attendees gained for 2004, megachurch name, city, state, senior/lead pastor’s name, and website address. Rankings for this year were exclusively based on the number of attendees gained. By 2008 researchers starting using a different ranking strategy that included growth by number and growth by percentage.

Focal IVs

Focal independent variables for the study included niche width measures (the number of megachurch locations, the number of church worship services, and educational, racial, and ethnic diversity present at the zip code and city levels) and a measure of concentration (number of megachurches in the city relative to population).
Focal independent variables also included interactions between each niche width measure and concentration; a description of the hypotheses for the niche width variables and the concentration variable are therefore postponed until all have been described.

*Niche Width Measures*

Data for the first niche width measure – the number of sites a megachurch had – came from the compiled megachurch list and follow-up search of megachurch websites to ascertain the number of church locations at each point in time during the 2005-2013 study period. As I argued in the introduction to this chapter, both SSM and MM have a wide niche width but MM niche width is wider than that of SSM. The presence of multiple sites allows MMs to differentiate (to some degree) the programming offered at different locations; this allows the church as a whole to broaden its appeal to a wider range of attendees.

For the second niche width measure, it is important to note that Megachurches tend to offer a variety of worship service options to attendees and members. These efforts accommodate busy life schedules while allow congregants to participate in this major part of church-life. Some church researchers have collected data on the number of worship services and church size (Thumma & Bird, 2008; Bird, 2014). When multiple services are added, churches often differentiate the format of each service from the others. Thus, the larger the number of services offered, the more likely the church is trying to reach a more diverse audience. Larger numbers of worship services would therefore reflect a wider niche width. Data on the number of worship services was obtained from church websites.
Data for six demographic-based measures of niche width came from the US Census American Fact Finder. The U.S. Census American Fact Finder provided specific ZIP code data for areas surrounding each SSM in the sample. For race, Census data was obtained on the percent of a ZIP code population that was White, African American, American Native/Native Indian, Asian American, Native Hawaiian/Pacific Islander, other races, and two or more races. For ethnicity, Census data was obtained on the percent that was Hispanic/Latino and non-Hispanic. For educational attainment, Census data was obtained on the percent of adults, age 25 years old and older, with an education of less than 9th grade, 9th-12th grade- no diploma earned, high school and equivalent, some college – no degree earned, bachelor’s of arts/science degree, master of arts/science degree, and professional degree (i.e., JD, MD). These percentages were captured for both the ZIP code where a church was located and for the entire CBSA (city) where the church was located.

The ZIP code level demographic information was used to construct the same three niche width measures used in the Chapter 2 analysis. As described there, race, ethnicity, and educational niche width measures were calculated from these percentages using a one-way $\chi^2$ statistic. The reported percentages were used as the observed values for this calculation. The expected values (percentages) were calculated by dividing a total of 100% by the number of categories present for each respective attribute (i.e., 100% divided by 7 for the race expected values; 100% divided by 2 for the ethnicity expected values; 100% divided by 7 for the education expected values). Each of the three separate $\chi^2$ statistics were then calculated using the following formula:

$$\chi^2 = \sum \frac{(Observed\ Percentage - Expected\ Percentage)^2}{Expected\ Percentage}$$
It is important to note that, conceptually, diversity is at its greatest when each category of a variable is represented equally. Therefore, diversity is at its highest when the observed percentages equal the expected percentages. Thus, lower $\chi^2$ values correspond to higher levels of diversity (wider niche width) while higher $\chi^2$ values correspond to lower diversity (smaller niche width).

The CBSA level demographic information was used to construct the three additional (race, ethnicity, and education) niche width measures, also using a one-way $\chi^2$ statistic. As for the ZIP code based measures, the reported percentages from the ZIP code where a church was located were used as the observed values for this calculation. However, for the CBSA based measures, the expected values (percentages) were the reported percentages for the CBSA where the church was located. Each of the three separate $\chi^2$ statistics were then calculated using the following formula:

$$\chi^2 = \sum \frac{(Observed\ Percentage - Expected\ Percentage)^2}{Expected\ Percentage}$$

It is important to note that the CBSA based measures capture similarity/dissimilarity between a church’s ZIP code area and the church’s city as a whole. A church’s ZIP code area is most similar to the city as a whole when the reported percentages for the ZIP code match the reported percentages for the CBSA. Thus, lower $\chi^2$ values for the 3 CBSA based measures correspond to a higher level of match to the city as a whole while higher $\chi^2$ values correspond to lower level of match. Logically then, a higher level of match to a church’s city (i.e., a lower $\chi^2$ value) indicates a broader niche width in the local context.

There is support in the megachurch literature for using diversity and similarity levels as measures of niche width. Among multi-site researchers, “reaching new kinds of people” has been the focus (Shields, 2007). Early attention on multi-site church diversity
was on language diversity, where satellite campuses were able to offer worship services in languages other than the one used at the “first campus” (Bird & Walters, 2010, p. 16). Bird (2014) reported that “economic levels are the greatest area of campus diversity” followed by attendee age, number of new believers, ethnic makeup, worship style, and language (p. 27). Given the high likelihood that megachurches reflect the areas in which they are located, diversity in the environment/market (i.e., racial, ethnic, and educational attainment level) is therefore a plausible measure of niche width.

**Concentration**

The concentration of megachurches, at the city level, was calculated by dividing the number of people in that market/city attending a church by the total number of megachurch sites in that city (see below). The city church population (number of people in that city/market attending a church) came from the 2010 US Religious Congregations & Membership Study (RCMS) collected by Association of Statisticians of American Religious Bodies (ASARB). The religious study record includes classifications of religious bodies (e.g., Church of the Brethren, Calvary Chapel Fellowship Churches), tradition (typology based on Steensland, et al. (2000) Black Protestant, Evangelical Protestant, Mainline Protestant, Nondenominational Protestant, Other Protestant, and Unknown Protestant), number of congregations, adherents, and the adherence rate per religious body. The RCMS had 2010 adherent data cities associated with the sampled megachurches except for seven; Thomasville, AL, Franklin, NC, Maysville, GA, Plentywood, MT, Cody, WY, Pittsfield, IL, and Mt. Sterling, IL. The total number of megachurches (SSMs and MMs) came the randomly sampled megachurch list collected for this study.
Interaction between niche width and concentration

Because resource partitioning theory (Carroll 1985) suggests organizational performance is contingent on both niche width and the overall level of concentration at the “center” of the market, interactions between each niche width measure and concentration were added to the models. These led to the following hypotheses:

\[ \text{concentration} = \frac{\text{Total number of megachurches in a market}}{\text{Number of people in that market attending a church}} \]

**H1:** When concentration levels are low, megachurches with more locations (a.k.a., those that are more generalist) will have greater growth. However, when concentration levels are high, megachurches with fewer locations (a.k.a., those that are more specialist) will have greater growth.

**H2:** When concentration levels are low, megachurches with more worship services (a.k.a., those that are more generalist) will have greater growth. However, when concentration levels are high, megachurches with fewer worship services (a.k.a., those that are more specialist) will have greater growth.

**H3a:** When concentration levels are low, megachurches in more racially diverse ZIP code areas (a.k.a., those that are more generalist) will have greater growth. However, when concentration levels are high, megachurches in less racially diverse ZIP code areas (a.k.a., those that are more specialist) will have greater growth.

**H3b:** When concentration levels are low, megachurches in more ethnically diverse ZIP code areas (a.k.a., those that are more generalist) will have greater growth. However, when concentration levels are high, megachurches in less ethnically diverse ZIP code areas (a.k.a., those that are more specialist) will have greater growth.

**H3c:** When concentration levels are low, megachurches in more educationally diverse ZIP code areas (a.k.a., those that are more generalist) will have greater growth. However, when concentration levels are high, megachurches in less educationally diverse ZIP code areas (a.k.a., those that are more specialist) will have greater growth.

**H4a:** When concentration levels are low, megachurches in ZIP code areas that more closely resemble the racial distribution of their cities (a.k.a., those that are more generalist) will have greater growth. However, when concentration levels are high, megachurches in ZIP code areas that less closely resemble the racial distribution of their cities (a.k.a., those that are more specialist) will have greater growth.
H4b: When concentration levels are low, megachurches in ZIP code areas that more closely resemble the ethnic distribution of their cities (a.k.a., those that are more generalist) will have greater growth. However, when concentration levels are high, megachurches in ZIP code areas that less closely resemble the ethnic distribution of their cities (a.k.a., those that are more specialist) will have greater growth.

H4c: When concentration levels are low, megachurches in ZIP code areas that more closely resemble the education distribution of their cities (a.k.a., those that are more generalist) will have greater growth. However, when concentration levels are high, megachurches in ZIP code areas that less closely resemble the education distribution of their cities (a.k.a., those that are more specialist) will have greater growth.

Control Variables

Several control variables are used in the study: (1) church age, (2) largest 100 churches list, (3) tenure length of senior pastors, (4) the presence of a formal new member program, (5) city-level population, (6) median age in a church’s ZIP code area and (7) median income in a church’s ZIP code area.

Older churches do survive, suggesting they fit their environment well and will outperform their younger counterparts. However, there is also organizational literature that argues that older organizations perform worse because inertia has constrained them for a longer period of time. Therefore, older organizations are more out of step than younger ones. This literature does conclude that once resource levels are controlled age (because older organizations have more resources to buffer themselves) becomes detrimental to survival (Le Mens, Hannan, Polos, 2015).

H5: As megachurches (SSMs and MMs) increase in age there will be increased probability of growth.

