

Bridging and Bonding: How Diverse Networks Influence Organizational Outcomes

by

Brad Robert Fulton

Department of Sociology  
Duke University

Date: \_\_\_\_\_

Approved:

\_\_\_\_\_  
Mark Chaves, Supervisor

\_\_\_\_\_  
Lisa Keister

\_\_\_\_\_  
Nan Lin

\_\_\_\_\_  
James Moody

\_\_\_\_\_  
Richard L. Wood

Dissertation submitted in partial fulfillment of  
the requirements for the degree of Doctor  
of Philosophy in the Department of  
Sociology in the Graduate School  
of Duke University

2015

UMI Number: 3688284

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI 3688284

Published by ProQuest LLC (2015). Copyright in the Dissertation held by the Author.

Microform Edition © ProQuest LLC.

All rights reserved. This work is protected against unauthorized copying under Title 17, United States Code



ProQuest LLC.  
789 East Eisenhower Parkway  
P.O. Box 1346  
Ann Arbor, MI 48106 - 1346

ABSTRACT

Bridging and Bonding: How Diverse Networks Influence Organizational Outcomes

by

Brad Robert Fulton

Department of Sociology  
Duke University

Date: \_\_\_\_\_

Approved: \_\_\_\_\_

\_\_\_\_\_  
Mark Chaves, Supervisor

\_\_\_\_\_  
Lisa Keister

\_\_\_\_\_  
Nan Lin

\_\_\_\_\_  
James Moody

\_\_\_\_\_  
Richard L. Wood

An abstract of a dissertation submitted in partial fulfillment of  
the requirements for the degree of Doctor  
of Philosophy in the Department of  
Sociology in the Graduate School  
of Duke University

2015

Copyright by  
Brad Robert Fulton  
2015

## **Abstract**

Although many organizations aspire to be diverse, both in their internal composition and external collaborations, diversity's consequences for organizational outcomes remain unclear. This project uses three separate studies to examine how diversity within and across organizations influences organizational outcomes. The first study uses original data from a national study of organizations to analyze how an organization's internal social composition is associated with its performance. It advances diversity-performance research by demonstrating how the mechanisms of social bridging and social bonding can work together within a diverse organization to improve its performance. The findings suggest that an organization can improve its performance by having socially diverse members who interact often and in ways that engage their social differences. The second study integrates social capital theory and network analysis to explore the relationship between interorganizational networks and organizational action. It uses cross-sectional and panel data from a national study of congregations to analyze the collaborative partnerships congregations form to provide social services. This study demonstrates that a congregation's network ties, net of the effects of its internal characteristics, are significantly associated with the number and types of social service programs it offers. The third study illustrates how an organization's external ties can shape its action by examining black churches and their

responses to people living with HIV/AIDS. It uses data from a nationally representative sample of black congregations and draws on institutional theory to analyze congregations as open systems that can be influenced by their surrounding environment. This study indicates that black churches that are engaging their external environment are significantly more likely to have an HIV/AIDS program. Overall, by analyzing how individuals interact within organizations and how organizations interact with one another, these three studies demonstrate how diverse networks influence organizational outcomes.

## Contents

Abstract .....	iv
List of Tables .....	viii
List of Figures .....	ix
Acknowledgements .....	x
1. Introduction .....	1
2. Bridging and Bonding: How Social Diversity Influences Organizational Performance	4
2.1 Background .....	7
2.2 Social Diversity and Organizational Performance.....	13
2.3 Social Interaction and Organizational Performance.....	15
2.4 Discussing Social Differences and Organizational Performance.....	17
2.5 Data and Methods .....	19
2.5.1 Measures of social bridging .....	21
2.5.2 Measures of social bonding.....	22
2.5.3 Measures of organizational performance .....	24
2.6 Analysis and Discussion.....	29
2.7 Conclusion.....	46
3. Network Ties and Organizational Action: Explaining Variation in Social Service Provision Patterns .....	50
3.1 Social Capital, Social Networks, and Organizational Action.....	51
3.2 Case Study: Congregations, Collaborators, and Social Service Provision .....	53
3.3 Data and Methods .....	60