From 2005 to 2013 Outreach Magazine annually published the 100 Largest Churches list. Several of the churches on the fastest-growing list were megachurches while others were approaching the 2,000 attendee minimum. All of the churches on the
largest churches list were classified as megachurches, and most had to exceed the 2,000 attendee minimum to make the list. Other news sources would also disseminate this information giving these megachurches greater attention in the public sphere. I suspected that making the list would have an ongoing positive effect on church growth because of their acquired notoriety and effective ability to attract attendees. I hypothesized the following to test the relationship between making either list and megachurch growth:

\[ H_6: \text{Megachurches making OM’s largest churches list will have increased probability for church growth.} \]

Megachurch researchers have discovered that high levels of church growth have coincided with long-standing pastors being at the helm (Rainer, 2009; Thumma, Travis, & Bird, 2005; Thumma & Bird, 2008). In some cases these pastors were also the founders of these churches. I wanted to test the significance and impact of the relationship between church growth and pastor’s tenure. The hypothesis was needed to conduct an analysis on the relationship based on the findings of other church-related studies.

\[ H_7: \text{The tenure of megachurch pastors (SSMs and MMs) and the probability of church growth will have a positive relationship.} \]

One of the critiques of megachurches is that attendees are spectators and not actual participants (Bird, 2007). Further concern within megachurch organizations is how to move people from attendee status to member status, faster. Megachurch leaders assume that attendees have a lower level of commitment to the organization than members do (Shelby, 2014; Shelby & Roelfs, 2015). Therefore, I suspected that most megachurches would have a formal process for attendees to join the church. The process would likely include a new membership class that, at the very least, introduced new people to the church. While there can be theological variation on church membership,
fundamentally, all megachurches have some way for new people to belong to the community. I defined the formal aspect of a new member program based on a megachurch promoting a new member class, program or process on their publicly official webpage. For churches that provided this information, formalize church member rolls were expected to increase. And while it is common for church researchers to count the number of attendees and not members, this hypothesis will allow us to see the effect of on-board church programming, like new member classes, on church growth. I hypothesized the following:

**H8:** Megachurches, of either variety, offering a formalized new member program (via website promotion) will experience the greatest church growth.

Church research has shown that megachurches are mostly situated in suburban communities, attract people between the age of 25 and 44, and are mostly comprised of middle class people (Shields, 2009; Thumma & Bird, 2009; Tucker-Worgs, 2011; Kilde, 2002). I wanted to test all of these demographic results on my megachurch sample (SSMs and MMIs) and ascertain their effect on church growth. The following demographic hypotheses were tested for this study:

**H9:** Increases in city-level population will have a positive relationship to megachurch growth.

**H10:** A positive relationship exists between increases in median age and increases in church growth.

**H11:** Higher median household income levels are associated with increases in church growth.

**Statistical Method**

The variables were analyzed using generalized estimating equations (GEE). A generalized estimating equation (GEE) – similar to binary logistic regression for time series analysis was run to test the hypotheses noted above. GEE and multilevel
(hierarchical) models function similarly, with the main difference being GEE’s focus on estimating a non-varying (or average) coefficient in the presence of clustering, whereas MLMs (HLMs) focus on estimating the aspects of the model that vary by group.

Collinearity was examined using variance inflation factors (VIFs). Most variables in the model had VIFs smaller than 10 indicating a possibility that collinearity could be detrimental. Linearity of association between the dependent variable and the nominal and interval/ratio predictors was tested by including squared terms for each variable and examined using scatterplots of each predictor vs. the studentized residuals. Both full and parsimonious models were sought, with the parsimonious model being produced via backwards selection (p>.10 to exit).

There were instances of missing data for the years 2005-2013 in the U.S. Census demographic information. These missing data required a formal process for imputing some of the missing values. Using SPSS syntax, a systematic approach of determining the missing values, their proximity to (prior or subsequent) known data points was used to determine if imputation was warranted. If demographic variables for a particular year had fewer than two data points across the time period, no additional efforts were made to impute the missing values. If a particular variable was missing all but one or two data points the missing values were not extrapolated. For years where variables had two or more values present, syntax calculations were used. For instance, Abbeville, LA did not have any information on racial groups for years 2005 and 2006, and therefore no data were imputed. In the example below if population values for 2005 were missing, the syntax would look at population data for 2007, subtract 2 (number of years difference),
and multiply population data for years 2013 minus 2007, and finally divide the result by the number of years in total (7).

| Example: IF (missing(Pop05)) Pop05 = Pop07 - 2 * ((Pop13 - Pop07) / 7). |

**Results**

*Descriptive Results*

Descriptive statistics for the 4247 megachurch-years (538 megachurches over the 2005-2013 period) using for the analysis are displayed in Table 10. Among these megachurch-years, 4.5% corresponded to a church being listed among the fastest-growing churches and 5.1% corresponded to a church being listed among the largest churches in the U.S. Megachurches had between 1 and 15 locations with typical megachurches having 1.2140 locations (Std. Dev. = .63506). They averaged 2.90 worship services on a given weekend across the organization (Std. Dev. = 1.375).
Table 10: Chapter IV Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Central Tendency Measure</th>
<th>Variability Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent Variable</td>
<td>Church Growth&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Fastest-Growing</td>
</tr>
<tr>
<td>Number of Church Sites</td>
<td>1.2140 (mean)</td>
<td>4.5%</td>
</tr>
<tr>
<td>Number of Worship Services</td>
<td>2.90 (mean)</td>
<td>1.375 (Std. Dev.)</td>
</tr>
<tr>
<td>Diversity at church location (ZIP code area)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Racial Diversity</td>
<td>346.2747 (mean)</td>
<td>124.98285 (Std. Dev.)</td>
</tr>
<tr>
<td>Ethnic Diversity</td>
<td>63.2484 (mean)</td>
<td>29.05650 (Std. Dev.)</td>
</tr>
<tr>
<td>Educational Attainment Diversity</td>
<td>47.6841 (mean)</td>
<td>7.79-384.60 (min.-max.)</td>
</tr>
<tr>
<td>Niche Width Measures</td>
<td>Similarity between church location (ZIP code area) and city (CBSA) as a whole</td>
<td></td>
</tr>
<tr>
<td>Racial similarity</td>
<td>58.1865 (mean)</td>
<td>229.13288 (Std. Dev.)</td>
</tr>
<tr>
<td>Ethnic Similarity</td>
<td>4391.0382 (mean)</td>
<td>41.06455 (Std. Dev.)</td>
</tr>
<tr>
<td>Educational Similarity</td>
<td>21.0936 (mean)</td>
<td>0.10-878.40 (min.-max.)</td>
</tr>
<tr>
<td>Concentration Measure</td>
<td>Concentration&lt;sup&gt;3&lt;/sup&gt;</td>
<td>52.6219 (mean)</td>
</tr>
<tr>
<td>Church Age</td>
<td>59.5032 years old (mean)</td>
<td>44.44878 (Std. Dev.)</td>
</tr>
<tr>
<td>Outreach Magazine’s Top 100 Largest Churches List</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>5.1%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Variables</td>
<td>Pastor’s Tenure</td>
<td>17.4806 (mean)</td>
</tr>
<tr>
<td>New Member Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>60.4%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>39.6%</td>
<td></td>
</tr>
<tr>
<td>Population (City)&lt;sup&gt;4&lt;/sup&gt;</td>
<td>3692.4213 (mean)</td>
<td>4274.95222 (Std. Dev.)</td>
</tr>
<tr>
<td>Median Age (ZIP code)&lt;sup&gt;5&lt;/sup&gt;</td>
<td>36.459 years old (mean)</td>
<td>5.1511 (Std. Dev.)</td>
</tr>
<tr>
<td>Median Income (ZIP code)&lt;sup&gt;5&lt;/sup&gt;</td>
<td>$60,293.40 (mean)</td>
<td>$26,674.52 (Std. Dev.)</td>
</tr>
</tbody>
</table>

<sup>1</sup> All variables were mean centered prior to the regression; n = 4247 megachurch-years (538 megachurches for 9 years)

<sup>2</sup> The outcome of interest (DV) for the General Estimating Equation

<sup>3</sup> Concentration measured in units of 1,000.

<sup>4</sup> Population measured at the city level in 1000s of people.

<sup>5</sup> Median income measured in $1,000 U.S. dollars.
Chi-square statistics were calculated to determine the level of racial, ethnic, and educational attainment diversity in a church’s ZIP code area. The mean chi-square statistic for racial diversity at the zip code-level was 346.2747 (range = 57.87-591.64). The zip code-level chi-square mean for racial diversity indicates that, on average, churches’ ZIP code areas had a relatively high degree of racial homogeneity. Ethnic diversity at the zip code-level averaged 63.2484 (range = 0-100), indicating limited ethnic diversity. The zip code educational chi-square mean of 47.6841 (range = 7.79-384.60) indicates heterogeneity in the zip codes.

Chi-square statistics were also calculated to determine the level of racial, ethnic, and educational similarity between a church’s ZIP code area and the city as a whole. The mean chi-square statistic for racial diversity at the city-level was 58.1865 (range = .09-5422.87), indicating that the racial makeup is, on average, similar between the ZIP code areas where churches are located and their cities as a whole. Ethnic diversity at the city-level was a bit more heterogeneous by averaging 4391.0382 (range = 3,267-6,327.09). This indicated a relatively high degree of dissimilarity between the ethnic make-up in a church’s ZIP code and the city as a whole. The city-level educational chi-square mean of 21.0936 (range = .10-878.40) indicates that the educational attainment levels are similar between zip codes and cities.

Megachurches in the sample had a typical concentration of 52.6219 (Std. Dev. = 28.07848), measured as 1000s of churchgoing population per megachurch. In terms of control variables, megachurches, on average, were 59.5 years old (Std. Dev. 44.44878). 5.1% of megachurch-years corresponded with a church being on OM’s Largest 100 Churches list. Senior pastors had been in the senior leadership role for an average of
17.48 years (Std. Dev. = 12.96). Most of the megachurches (60.4%) in the sample
advertised a formal new member program on their webpage. The average population at
the city level (measured as 1000s of people) was 3692.4213 people (Std. Dev. =
4274.95222). The average median age for churches’ ZIP code areas was 36.459 years old
(Std. Dev. = 5.1511). The church ZIP code area mean for median income was $60,293.40
(Std. Dev. = $26,674.52).

Table 11 shows the full regression models and the resulting parsimonious model
for whether a church was listed on the 100 Fastest-growing list in a given year. The
following summary discusses results from the parsimonious model. The following are
among the significant (at the p < .10 level) independent variables: number of church
sites/locations (p = .000); number of worship services (p =.001) and its squared
counterpart (p = .065); diversity measures for race (p = .088) at the zip code level;
similarity measures for educational attainment (p = .020); the interactions between
education at the zip code level and concentration (p = .094) and its squared counterpart (p
= .002); concentration of megachurches (p = .004) and its squared counterpart (p = .000);
church age (p = .001) and its squared counterpart (p =.006), being listed among OM’s
100 Largest Churches (p = .000); median age squared (p = .061).

Table 11: Generalized estimating equations predicting the odds of being listed among the
100 fastest growing churches in a particular year\(^1\)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Full Model</th>
<th>Parsimonious Model (^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Niche Width Measures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Worship Services</td>
<td>1.231 (.932-1.625)</td>
<td>1.361 (1.138-1.629)</td>
</tr>
<tr>
<td>Number of Worship Services (squared)</td>
<td>1.029 (.946-1.119)</td>
<td>.982 (.963-1.001)</td>
</tr>
<tr>
<td>Constant</td>
<td>.015 (.007-.031)</td>
<td>.020 (.013-.032)</td>
</tr>
<tr>
<td>Number of Megachurch Sites</td>
<td>1.979 (1.382-2.834)</td>
<td>1.577 (1.263-1.970)</td>
</tr>
</tbody>
</table>
### Racial Diversity

<table>
<thead>
<tr>
<th>Similarity</th>
<th>Coefficient</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Racial Similarity</td>
<td>1.003</td>
<td>(1.000-1.006)</td>
</tr>
<tr>
<td>Ethnic Similarity</td>
<td>1.003</td>
<td>(.980-1.026)</td>
</tr>
</tbody>
</table>

### Ethnic Diversity

<table>
<thead>
<tr>
<th>Similarity</th>
<th>Coefficient</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Racial Similarity</td>
<td>1.002</td>
<td>(1.000-1.004)</td>
</tr>
<tr>
<td>Ethnic Similarity</td>
<td>1.002</td>
<td>(.975-1.010)</td>
</tr>
</tbody>
</table>

### Education Attainment Diversity

<table>
<thead>
<tr>
<th>Similarity</th>
<th>Coefficient</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational Attainment Similarity</td>
<td>1.003</td>
<td>(.980-1.026)</td>
</tr>
</tbody>
</table>

### Concentration

<table>
<thead>
<tr>
<th>Concentration</th>
<th>Coefficient</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentration</td>
<td>1.002</td>
<td>(.971-1.034)</td>
</tr>
<tr>
<td>Concentration (squared)</td>
<td>.999</td>
<td>(.998-1.000)</td>
</tr>
</tbody>
</table>

### Number of Megachurch Locations

<table>
<thead>
<tr>
<th>Number of Megachurch Locations</th>
<th>Coefficient</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>with Concentration</td>
<td>1.005</td>
<td>(.984-1.026)</td>
</tr>
<tr>
<td>with Concentration (squared)</td>
<td>.998</td>
<td>(.986-1.010)</td>
</tr>
</tbody>
</table>

### Number of Worship Services

<table>
<thead>
<tr>
<th>Number of Worship Services</th>
<th>Coefficient</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>with Concentration</td>
<td>1.000</td>
<td>(1.000-1.000)</td>
</tr>
<tr>
<td>with Concentration (squared)</td>
<td>1.000</td>
<td>(.999-1.000)</td>
</tr>
</tbody>
</table>

### Number of Worship Services (squared)

<table>
<thead>
<tr>
<th>Number of Worship Services (squared)</th>
<th>Coefficient</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>with Concentration</td>
<td>1.002</td>
<td>(.999-1.004)</td>
</tr>
</tbody>
</table>

### Racial Diversity with Concentration

<table>
<thead>
<tr>
<th>Racial Diversity with Concentration</th>
<th>Coefficient</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>with Concentration</td>
<td>1.000</td>
<td>(1.000-1.000)</td>
</tr>
<tr>
<td>with Concentration (squared)</td>
<td>1.000</td>
<td>(.999-1.000)</td>
</tr>
</tbody>
</table>

### Ethnic Diversity with Concentration

<table>
<thead>
<tr>
<th>Ethnic Diversity with Concentration</th>
<th>Coefficient</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>with Concentration</td>
<td>1.000</td>
<td>(1.000-1.000)</td>
</tr>
<tr>
<td>with Concentration (squared)</td>
<td>.999</td>
<td>(.998-1.000)</td>
</tr>
</tbody>
</table>

### Educational Attainment Similarity with Concentration

<table>
<thead>
<tr>
<th>Educational Attainment Similarity with Concentration</th>
<th>Coefficient</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>with Concentration</td>
<td>1.000</td>
<td>(.999-1.000)</td>
</tr>
<tr>
<td>with Concentration (squared)</td>
<td>1.000</td>
<td>(.999-1.000)</td>
</tr>
</tbody>
</table>

### Control Variables

<table>
<thead>
<tr>
<th>Church Age (squared)</th>
<th>Coefficient</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Church Age</td>
<td>.989</td>
<td>(.980-.997)</td>
</tr>
<tr>
<td>(squared)</td>
<td>.987</td>
<td>(.979-.994)</td>
</tr>
</tbody>
</table>

### Church Age

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.000</td>
<td>(1.000-1.000)</td>
</tr>
</tbody>
</table>
Outreach Magazine’s Top 100 Largest Churches List

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Odds Ratio (95% CI)</th>
<th>Odds Ratio (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pastor’s Tenure</td>
<td>1.001 (.984-1.018)</td>
<td></td>
</tr>
<tr>
<td>Pastor’s Tenure (squared)</td>
<td>1.000 (.998-1.002)</td>
<td></td>
</tr>
<tr>
<td>New Member Program</td>
<td>1.107 (.708-1.729)</td>
<td></td>
</tr>
<tr>
<td>Population– City²</td>
<td>1.000 (1.000-1.000)</td>
<td>1.000 (1.000-1.000)</td>
</tr>
<tr>
<td>Population– City (squared)</td>
<td>1.000 (1.000-1.000)</td>
<td>1.000 (1.000-1.000)</td>
</tr>
<tr>
<td>Median Age</td>
<td>1.001 (.944-1.061)</td>
<td>1.004 (.953-1.059)</td>
</tr>
<tr>
<td>Median Age (squared)</td>
<td>.993 (.985-1.000)</td>
<td>.994 (.988-1.000)</td>
</tr>
<tr>
<td>Median Income⁵</td>
<td>1.000 (1.000-1.000)</td>
<td></td>
</tr>
<tr>
<td>Median Income (squared)</td>
<td>.997 (0.985-1.010)</td>
<td></td>
</tr>
</tbody>
</table>

¹ Based on n = 4247 church-years; pseudo $R^2 = .209$ for the parsimonious model; numbers shown are odds ratios (95% Confidence Interval in parentheses); all independent variables are mean-centered and some are squared so the constant may be interpreted as the overall mean odds of having a church listed among the 100 fastest growing.
² Parsimonious model produced using backward selection (p>.10 to exit).
³ Concentration was calculated as the number of 1000s of people per megachurch city.
⁴ Population was divided by 1,000.
⁵ Income is measured in units of $1,000.

The non-significant predictors of being among the fastest growing churches in a given year included the level of ethnic diversity at the zip code level (p = .914); educational diversity at the zip code level (p = .363; variable retained in the final model because the interaction with concentration was significant); racial and ethnic similarity at the CBSA level (p = .133 and p = .591, respectively); all interactions except for those involving educational diversity and educational similarity; the length of the pastor’s tenure and its squared counterpart (p = .986 and p = .834, respectively); whether a church had a formal new member program (p = .655); city-level population density (p = .694) and is squared counterpart (.293)⁴; median age, (p = .884; variable retained in the final model because median age squared was significant); and median income (p = .884).

⁴ Although variables are not statistically significant the process of removing them was a bit complex. Removing the squared variable when its p-value exceeded .10 made the main variable significant.
The parsimonious model explained about 21% of the unexplained variance of the dependent variable. The quasi-likelihood under independence model criterion (QIC) for the intercept only model was 1771.395. Under the parsimonious model the goodness of fit statistic quasi-likelihood under independence model criterion (QIC) was 1399.688, yielding a pseudo $R^2$ of .2098. Thus, considering that this is an exploratory analysis, the model fit the data reasonably well.

*Niche Width Measures*

Both the number of megachurch sites and the number of worship services were significantly associated with the probability that a megachurch would be listed on the fastest growing churches list. The results showed that each additional site a megachurch has is associated with a 57.7% increase in the odds (corresponding to an increase of .61 to the probability). I hypothesized that there would be a significant interaction between the number of church sites and concentration, such that when concentration levels were low, megachurches with more locations would have greater growth and that when concentration levels were high, megachurches with fewer locations would have greater growth. The findings indicated that the probability of being on the fastest growing church list increased with the number of locations equally for all concentration levels. Hypothesis H1 was therefore not supported.

The number of worship services and its squared counterpart remained in the final model because both were statistically significant ($p = .001$ and $p = .065$, respectively). The main effect for number of services was .308 and the quadratic effect was -.018, and

---

Retaining the main variable in the model suggest returning the squared variable, making them both statistically non-significant.
their combined effect is displayed in Figure 21. The results show that as the number of worship services increases, the probability of being on the fastest growing church list also increases, though at no point does the probability exceed .10.
I hypothesized that there would be a significant interaction between the number of worship services and concentration, such that when concentration levels are low, megachurches with more worship services and that when concentration levels are high, megachurches with fewer worship services will have greater growth. The findings indicated that the probability of being on the fastest growing church list increased with the number of worship services equally for all concentration levels. Hypothesis H2 was therefore also not supported.