3.4 Results .....	72
3.5 Discussion and Conclusion .....	82
4. Black Churches and HIV/AIDS: Factors Influencing Congregations' Responsiveness to Social Issues .....	87
4.1 Ideological Orientation and External Engagement .....	88
4.2 Data and Methods .....	92
4.3 Results .....	99
4.4 Discussion and Conclusion .....	107
Appendix A: Quadratic Assignment Procedure (QAP) Analyses .....	112
References .....	115
Biography .....	129



## List of Tables

Table 1: Descriptive Statistics for the Community Organizing Coalitions and Their Boards..	28
Table 2: Poisson Regressions Estimating the Relationship between Social Bridging and Bonding and Organizational Performance .....	31
Table 3: Poisson Regressions Estimating the Relationship between Discussing Members' Social Differences and Organizational Performance among Coalitions with Diverse Boards <sup>a</sup> .....	39
Table 4: Descriptive Statistics of Congregation-Based Social Services .....	62
Table 5: Descriptive Statistics of Social Service Providing Congregations and Their Collaborators .....	65
Table 6: Descriptive Statistics of Panel Data—Change Scores (Wave 2 – Wave 1) of Time-Varying Variables .....	67
Table 7: Zero-truncated Poisson Regressions on the Number of Programs a Congregation Offers [anti-logs displayed] .....	74
Table 8: Standardized Coefficients from OLS Regression Models Estimating the Change in the Number of Programs a Congregation Offers between Wave 1 and Wave 2 .....	76
Table 9: Descriptive Statistics and QAP Matrix Correlation between Similar Social Services and Each of the Independent Variables .....	78
Table 10: QAP Regression of Similar Social Services on Common Collaborator Types and Measures of Shared Characteristics .....	81
Table 11: Descriptive Statistics of Black Congregations (N=203) .....	98
Table 12: Odds Ratios from Logistic Regressions Model of whether a Black Congregation has an HIV/AIDS Program .....	103

## List of Figures

Figure 1: The Countervailing Causal Pathways of Social Bridging and Social Bonding.... 8

Figure 2: Bivariate Analysis of Black Congregations with HIV/AIDS Programs  
Comparing Conservative with Non-conservative Congregations and Externally Engaged  
with Insular Congregations..... 101

Figure 3: Predicted Probabilities of a Semi-large, Urban, Non-southern, Black  
Congregation having an HIV/AIDS Program Given the Presence of Particular External  
Engagement Characteristics ..... 105

## Acknowledgements

I am thankful to the people who believed in me, supported me, and entrusted me with conducting the National Study of Community Organizing Coalitions (NSCOC) and embarking on this project.

At Duke University, Mark Chaves provided excellent guidance and advice at critical points throughout the project. Lisa Keister, Nan Lin, and James Moody as well as David Brady and Martin Ruef were always available to offer timely and helpful feedback. Charlie Clotfelter, Angie O’Rand, and Ken Spenner played a central role in helping me to secure seed money to implement the NSCOC. Gary Thompson provided crucial assistance with data management, and my undergraduate research assistants, Tian Chen, Tiphany Jackson, Kristin Lee, and Michael Habashi skillfully executed several important tasks related to the study.

Primary funding for the NSCOC was provided by the institutional members of Interfaith Funders: The Unitarian Universalist Veatch Program at Shelter Rock, the Catholic Campaign for Human Development, the C.S. Mott Foundation, the Needmor Fund, the Evangelical Lutheran Church in America, the New York Foundation, the Missionary Oblates of Mary Immaculate, and the Presbyterian Church-USA. The leaders of Interfaith Funders—the Executive Director Kathy Partridge and Board Members Ned Wight, Cris Doby, Sue Engh, Randy Keesler, Mary Sobecki, Charlie Bernstein, Kevin Ryan, and Rachel Feldman, along with Seamus Finn, Molly Schulz Hafid, and Sean Wendlinder, Ralph McCloud, and Katie DiSalvo—provided the perfect balance of

oversight and freedom when they commissioned me to conduct the NSCOC. Moreover, they were a joy to work with and became close friends in the process.