The probability that a megachurch is listed on the fasted growing church list was also impacted by the level of racial diversity in a church’s ZIP code area. The variable was marginally significant in the parsimonious model ($p = .088$) with an odds ratio of 1.002. This odds ratio indicates that decreasing levels of racial diversity (i.e., higher values for the $\chi^2$) were associated with very slightly higher probabilities. I hypothesized that when concentration levels are low, megachurches in more racially diverse ZIP code areas (a.k.a., those that are more generalist) will have greater growth. I also hypothesized
that when concentration levels are high, megachurches in less racially diverse ZIP code areas (a.k.a., those that are more specialist) will have greater growth. Because the interaction between the racial diversity measure and the concentration measure was non-significant, Hypothesis H3a was not supported.

Two of the niche width measures focused on education: educational diversity in the ZIP code area and the level of similarity between education levels in the ZIP code and city. The effect of education diversity in ZIP code areas with a concentration interaction is displayed in Figure 22.

Figure 22: Probability of being on fastest-growing list by Concentration and Education diversity (χ2) in ZIP code areas

When educational diversity is at a high level in a ZIP code area (i.e., when the χ² measure is low), as concentration increases it dramatically decreases the probability of being on the fastest-growing list. At very low concentrations the effects on growth is really quite high, but at concentration levels around 50, chances for growth is very low and remains low as concentration increases. Conversely, when educational diversity is very low (i.e., high χ²) and concentration is low, there is very low probability of being on
the list until around a concentration of 55. At this point, the chances begin to accelerate
and reach a probability of 1 starting at a concentration of around 75 or 210. As
concentration continues to increase, the probability of being on the fastest growing
church once again becomes very low.

I hypothesized that when concentration levels are low, megachurches in more
educationally diverse ZIP code areas (a.k.a., those that are more generalist) will have
greater growth. I also hypothesized that when concentration levels are high,
megachurches in less educationally diverse ZIP code areas (a.k.a., those that are more
specialist) will have greater growth. According to the results, more generalist churches
(those in more educationally diverse areas) did have greater growth at very low levels of
concentration (0-25). The results for specialist churches did not support the hypothesis
because at high concentration levels, megachurches in less educationally diverse ZIP
code areas had no growth. Therefore, hypothesis H3c was partially supported.

Figure 23 displays the interaction between educational similarity and
concentration. When educational similarity is high (low $\chi^2$), low concentration has very
little effect on growth. Things increase very little around a concentration of 25 and the
probability of being on the fastest growing church list ripples between a concentration of
around 35 and 125, and then stays low when concentration is higher. In cities with low
educational similarity (i.e., a high $\chi^2$), low concentration coincides with a slightly higher
probability of being on the fastest-growing list (though the probability, overall, remains
very low). However, at concentrations of around 55 the probability decreases to nearly 0.
As concentration continues to increase beyond this point, the probability remains very
low.
My hypothesis stated that when concentration levels are low, megachurches in ZIP code areas that more closely resemble the education distribution of their cities (a.k.a., those that are more generalist) will have greater growth. However, when concentration levels are high, megachurches in ZIP code areas that less closely resemble the education distribution of their cities (a.k.a., those that are more specialist) will have greater growth. Megachurches in ZIP code areas with educational distributions that were similar to their cities (generalists) did not have greater growth when concentration was low nor did specialist churches have greater growth at high levels of concentration. Thus, hypothesis H4c is also not supported.

**Control IVs**

Church age and its squared counterpart remained in the final model because both were statistically significant ($p = .001; p = .006$). The main effect for church age was -.014 and the quadratic effect was 9.438E-05, and their combined effect is displayed in Figure 24. I was curious to see the effect of church age on megachurch growth because
previously reviewed OE literature had spent considerable time investigating and discussing the effects of organizational age and inertia (see Chapter 2). The age span for megachurches ranged from 3 to 281 years, and yet, the odds for a megachurch being listed among the fastest growing is less than 10% for the majority of these ages. The best chance for church growth occurred for the oldest of churches in the sample (279-280 years old at 10%).

Figure 24: Probability of being on fastest-growing list by Church Age

I hypothesized that as megachurches (SSMs and MMs) increase in age there would be an increased probability of growth. The resultant pattern of the curve indicates growth for youngest and oldest megachurches, with the greatest growth chances going to oldest megachurches. Church age increasing from 3 and 180 years old has a decreased probability of growth (negative relationship). As church age increases from 185 to 281, the probability then increases. Hypothesis H5 is therefore partially supported by the results. However, it is important to mention that very few churches are in the upper ages which increases the level of support for this hypothesis.
The probability that a megachurch is listed on the fastest growing church list was also impacted by whether or not it was listed on the largest churches list. The variable was statistically significant in the parsimonious model (p = .000) with an odds ratio of 8.323. This odds ratio indicates that a church listed as being one of the 100 largest in the nation in a particular year was much more likely to also be listed on the fastest growing church list. I hypothesized that megachurches making the OM’s largest churches list would have increased probability for church growth. The findings show that this was the case. Therefore, H6 was supported.

The population in a church’s city and its squared counterpart also remained in the final model. The main effect was -.0000184107 and the quadratic effect was -4.622598E-9, and their combined result is displayed in Figure 25. While difficult to discern on the graph, the probability of being on the fastest growing church list increases up to a population of about 1.5 million before subsequently declining. However, as evidenced by the graph, at no population level does the probability get above .02. I hypothesized that increases in city-level population would have a positive relationship to megachurch growth. Hypothesis H9 was therefore only partially supported (i.e., only supported when population is between 0 and about 1.5 million people).
Median age and its squared counterpart also remained in the final model. However, the main variable was not significant (p = .884) while the squared variable was (marginally) statistically significant (p = .061). The main effect for median age was 6.239E-06 and the quadratic effect was -.006, and their combined result is displayed in Figure 26. Disappointingly, because of the marginally statistically significant effect of the squared variable there was a minimal impact of median age on the chances that a church would be listed among the fastest growing. Median ages at the beginning and end of the range indicate probabilities hovering near 0%. For median ages of 29 to 44 years, the probabilities ranged between only 2.0% and 2.5%.
I hypothesized that there would be a positive relationship between median age and the probability that a megachurch was on the fastest growing list. Hypothesis H9 was partially supported (i.e., between median ages 19 to 36). However, the hypothesis was not supported as median age increased from 37 to 70.

Unsupported Hypotheses

Several independent variables were not retained in the model because they were not statistically significant (i.e., \( p > .10 \)). The only niche width diversity measure not in the final model was ethnic diversity in a church’s ZIP code area. Also not in the final model were the measures for racial and ethnic similarity between a church’s ZIP code area and their cities. For all three I hypothesized that when concentration levels are low, megachurches in ZIP code areas that were more ethnically diverse and more closely resembled the racial and ethnic distribution of their cities (a.k.a., those that are more generalist) will have greater growth. I also hypothesized that when concentration levels are high, megachurches in ZIP code areas that were less ethnically diverse and less
closely resembled the racial and ethnic distribution of their cities (a.k.a., those that are more specialist) will have greater growth. Hypotheses H3b, H4a, and H4b were not supported.

Three of six control variables were also removed from the model for lack of statistical significance. The pastor’s position tenure, new member program, and median income were removed. None of their corresponding hypotheses (numbers H6, H7, and H10) were therefore supported.

**Limitations**

This exploratory study on megachurch growth expresses an attempt to test prospective relationships between known organizationally-related variables. Although there were some important discoveries made here, there were also some limitations.

First, testing the relationship between megachurch growth and the number of worship services needed a bit more exploration. Perhaps it would helpful to record which locations in a megachurch network (multi-site) has what particular worship services and service times. What kind of attendance occurs at each worship service? It is unknown what kind of impact multiple services has on overall growth when deployed at main locations versus those at satellite locations. This also means that maximum church occupancies might be an important variable to include. However, it is unclear how this information could be collected, especially when attempts to gather room capacity through local fire marshals’ offices have proven less than fruitful. With the aforementioned information it might be possible to test a broader range of hypotheses. In addition, it might be interesting to test for possible interactions between the number of church
locations and the number of church services offered. Below are examples of two hypotheses for future consideration.

**Hypothesis A:** As the number of locations increases and the number of services increases megachurch growth will also increase.

**Hypothesis B:** As the number of locations increases and the number of services decreases megachurch growth will be flat.

Second, when testing for collinearity all of the ethnicity variables had variance inflation factors (VIFs) greater than 10. The following lists the variables of concern and their corresponding VIFs: ethnic diversity at the ZIP code level (12.671); ethnic similarity between church location ZIP code area and city as a whole (12.681); ethnic diversity with concentration (15.002), ethnic diversity with concentration, squared (116.543); ethnic similarity with concentration (12.638), ethnic similarity with concentration, squared (124.714); educational similarity with concentration (10.948); number of worship services with concentration, squared (11.255). Collinearity concerns were addressed when the parsimonious model was checked for collinearity as well. In the parsimonious model, none of the retained variables had VIFs above 7.395 (educational attainment similarity with concentration). Therefore collinearity did not bias the model coefficients.

Third, the sampling of megachurches, and method for measuring church growth, occurred due to time constraints and the limited number of megachurches responding to requests for study-related information. Given enough time I would collect the necessary organizational information (founding dates, number of locations, etc.), via telephone, from what remains of the 291 megachurches and be able to obtain year-by-year data on church attendance, thereby allowing for a more direct measure of growth.
Fourth, a Type I error may be present in the results. At a 95% confidence level, one would expect approximately 1 in 20 variables to be significant by pure chance alone. However, in my final model 12 variables were significant. This suggests that real associations exist between the various IVs and the DV. Furthermore, measurement issues may have limited the study. For instance, using ZIP code areas to ascertain megachurch demographics could be problematic. Racial and ethnic diversity is somewhat present in megachurches, however, there are still racially segregated churches. Thumma (1996) did argue that the majority of megachurches consist of White attendees even in the midst of other types of diversity (language, income, etc.).