I am also grateful for the additional funding that was provided by the Hearst Foundation, the Society for the Scientific Study of Religion, the William K. Kellogg Foundation, the Religious Research Association, the RGK Center for Philanthropy & Community Service, the Association for Research on Nonprofit Organizations and Voluntary Associations, the Center for the Study of Philanthropy and Voluntarism, and Duke University's Graduate School and Department of Sociology.

I credit a large portion of the success of the NSCOC, both in its response rate and data quality, to the directors of the community organizing coalitions who participated in the study and to the leaders of the organizing networks who endorsed and promoted it.

In the course of this project, Rich Wood has become a valued mentor, colleague, and friend. He has been a gracious collaborator who has provided iron-sharpening feedback, full confidence, wise counsel, and enthusiastic support.

My parents, Jim and Bonnie, my brothers, Scott and Brent, and my ever-expanding extended family instill the vision and confidence I need to wholeheartedly pursue my passions. And throughout this project, my immediate family provided daily relief and recreation that re-energized me each day to carry out this work. Carla's strong presence, deep commitment, and critical engagement, along with Josh, Katie, and Emily's unbridled enthusiasm for life, sharpen and sustain me more than I realize. Thank you and I love you.

# 1. Introduction

Although many organizations aspire to be diverse, both in their internal composition and external collaborations, diversity's consequences for organizational outcomes remain unclear. The following three chapters contain three separate studies that examine how diversity within and across organizations influences organizational outcomes.

Chapter 2 examines how an organization's internal social composition is associated with its performance. Bridging theories argue that diverse organizations will perform better because they have access to a greater variety of social resources via their members' diverse networks. Bonding theories, on the other hand, argue that diverse organizations will perform worse because they are less cohesive by virtue of their members differing socially from each other. When scholars test these competing theories they often (mis)specify social bridging and social bonding as being the inverse of each other. This study specifies them as distinct mechanisms and measures them independently—bridging as the diversity of an organization's social composition and bonding as the intensity of its members' social interaction. Then it assesses their independent and interrelated effects on performance by analyzing original data from a national study of organizations. The first analysis indicates that social diversity is positively related to activities that involve accessing external resources, but the relationship is diminished or negative for activities that involve greater internal coordination. Social interaction, on the other hand, is positively related to activities that involve greater internal coordination. The second analysis examines the

content of interaction within diverse organizations and finds that talking about social differences is positively associated with organizational performance. For activities that involve both accessing external resources and internal coordination, realizing the benefits of being diverse depends on how often the members discuss their social differences. The findings suggest that an organization can improve its performance by having socially diverse members who interact often and in ways that engage their social differences.

Chapter 3 integrates social capital theory and network analysis to explore the relationship between interorganizational networks and organizational action. It analyzes the collaborative partnerships congregations form to provide social services and it examines how these ties are associated with the number and types of programs they offer. Using cross-sectional and panel data from a national study of congregations, the analysis finds significant relationships between congregations' interorganizational ties and their social service provision patterns. Congregations that collaborate with other organizations offer more programs and the effect is even greater for congregations with a diverse portfolio of collaborators. Furthermore, network analysis indicates that congregations occupying equivalent interorganizational network positions behave similar to each other. Specifically, congregations with a similar portfolio of collaborators offer a similar menu of services. This study demonstrates that an organization's network ties, net the effects of its internal characteristics, are significantly associated with the volume and scope of its activity.

Chapter 4 provides a case study to illustrate how an organization's external ties can shape its action by examining black churches and their responses to people living with HIV/AIDS. The ambivalent response of many black churches to current social issues has caused some scholars to question the centrality of black churches within African American communities. Using data from a nationally representative sample of black congregations, this study engages the debate about the institutional centrality of black churches by focusing on their response to HIV/AIDS. Although many congregational studies treat black churches as a monolithic whole, this analysis identifies heterogeneity among black churches that shapes their responsiveness to social issues. Contrary to prior claims, a black church's liberal-conservative ideological orientation is *not* significantly associated with its likelihood of having an HIV/AIDS program. Beyond assessing congregations' internal characteristics, this study draws on institutional theory to analyze congregations as open systems that can be influenced by their surrounding environment. The analysis indicates that externally engaged black churches are significantly more likely to have an HIV/AIDS program. These results suggest that some black churches maintain institutional centrality by engaging their external environment.

Overall, by analyzing how individuals interact within organizations and how organizations interact with one another, these three studies demonstrate how diverse networks influence organizational outcomes.

## 2. Bridging and Bonding: How Social Diversity Influences Organizational Performance

Although many organizations aspire to be socially diverse, diversity's consequences for organizational performance remain unclear. Most reviews of studies that examine the diversity-performance relationship emphasize the mixed findings and provide minimal help in adjudicating between the competing views.<sup>1</sup> Advocates of the "optimistic" view privilege social bridging theories (c.f., Burt 1992; Granovetter 1973; Lin 1999b) and argue that diverse organizations will perform better because they have access to a broader range of social resources via their members' diverse networks (e.g., Ancona and Caldwell 1992; Bantel and Jackson 1989; Pelled et al. 1999).<sup>2</sup> Advocates of the "pessimistic" view privilege social bonding theories (c.f., Bourdieu 1980; Coleman 1988; Portes 1998) and argue that diverse organizations will perform worse because they are less cohesive by virtue of their members being socially different from each other (e.g., O'Reilly et al. 1989; Pfeffer 1985; Zenger and Lawrence 1989).<sup>3</sup> Although the optimists acknowledge that social diversity can undermine organizational cohesion, they believe that the bridging opportunities diversity provides outweigh the bonding

---

<sup>1</sup> See Bell et al. 2011; Horwitz and Horwitz 2007; Jackson et al. 2003; Milliken and Martins 1996; Shore et al. 2009; van Knippenberg and Schippers 2007; Williams and O'Reilly 1998.

<sup>2</sup> Throughout this chapter the term "social resources" is used to represent the various types of resources embedded in members' social networks (Lin et al. 1981). Some of the resources include influence, information, and experience.

<sup>3</sup> Throughout this chapter the term "social cohesion" is used to represent the quality of relationships among organizational members (Bettenhausen 1991; Friedkin 2004). Some of the qualities include trust, cooperation, and interdependence.



opportunity costs. Conversely, although the pessimists acknowledge that social similarity limits the range of social resources an organization can access, they believe that the bonding opportunities similarity provides outweigh the bridging opportunity costs.

Advancing knowledge about the diversity-performance relationship has been hindered because many studies operationalize the mechanisms of bridging and bonding using the same measure—the organization’s social composition, where diversity is positively related to the social resources that come with bridging and negatively related to the social cohesion that comes from bonding.<sup>4</sup> An organization that has a heterogeneous social composition is characterized as exhibiting high bridging and low bonding whereas an organization that has a homogeneous social composition is characterized as exhibiting high bonding and low bridging. This approach assumes that bridging and bonding are necessarily opposing mechanisms, and it precludes the possibility that an organization could exhibit both high bridging *and* high bonding (e.g., an organization could be highly diverse and highly cohesive). Furthermore, specifying these mechanisms as the inverse of each other prevents analyses from assessing their independent and interrelated effects.

---

<sup>4</sup> See Beyerlein and Hipp 2005; Coffé and Geys 2007; Finkelstein et al. 2009; Finkelstein and Hambrick 1996; Laurence 2011; Putnam 2000; 2007.