Lastly, these findings continue to raise the question about cause and effect relationship within the study. While there are no provable cause and effect relationships taking place, there are indications that some degree of association is present for the supported hypotheses. However, these glimmers of association, does not mean strategies and wholesale organizational changes should be instituted based on these findings. These findings are a substantial first step in gaining better organizational understanding of the megachurch phenomenon.

Other limitations were likely present in this exploratory study. As such, additional limitations are identified and interspersed in the discussion and conclusion section below.

**Discussion and Conclusion**

*Niche Width measures*

My study results did not fully support hypotheses based on Hannan & Freeman’s (1977) three scenarios for generalist and specialist organizations. Admittedly, Hannan & Freeman’s scenario that stable environments favor specialist organizations was untested
in the study. I did not have specific variables to include in the analysis that tests grain in the environment (i.e., fine grain = rapidly changing; coarse grain = slowly changing).

In future research I will establish testable hypotheses that are based on empirical evidence of environmental grain. Presently, I suspect that environmental conditions are rapidly changing (fine-grained). Some observational evidence suggests that megachurch resources are in flux. 2008 began an economic recession that likely had negative impact on financial resources secured by megachurches. It is reasonable to also see the economic recession as a time then new people were attracted to the message and programs of megachurches because they do not require financial payment for participation. Second, people self-identifying as religiously nonaffiliated in American society removes the former ease of attracting attendees that were familiar with the basic tenants of Christianity. The loss of religiosity may create a chasm between church organizations and their environment that, in some cases, is too insurmountable to bridge. Third, as a larger sub-category, numerous social problems/issues in the larger society conflict with church doctrine and orthopraxy. Enduring disagreement about same-sex marriage (i.e., marriage equality), legalized abortion, legalization of marijuana – in some states, the impact of divorce and remarriage, race relations in the society writ large and the presence of segregated church congregations, perceived or real alignment of church teaching and political ideology, terrorism at home and abroad, and ongoing challenges with immigration all have the potential to create a rapidly changing environment for churches. I would also assume, if this aforementioned evidence is substantiated, that environmental states are dissimilar. In this case I would expect, given Hannan & Freeman’s (1977) conclusions that specialist organizations would win. In the current study, if SSMs are
considered more specialist and MMs more generalist, then SSMs would be expected to win.

However, the evidence from the study suggests that the hypothesized classifications (SSM as specialist and MM as generalist) may not necessarily be correct. The lack of supported hypotheses from the resource partitioning literature does not allow me to see if this is the case or not. Thus, it remains possible that SSMs are in fact more generalist and MMs are more specialist. One could argue, contrary to what I did earlier in this chapter that being multi-site allows a MM to more closely tailor the services at each of its locations to the people in the area (making MM sites very specialist). One could correspondingly argue that because SSMs rely on a single location to which people must commute that they make their services more general in order to pull from as far as commuting distance as possible (making the SSM very generalist). Future research will also test this notion in order to assess if OE is applicable to this organizational population.

Resource Partitioning and Concentration

Additionally, specific attempts to tests interactions between niche width and concentration, proposed by Carroll (1985) yielded unanticipated results. Interactions variables related to number of locations and concentration (H1), and number of worship services (H2) were not significant, were removed from the model, and indicated no conclusions about either generalist SSMs or specialist MMs being favored in the market. These two measures did not enable me to add to the megachurch research discussion that argues there is a dramatic growth effect for adding church locations and adding worship services (Surratt, Ligon, & Bird, 2009; Bird & Walters, 2010, Bird, 2014). Making these
organizational changes would show if SSMs and MMs were experiencing growth as anticipated in the OE literature.

This was also true for racial and ethnic diversity measures at the ZIP code level. Since the interactions for these variables were removed from the model nothing can be concluded about how racial diversity and concentration levels impact megachurch growth nor can conclusions be reached about ethnic diversity and concentration levels on megachurch growth. Interaction variables for educational diversity was retained in the model, but did not support the hypothesis.

The preponderance of removed variables resulting in lackluster findings leads to questions about the applicability of OE theory on megachurch populations. Do the lack of results suggest that OE is not appropriate for examining megachurch organizations? Are megachurch organizations really different from for-profit businesses, suggesting that other kinds of organizational theories be explored?

RPT argues that markets consist of a spectrum of niches and this megachurch research was designed to measure those niches by viewing megachurches as generalists compared to small denominational churches (a future notion to examine) and SSMs as more specialist than MMs. Acknowledging the presence of a niche width spectrum and the absence of competition between SSMs and MMs (Chapter 1) should have provided evidence for resource partitioning of the megachurch market. SSMs have some generalist characteristics (crowding the center of the market, larger carrying capacity, and thrives on more homogeneous resources) and MMs have others (newer organizational type on the periphery of the market, specialized carrying capacity, and its need for heterogeneous resources) as discovered in the niche width portion of the study.
Perhaps the niche width and concentration interactions would have been supporting of the application of OE theory if the dependent variable had been organizational mortality rather than growth. Organizational mortality among megachurches could include a spectrum of meaning. First, and perhaps the clearest indication of megachurch mortality occurs when churches close their doors. Second, when attendance numbers drop below the 2,000 threshold and the church is no longer considered a megachurch could be a sign of church mortality/failure. Third, mortality among megachurches could mean SSMs with failed attempts at going multisite. Those failed attempts result in closing failed sites while supposing the remaining central location remains open. Fourth, perhaps organizational failure occurs when a megachurch changes its name, suggesting the formerly named church no longer exists and the new church name represents a new church. This could be difficult to substantiate when the core of the organization is unchanged (e.g., the same leaders, staff, and attendees/members remain, and strategy and structure stay the same). The nature of my study and the availability of megachurch related data precluded me from exploring concentration and mortality rates, the effect of concentration on specialist organizations, the effects of market size on competition. These primary research characteristics will have to be applied to future research projects on this organizational population.

Why did the interactions fail? Why did the study not yield expected outcomes?

There are several possible reasons why the interaction terms failed in the model when theory would have predicted otherwise. Each possibility is introduced and discussed in brief here, and then extended into the Chapter 5 discussion to follow. Some of these problems are likely exacerbated by measurement issues and limitations. For
instance, the exploratory nature of this study tried to see if measures could be developed in the megachurch context that would accurately capture these OE concepts (e.g., generalism versus specialism). The corresponding niche width measures used in this study were completely untried in the megachurch context. Hannan & Freeman measured niche width by duration of environmental stability/instability, rate of environmental change, and similarity/dissimilarity of alternate environmental conditions. Whereas I measured niche width by looking at what differentiates the two organizations forms and/or their geographic locations. For each consideration I led with the question— which megachurch organizational structure, SSM or MM, allows for or has greater differentiation? Number of church sites was a clear area for differentiation between megachurch forms. I made the assumption about assigning SSMs as specialist (narrower niche width) and MMs as generalist (wider niche width) because having one site does not require as much as differentiation for megachurches with multiple sites that coordinate across different sites with potentially different characteristics. The number of worship services was another niche width measure that allowed megachurches to differentiate from one another. Megachurches offering only one worship service does not distinguish it from megachurches with multiple services. Lastly, megachurches located in diverse ZIP code areas or cities have the best chance for differentiation on demographic characteristics like race, ethnicity, and educational attainment. Perhaps, in the end, there was not enough of a difference between SSM and MM in terms of niche width. Both were argued to be toward the generalist end of the spectrum leaving perhaps too little measureable differentiation between them.
Lastly, the measurement used for concentration was not ideal. Ideally, both the total number of churchgoers in the market and the total number of churchgoers at megachurches would be used to calculate concentration levels. As noted in the methods section of the study, the number of churchgoers in the market was used. However, I used total number of megachurch sites in that city instead of total number of churchgoers at megachurches because the data were not available. Perhaps this more detailed concentration measure would have produced results more in line with the hypotheses.

However, the failure of the interactions and unanticipated results could be related to the theory itself. There is relatively little testing in the literature about interactions between niche width and concentration. Carroll (1985) posed the question over 30 years ago, and this megachurch study is among very few trying to test it, and it failed to produce support for the theory.
CHAPTER V
DISCUSSION AND CONCLUSION

As a review, this dissertation study was guided by three main research questions; (1) how density dependence (legitimacy and competition) impacts megachurch founding events, (2) if or how inertia and isomorphic pressures impact megachurch decisions about switching to the MM format or not, and (3) how niche width structure and organizational concentration impact megachurch growth. Underlying these three questions were two larger, guiding questions. Are organizational theories (OE and NIS specifically) that were developed through the study of for-profit organizations sufficiently broad so as to apply outside the for-profit sector as well (the non-profit church sector in this case). And can the literature on megachurches and our understanding of them be enriched by the inclusion of organizational concepts. I begin answering these two larger questions with a brief summation of each chapter’s hypotheses and evidence for the focal organizational variables (i.e., a review of the findings), before turning to this more general assessment.

Chapter Hypotheses and Findings

Chapter 2

In chapter 2 the focal organizational variables were counts of the number of SSMs and MM at both the city level and at the national level, and the central concepts were legitimacy levels and competition levels. My hypotheses were based on the idea that legitimacy would primarily be reflected in the national-level variables while competition
would primarily be reflected in the city-level variables. Therefore, I offered the following four chapter hypotheses:

**H1**: Since the benefits of legitimacy are hypothesized at the nation-level, additional SSMs in the city will have no effect on MM legitimacy. However, since competition is hypothesized to occur at the city-level, the larger number of SSMs in the city will increase competition. Taken together, additional SSMs in the city should decrease the likelihood of MM founding events.

**H2**: Since the benefits of legitimacy are hypothesized at the nation-level, additional MMs in the city will have no effect on MM legitimacy. However, competition is hypothesized to occur at the city-level. Therefore a larger number of MMs in the city will decrease the likelihood of MM founding events.

**H3**: Since benefits of legitimacy effects are hypothesized at the nation-level, additional SSMs in the nation will increase legitimacy, and therefore increase the likelihood of MM founding events. However, since competition is hypothesized to occur at the city-level, not the nation-level, additional SSMs in the nation will have no effect on MM founding events.

**H4**: Since benefits of legitimacy effects are hypothesized at the nation-level additional MMs in the nation, will increase legitimacy, and therefore increase the likelihood of MM founding events. However, since competition is hypothesized to occur at the city-level, not the nation-level, additional MMs in the nation will have no effect on MM founding events.

The complete picture of H1 should have only shown evidence for competition effects and no legitimacy effects. The results indicated that the number of SSMs in the city was not a significant predictor (the only density test to return such a result). In other words, there was no legitimacy or competition effect present. The results showed little support for legitimacy in hypothesis (H2). The presence of MMs in the city had some positive, measurable increased effect on additional MM founding events when there were up to 3.5 MMs present. OE theory would suggest this is evidence of an increased legitimacy effect being present. The pattern observed in Figure 4 from Chapter 2 (pertaining to H2) does show, however, that there was a sloping decline when greater
than 3.5 MMs are in the city suggesting the presence of competition effects at higher densities.

In general, the evidenced pattern expected according to hypothesis H3 held true in the results, though the effect was stronger than expected. Figure 5 from Chapter 2 shows the association between the total number of SSMs in the nation and the probability of MM founding events. The chances for a MM founding event goes from no chance to being very likely with 460 SSMs in the nation. When 464 or more SSMs are in the nation the chances for MM founding events remains very likely. Interestingly, the pattern kicked into high gear with multisiting when approximately 460 SSMs are present. The competition aspect of hypothesis (H3), where no effect on MM founding events was anticipated, was supported.

Figure 6 from Chapter 2 shows the total number of MMs in the nation and the probability of a MM founding event. When 40 to 80 MMs are present in the nation there is no chance of additional MM foundings at the national level. The presence of approximately 90 MMs only slightly increases the chances of a founding event. In addition to showing little support for the national-level legitimacy aspect of the hypothesis (H4), the further evidence did not support the competition aspect of the hypothesis. As depicted in Figure 5 from Chapter 2, there were weak indications of competition effects (i.e., the very small downward slant). Thus, evidence of small legitimacy and competition effects were both present in the results.
Chapter 3

In Chapter 3, the focal organizational variables were measures of inertia, niche width, or isomorphism. I offered the following hypotheses and found the following results.

**H1:** As church age (a measure of inertia) increases in years, chances will increase for SSMs not switching to MMs (i.e., not switching as an indication of inertia).

The age span for SSMs ranged from 0 to 281 years, with the highest probability of switching (14%) occurring at very high ages. The findings showed that the probability of switching declined slightly as church age increased until a church reached 150 years old, and then the probability increased as church age increased further. Hypothesis H1 was therefore not fully supported by the findings.

**H2:** As SSM size increases, the likelihood of switching decreases (i.e., increased size leads to increased inertia).

Hypothesis H2 was not supported by the findings (it was dropped from the final model due to p-value >.10). Thus, the results showed that the probability of switching was not related to church size.

**H3:** SSMs making it on the 100 Fastest-growing churches list (2005-2013) have increased chances of switching to MMs (i.e., increased growth leads to decreased inertia).

The odds of switching to MM for a SSM that was on OM’s 100 Fastest-Growing Churches list between 2005 and 2013 was 1.876 times the odds for a SSM not on the list. As shown in Figure 4 from Chapter 3, this translated to a probability of switching to MM of 14.2% (for those on the list) versus 2.8% (for those that did not make the list). Hypothesis H3 was supported by these findings.
H4: SSMs in relationship with certain denominational groups (e.g., Mainline Protestants) will have a decreased likelihood of switching (i.e., certain denominational groups will have greater inertia).

Contrary to this hypothesis, I found no denominational differences for the probability that a SSM would switch to the MM format (the series of dummy variables was dropped from the final model due to p-value > .10). Hypothesis H4 was therefore not supported.

H5: As diversity [heterogeneity] (educational or racial or ethnic) in a SSM’s surrounding area increases, there is an increased chance of switching to multisite.

I also included three measures of demographic diversity in a church’s surrounding area as predictors. Each measure of diversity was calculated with the idea that greater diversity reflects a wider niche width. When these variables were included in the model only racial diversity remained in the parsimonious model (educational diversity and ethnic diversity were not significant). Thus, this hypothesis (H5) was not supported for educational or ethnic diversity. For the one significant diversity measure – race - hypothesis H5 was not supported either.

H6: As SSM pastor’s educational attainment level increases (increasing the chances for normative isomorphism), the chances for SSM switching event to MM will also increase (isomorphic effect).

Compared to megachurches with pastors who had a high school (or unknown) education level, the odds of switching to MM in a given year was 216% higher for megachurches with pastors who have a PhD, MD, or JD. As shown in Figure 5 from Chapter 3, this translated to probabilities of 2.9% and 8.2%, respectively. In sum, hypothesis H6 was at least partially supported by the findings because the highest
pastor’s education category (PhD, MD, or JD) was associated with higher odds of going MM.

**H7:** SSMs affiliated with WCA, MSS, and/or ECFA will increase the probability of switching (i.e., because of increased isomorphism toward the MM model).

The results showed the opposite of hypothesis H7. Surprisingly, SSMs had greater chances for switching if they were *not* associated with these organizations. Non-affiliation with MSS (an organization that helps churches become multi-site) showed a 3.1%% chance for switching, per year. Single-site megachurches affiliated with MSS shows less than 1% chance for switching (.7%); an unanticipated detrimental result for MSS. Those SSMs not affiliated with WCA had 3.6% chance of switching to MM and affiliated SSMs had a 1.2% chance of switching to MMs, per year.

**H8:** As the number of MMs increase in the nation (a measure of mimetic isomorphism), the likelihood of switching to MM increases for SSMs.

Finally, I hypothesized the greater presence (implying also a greater level of model success) of MMs in the nation would lead to mimetic isomorphism for switching to the MM format. Hypothesis H8 was not supported, however, since the variable was non-significant (dropped from the final model due to p-value > .10).

**Chapter 4**

The focus of Chapter 4 was on the interaction between niche width and organizational concentration on church growth. Here, church growth was measured indirectly using information on whether or not a church was listed among the 100 fastest growing churches in a given year. I therefore offered the following hypotheses and found the following results:

**H1:** When concentration levels are low, megachurches with more locations (a.k.a., those that are more generalist) will have greater growth. However, when
concentration levels are high, megachurches with fewer locations (a.k.a., those that are more specialist) will have greater growth.

**H2:** When concentration levels are low, megachurches with more worship services (a.k.a., those that are more generalist) will have greater growth. However, when concentration levels are high, megachurches with fewer worship services (a.k.a., those that are more specialist) will have greater growth.

**H3a:** When concentration levels are low, megachurches in more racially diverse ZIP code areas (a.k.a., those that are more generalist) will have greater growth. However, when concentration levels are high, megachurches in less racially diverse ZIP code areas (a.k.a., those that are more specialist) will have greater growth.

**H3b:** When concentration levels are low, megachurches in more ethnically diverse ZIP code areas (a.k.a., those that are more generalist) will have greater growth. However, when concentration levels are high, megachurches in less ethnically diverse ZIP code areas (a.k.a., those that are more specialist) will have greater growth.

**H3c:** When concentration levels are low, megachurches in more educationally diverse ZIP code areas (a.k.a., those that are more generalist) will have greater growth. However, when concentration levels are high, megachurches in less educationally diverse ZIP code areas (a.k.a., those that are more specialist) will have greater growth.

While the number of megachurch sites was significantly associated with being on the fastest growing church list (the probability increased as number of sites increased), the interaction between this and concentration was not significant. Therefore hypothesis H1 was not supported. Similarly, the number of worship services and its squared counterpart were also either significant (or marginally significant), with the results showing that the probability of being on the fastest growing list increased as the number of worship services increased. However, as with the first hypothesis from this chapter, the interactions with concentration were not significant and hypothesis H2 was therefore not supported.

In terms of the diversity measures for niche width, the results for both racial diversity and ethnic diversity deviated from the hypothesized pattern. While the racial diversity measure was marginally significant, the interaction with concentration was not.
Therefore hypothesis H3a was not supported. Neither the ethnic diversity measure nor its interaction with concentration were significant so hypothesis H3b was likewise rejected. Hypothesis H3c, pertaining to educational diversity, was partially supported however. According to the results, more generalist churches (those in more educationally diverse areas) did have greater growth at very low levels of concentration (0-25). But support for this hypothesis was not full because at high concentration levels, specialist megachurches in less educationally diverse ZIP code areas had a very low probability of being on the fastest growing church list.

**H4a:** When concentration levels are low, megachurches in ZIP code areas that more closely resemble the racial distribution of their cities (a.k.a., those that are more generalist) will have greater growth. However, when concentration levels are high, megachurches in ZIP code areas that less closely resemble the racial distribution of their cities (a.k.a., those that are more specialist) will have greater growth.

**H4b:** When concentration levels are low, megachurches in ZIP code areas that more closely resemble the ethnic distribution of their cities (a.k.a., those that are more generalist) will have greater growth. However, when concentration levels are high, megachurches in ZIP code areas that less closely resemble the ethnic distribution of their cities (a.k.a., those that are more specialist) will have greater growth.

**H4c:** When concentration levels are low, megachurches in ZIP code areas that more closely resemble the education distribution of their cities (a.k.a., those that are more generalist) will have greater growth. However, when concentration levels are high, megachurches in ZIP code areas that less closely resemble the education distribution of their cities (a.k.a., those that are more specialist) will have greater growth.

Neither the racial similarity measure nor its interaction with concentration were significant so hypothesis H4a was rejected. The same was true for the ethnic similarity measure and its interaction with concentration, so hypothesis H4b (ethnic similarity) was also not supported. (Dropped from the final model due to p-value > .10). As was the pattern for the diversity measures, the only truly significant measure for similarity corresponded to the educational distribution. While statistically significant, hypothesis
H4c was still now supported since megachurches in ZIP code areas with educational
distributions that were similar to their cities (generalists) did not have greater growth
when concentration was low nor did specialist churches have greater growth at high
levels of concentration.

Implications for the application of organizational theory to megachurches

I claimed in the introduction that OE and NIS theory both seemed like a good fit
because the church sector was growing and changing in response to the emergence of a
new church form. An integrated view across the chapters reveals a broader limiting theme
that became noticeable with each empirical test.

Several of the hypotheses in Chapter 2 sought to address organizational
legitimacy and competition for SSMs and MMs by examining several measures of SSM
and MM density (counts). These hypotheses anticipated legitimacy at the nation level and
competition at the local level. Additionally, Chapter 3 had one hypothesis designed to
examine if increased MMs in the nation would increase the likelihood of SSMs switching
to MMs (H8). It is reasonable to assume that if MM legitimacy did occur at the nation
level, that part of the reason for the phenomena could be more SSMs switching to MM.
Chapter 2 results in this instance did not show pure legitimacy, and instead showed traces
of legitimacy and competition intermingled at the nation level. I surmised in Chapter 2
that the spread of MMs across CBSA boundaries might explain this finding.

What was revealed by the Chapter 2 findings, however, was that the concept of
density might not apply to the megachurch context in the most direct manner. While
density was broadly significant as a predictor, the patterns for the legitimacy and
competition effects suggest that legitimacy and competition themselves operate in a
subtly different way for megachurches than they do for for-profit businesses. Exacerbating this is the difficulty in transferring the concepts of generalism and specialism to the megachurch context (an issue already raised in the discussion at the end of Chapter 4. Perhaps this classification issue has something to do with the non-significant effect of density that was revealed in the Chapter 3 analyses.

I also expected some empirical connection for the diversity measures across chapters 3 and 4. Both chapters used racial, ethnic, and educational diversity as indications for organizational niche width. In effect, SSMs in racial, ethic, or educationally diverse areas were expected to correspond to a greater niche width, which in turn would be associated with an increased likelihood of a SSM switching to a MM format (examined in Chapter 3) and an increased likelihood that a church (SSM or MM) would appear on the top 100 fastest growing churches list (examined in Chapter 4). However, ethnic and educational diversity were both not statistically significant in chapter 3. The remaining racial diversity variable was significant but did not support the hypothesis. In Chapter 4, both the racial and ethnic diversity measures were dropped from the model. Educational diversity showed promise as a predictor when I observed that generalist churches (those in highly educationally diverse areas) did have greater growth at low concentration levels. However, specialist megachurches (those in less educationally diverse areas) did not have high growth at high concentration levels. The larger argument about the effects of niche width therefore never went beyond partial support for Chapter 4’s hypothesis H3c.

While it must be acknowledged that measurements issues complicate the interpretation of the overall findings related to the diversity measures, it can still be
broadly observed that they (like the density measures) did not produce the expected effects. The diversity measures were exploratory in nature (no existing OE study has used a niche width measure calculated like this). However, the pattern of non-significance and findings contrary to the OE-derived hypotheses suggest that niche width does not, as a concept, transfer over to the study of megachurches in a straightforward manner either.

**Using OE and NIS theory to analyze Megachurches**

Does this mean that density, legitimacy, and competition work differently for megachurches than for businesses? Perhaps, but in addition to this issue I think I also understand that density dependence theory might have some general limitations inherent in trying to measure all organizations in the same way using similarly measured variables. In other words, in seeking the highest possible level of generalizability, the density dependence theorists may have overlooked the need to tailor density, legitimacy, and competition measures to the organizational context. The results from the present study might be the result of what happens if those variables do not exist for one particular organizational population or they do not carry the same meaning across populations.

The results still suggest the application of OE’s concept of density dependence to be somewhat fruitful, at least in the ideal sense of the OE’s expected findings (the density measures were significant predictors after all). Results from this megachurch study strongly suggests that density dependence is more nuanced than what has been learned from the for-profit sector. The net effect of the hypotheses did not produce anticipated DDT outcomes. When DDT called for pure competition, no effect resulted. However, when hypotheses anticipated weak legitimacy for SSM in the nation, stronger than expected legitimacy resulted. Does this mean that competition and legitimacy work
differently for megachurches more generally? Perhaps it is overly simplistic to assume that all organizations in capitalist societies strive for legitimacy in the early going and then compete for resources. Is it possible that churches, more generally, do not compete? If so, what makes churches so unique to this different phenomenon? Could it also be true that churches spread in the same way as for-profit organizations? If not, how do they spread?

I would view the application of OE’s concept of inertia to also be somewhat fruitful for understanding megachurches. But here too there was some evidence that something other than inertia can be in play. Consider the example of organizational age. Once organizational size has been accounted for, previous OE scholars have argued that increasing age increases inertia. Yet in the present study, it was the oldest SSMs that exhibited an increased probability of switching to MMs. Perhaps the relatively high age of church organizations (they were, on average, much older than the typical for-profit organization) makes inertia work differently for this population of organizations. Again, in the quest for high generalizability, perhaps organizational scholars have overlooked some factors that make concepts like inertia work differently in different contexts.

Another inherent difficulty in transferring organizational models to the church context is the difficulty of developing measurements for key theoretical concepts. This difficulty has already been mentioned above with respect to niche width. The same issue may apply to measuring concentration appropriately. While using proxies for exploratory research can help eliminate certain measures from the realm of possibility (and we could just get lucky using a non-conventional measure), it increases the likelihood of dealing with failed models. So, it is important to have the correct data and the correct unit of
analysis. It may take considerable time to collect such data on megachurches because they are a non-traditional type of organization to study, but it is worth the potential outcome of learning more about this organizational population and for the exploration of organizational theory boundaries more generally.

Generally speaking, the immediate outcome from the concentration findings indicate that something is not correct with either the measurement of concentration or the classification of SSMs as specialists and MMs as generalists. I suggested in Chapter 4 that perhaps classifying both megachurch types as generalists when compared to smaller denominational churches would be more appropriate. What will require some adjustment for future research is further thought about which megachurches are generalists and which ones are specialists. While I argue that it was still a sound design decision in this exploratory study to examine SSM and MM through the lens of generalism and specialism, one potential problem with this approach could be the one-size fits all approach that was also mentioned when discussing density dependence. What if the standard for-profit ideas of generalists, specialists, and markets having a single “center” does not “fit” these organizations?

It is not apparent where the real problem lies with respect to the application of resource partitioning theory (generalism vs. specialism) to the megachurch context. Yet, the failure of the model at least gives opportunities for developing further questions to help guide future research on resource partitioning among megachurches. For example, a key next step might be to examine what would happen if SSM were characterized as generalists and MMs as specialists. If this fails, an intriguing approach could be to consider hybrid types. Perhaps SSMs and MMs use and exhibit shared characteristics that
would make the established generalism or specialism dichotomy too rigid. What if these organizational types are generalists and specialists at the same time? What if SSMs differentiated with the wide variety of programs and MMs achieved it through offering a wide variety of worship services across the church network? There are certainly many questions to consider moving forward with the important task of trying to understand the organizational dynamics of the megachurch population.

NIS’s normative isomorphism is already one of the more difficult forms of isomorphism to identify because the potential causal links to organizational change are never obvious or direct. However, the findings from Chapter 3’s examination of pastor’s educational attainment lean toward there being some credible evidence for normative isomorphism that occurs between PhD, MD, and JD programs and switching from SSM to MM. This idea would require additional examination to reach a more informed conclusion.

It would be helpful to examine isomorphism with greater specificity in the future. There were no clear hypotheses for coercive isomorphism, for example. The benefits of taking the research approach could yield greater understanding about the presence of isomorphic effects in megachurches and how they are employed. Perhaps, mimetic isomorphism is the simplest to assume, but empirical research will be required. The results of the present study at least point to the potential fruitfulness of this additional research.

**Implications for how religious scholars understand large organizations**

The implications of this megachurch study for how religious scholars understand large organizations may be a point that is already understood. Religious organizations are
not the same as for-profit organizations. They may use some of their strategies or structural ideas, but the very nature of The Church is really quite different. While it is true that churches are founded and experience failure and that they can spread and contend with internal and external pressure in ways parallel to businesses, they can be quite different. Since megachurches are not exactly like businesses, organizational research of megachurches will require nuanced dimensions if OE and NIS arguments are maintained. Hinings & Raynard (2014) argued that they key difference between churches and other organizations is “based in belief/theology” more specifically “religious organizations are based in beliefs and that issues of organization are theological” (p. 178). Therefore, churches should be researched organizationally with this important understanding taken into consideration. Perhaps for-profit theories can be helpful, so they should not be ruled out altogether. What can be learned from this study is that nuances will likely be present in the data and the outcomes.

I argued in Chapter 1 that megachurches resemble for-profit businesses in four general ways. First, megachurches use business processes, strategies and tactics, and offer similar resources to their attendees. Megachurches also build partnerships and coalitions to address social problems. Second, I argued that megachurches have a specialized division of labor that closely mirrors the myriad executive officers found at for-profit businesses. Megachurches and businesses are similar in their use of hierarchical reporting structures Third, both organizational sectors require financial resources to remain viable and use these resources in similar ways. Finally, I articulated that the many similarities do not suggest the two sectors are identical. However, the overall argument
was that businesses and megachurches were similar in enough key ways that organizational models might lend insight into the megachurch phenomenon.

In general, organizational variables seem to have the potential to be important predictors in the megachurch context. As demonstrated in this study, even an exploratory application of key organizational variables can provide important information for future research. As with exploratory research of any kind, knowledge is gained through failed tests and models, but new knowledge can then applied to the studies to follow. While the hypotheses were often not supported, organizational variables consistently provided predictive information about church phenomena. It is therefore useful to add the organizational piece to the church literature, even if it eventually becomes clear that the theories explored in this study cannot be applied in the church context. The organizational variables themselves are shown to have a value that is separate from the theories from which they came.

Future Research

In the future I will pursue the same organizational theoretical trajectory (OE and NIS) while seeking to use more robust measures. Ongoing research on megachurch density dependence amid legitimation and competition effects will benefit from an expanded megachurch dataset that includes any mortality data on these churches. By adding mortality data a more comprehensive picture of the megachurch population will likely result.

In addition to improving niche width measures (as discussed above) additional measures of isomorphism will be needed. I will further examine normative isomorphism through pastor’s educational attainment and add information on markets where municipal
areas have constrained megachurch expansion in public cases involving The Religious Land Use and Institutionalized Persons Act (RLUIPA).

I will also continue researching niche width interactions with concentration and their effects on church growth. At least five improved elements will be needed for this aspect of the research agenda. First, a more robust measure of concentration is crucial to the resulting strength of arguments. These measures will likely improve with a larger and more detailed megachurch dataset (number of attendees for each megachurch in a market). Second, adding social, political, and technological measures that contribute to environmental conditions being stable or less stable. Third, acquiring actual attendance numbers from megachurches over several years will allow me to examine church growth. Fourth, adding racial, ethnic, income, and educational demographic information from megachurches will strengthen the niche width part of the study. Fifth, in addition to exploring area similarity, I would also want to measure area dissimilarity for areas surrounding megachurches (Census tract and city levels).
REFERENCES


cultural values as mediated by racial/ethnic identity and moderated by gender. *Journal of personality and social psychology*, 72(6), 1460.


Shelby, R. L., Jr. & Roelfs, D. J. (2015). New member socialization in large religious organizations: Case study evidence from two multisite megachurches. Unpublished manuscript, Department of Sociology, University of Louisville, Louisville, Kentucky, USA.

Shelby, R. L., Jr. (2014). A program process evaluation of a multi-site megachurch new member program. Unpublished manuscript, Department of Sociology, University of Louisville, Louisville, Kentucky, USA.


**APPENDIX A**

### Black Protestant
- African Methodist Episcopal
- Baptist (unspecified)
- Church of God in Christ
- Missionary Baptist Church
- Missionary Baptist Church and National Baptist Convention (dual affiliation)
- National Baptist Convention
- National Baptist Convention & American Baptist Churches (dual affiliation)
- Pentecostal Assemblies of the World
- Progressive National Baptist

### Evangelical Protestant
- Independent Christian Church
- Christian Missionary Alliance
- Evangelical Covenant
- Evangelical Free
- Evangelical Presbyterian Church
- Presbyterian Church of America
- Southern Baptist Convention

### Mainline Protestant
- American Baptist Churches
- Anglican
- Baptist General Conference
- Church of Christ
- Evangelical Lutheran Church of American
- General Baptist Association
- Lutheran (other)
- Presbyterian Church USA
- Reformed Church of America
- United Methodist Church
- Korean Presbyterian Church of America
- Presbyterian (other)
- United Church of Christ

### Nondenominational Protestant
- Nondenominational Churches

### Other Protestant
- Four Square Church
- Assemblies of God Church
- Calvary Churches
- Cooperative Baptist Fellowship
- Church of God
- Church of God – Anderson, IN
- Church of the Nazarene
- Seventh Day Adventist
- United Pentecostal Church
- Vineyard, USA
- The Wesleyan Church
- Conservative Congregational Christian Conference
- Fellowship of Christian Assemblies
- Interdenominational
- Pentecostal (unspecified)
- Universalists
- United Pentecostal Church International
CURRICULUM VITA

NAME: Robert L. Shelby, Jr.

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DOB: Greer, South Carolina – December 25, 1969

EDUCATION & TRAINING:

B.A., Youth Ministry & Biblical Studies
Trinity International University
1997-2001

M.A., Communication & Culture
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2001-06

M.A., Sociology
Western Illinois University
2009-11

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University of Louisville
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TEACHING EXPERIENCE:

Assistant Professor of Sociology
University of Evansville, Evansville, IN
8/2016 – Present

- SOC 105 Introduction to Sociology
- SOC 235 Social Research Methods
- SOC 438 Race and Ethnic Relations

Visiting Assistant Professor of Sociology
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8/2015 – 7/2016

- SOC 105 Introduction to Sociology (Fall 2015, Spring 2016)
- SOC 230 Social Problems in the Modern World (Fall 2015)
- SOC 438 Race and Ethnic Relations (Fall 2015)
- SOC 330 Community Organization (Spring 2016)
- SOC 344 Introduction to Behavioral Statistics (Spring 2016)
- SOC 390 Principles of Sociological Theory (Spring 2016)

Independent Graduate Teaching Fellow/Graduate Teaching Assistant
University of Louisville, Louisville, KY
8/2011 – 7/2015

- SOC 202 Social Problems (Fall 2011, Summer 2013)
- SOC 303 Introduction to Research Methods (Fall 2014, Spring 2015)
- SOC 320 Social Theory (Summer 2012, Fall 2012, Spring 2013, Fall 2013, Spring 14,
Summer 2014)

- SOC 323 Diversity and Inequality (Spring 2012)

**Teaching Assistantship** Western Illinois University, Macomb, IL


- SOC 100 Introduction to Sociology (Spring 2011)

**Adjunct Faculty** Spoon River College, Macomb, IL


- COM 103 Speech Communication (Spring 2011, Summer 2011)

**Graduate Assistantship** Western Illinois University, Macomb, IL

8/2010 – 12/2010

- SOC 200 Contemporary Social Problems (Fall 2010)
- ANTH 110 Cultural Anthropology (Fall 2010)
- SOC 232 Sociological Research Methods I – SPSS lab assistant Fall 2010)

**Adjunct Faculty**

Trinity International University, Deerfield, IL

2004 – 2009

- **General Education**
• Social Sciences
  • HI323R History of African American Religious Experience (Fall 2006, Fall 2007)
  • SOC335R Urban Sociology (Spring 2007)
  • SOC330R Race and Ethnic Relations (Spring 2005)
  • SOC221R Marriage and the Family (Fall 2008)
  • PSY356R Conflict Management (Spring 2009)
• Education
  • ED385R Multicultural Education (Fall 2004, Spring 2005)
• Christian Ministries
  • IDS100R Introduction to Christian Thinking and Living (Spring 2005, Fall 2005)
  • CM175 Foundations of Youth Ministry (Fall 2007)
  • CM 181R Spiritual Formation (Spring 2009)
  • CM222 Integrated Field Experience I (Spring 2008)
  • CM 223 Integrated Field Experience II (Fall 2007)
• Communication and Organizational Leadership
  • COM122R Speech Communication (Fall 2008, Spring 2009)
  • COM335R Intercultural Communication in a Global Context (Fall 2006, Fall 2007)

RESEARCH:

Research Experience

• Research Assistantships
Summer 2015 University of Louisville

Library research on race, ethnicity, and genetics (Dr. Latrica Best and Dr. William Byrd)

Library research on social trust and environmentalism (Dr. Hiromi Taniguchi and Dr. Gul Marshall)

  Southeast Christian Church

  The Crossing Church

Papers under Review


Working Papers


- Shelby, Jr., Robert L. & Roelfs, David J. Modern Megachurch Organizations in the United States, 2005-2013: Niche Width Interactions
with Concentration and their Effects on Fastest-growing Church List Events.

- Roelfs, David J. and Robert L. Shelby. Organizations in Comic Book Adapted Film.

RESEARCH PRESENTATIONS AND CONFERENCE PARTICIPATION

- “Consequences of Racial Bias within the Justice System for Individuals and Communities.” (2015). University of Evansville panel discussant.
- “One Church with Multiple Locations: Exploring Community within The


SERVICE

University Service

- Athletic Committee – University of Evansville
  1/2016 – 5/2016 (Member)

- Inclusion Committee – University of Evansville
  1/2016 – Present (Member)

- Sociology Graduate Student Association – University of Louisville
  8/2012 – 05/2013 (Vice President)
  8/2011 – 5/2011 (Member)

- Graduate Appeals Committee of the College of Arts and Sciences

- Sociology Graduate Student Association (SGSA) – Western Illinois University 8/2010 – 5/2011(President)
  8/2009 – 5/2010 (Member)

- University Assessment Committee (Higher Learning Commission)
  Trinity International University

- Department of Education Assessment Committee

Trinity International University

- Trinity Evangelical Divinity School: Black Student Association
  2003 – 2004

Member

**Community Service**

- Family Resource and Youth Services Center
  Olmsted Academy South Middle School
  2014 – 2015

Advisory Council Member

- University of Louisville Libraries
  2013

Transcribing newspaper articles from The Louisville Leader (1917-1950)

- Louisville Regional Science and Engineering Fair
  2013 – 2015

Behavioral and Social Sciences - Judge Junior Division

- The Crossing Thrift Store

Working with city of Macomb, Illinois to provide household goods to needy

**PROFESSIONAL DEVELOPMENT**

- Entrepreneurship Academy – University of Louisville
  Fall 2014

- Alternative Careers for Graduate Students – University of Louisville
Spring 2014

- Transitioning to Faculty and Professional Life – University of Louisville

Spring 2014

- Introduction to Entrepreneurial Thinking: Entrepreneurship Within and Beyond Academe – University of Louisville Spring 2013

- Learning Centered Teaching – Delphi Center for Teaching and Learning University of Louisville Spring 2013

PROFESSIONAL AFFILIATIONS

- American Sociological Association
  2013 – Present

- Indiana Academy of the Social Sciences
  2015

- Kentucky Academy of Science
  2013 – Present

- North Central Sociological Association (NCSA)
  8/2011 – 2015

- Anthropologists and Sociologists of Kentucky (ASK)
  8/2011 – 8/2015

HONORS AND AWARDS

- Outstanding Research Award
  2015 University of Louisville

- Graduate Student Union Research Grant ($300)
2014 University of Louisville

- Graduate Student Council Research Award ($300)

2014 University of Louisville

- Graduate Teaching Assistant Outstanding Teaching Award

2012 – 2013 University of Louisville- Applied Sociology

- Alpha Kappa Delta International Sociology Honor Society (AKD)

5/2010 to Present Member

- Minority Internship Program (Competitive)

2010 Illinois Board of Higher Education HECA Grant ($10,000)