This study specifies bridging and bonding as distinct mechanisms and measures them independently—bridging as the diversity of an organization’s social composition and bonding as the intensity of its members’ social interaction. Then it assesses their independent and interrelated effects on performance by analyzing original data from a national study of organizations. Because the data include information on the content of members’ interaction, this study is the first to empirically test how discussing social differences within a diverse organization is associated with its performance.<sup>5</sup> The first analysis indicates that social diversity is positively related to activities that involve accessing external resources, but the relationship is diminished or negative for activities that involve greater internal coordination. Social interaction, on the other hand, is positively related to activities that involve greater internal coordination. The second analysis examines the content of interaction within diverse organizations and finds that talking about social differences is positively associated with organizational performance. For activities that involve both accessing external resources and internal coordination, realizing the benefits of being diverse depends on how often the members discuss their social differences. The findings suggest that an organization can improve its performance by having socially diverse members who interact often and in ways that engage their social differences.

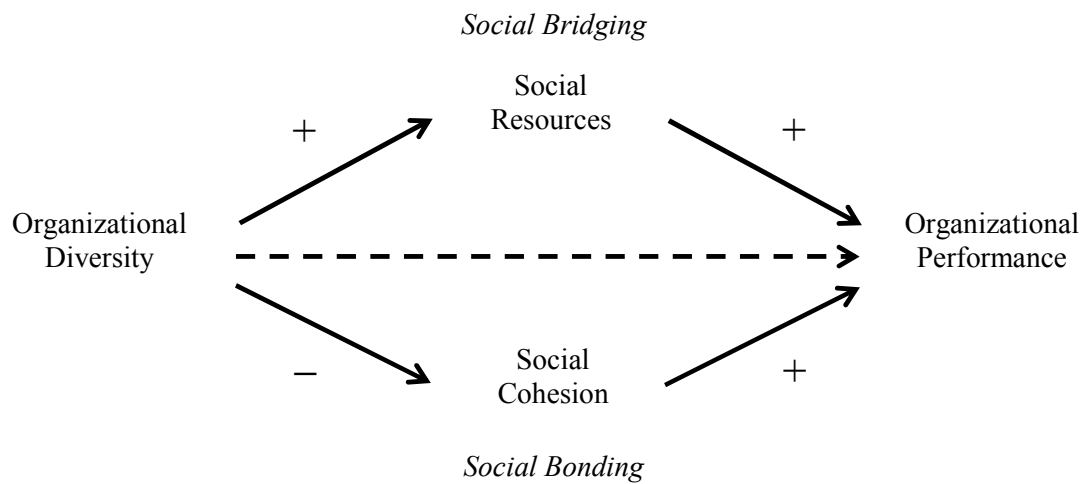
---

<sup>5</sup> Reagans and Zuckerman as well as Han and her colleagues (2014) analyze how social interaction moderates the relationship between social diversity and organizational performance, but neither study examines whether the social interactions involved members discussing their social differences.

## **2.1 Background**

Many studies that analyze the diversity-performance relationship use a version of the conceptual model depicted in Figure 1, which presents bridging and bonding as countervailing causal pathways that link organizational diversity and performance (Reagans and Zuckerman 2001). The bridging pathway hypothesizes that diversity increases the range of social resources an organization can access and that social resources improve organizational performance. The bonding pathway hypothesizes that diversity decreases the social cohesion of an organization and that social cohesion improves organizational performance. This model suggests that an organization's performance can be influenced by changing its social composition. However, using this model to predict how changing an organization's social composition would affect its performance is problematic because the variables hypothesized to improve performance—resources and cohesion—are both based on the organization's social composition and they are negatively correlated. Changing the level of diversity produces a trade-off between the two causal pathways, and the magnitude of the trade-off depends on the relative magnitude of the two effects (Reagans et al. 2004). In situations where the effect of social bridging outweighs the effect of social bonding, diversity is positively related to performance. On the other hand, in situations where bonding outweighs bridging, diversity is negatively related to performance. Finally, in situations where the effects are equal, the net effect is no significant relationship between

diversity and performance. Given this model's countervailing causal pathways, it is understandable why reviews of diversity-performance analyses consistently find mixed results. Moreover, regardless of the results, analyses that use this approach cannot isolate the individual contributions of each mechanism on performance; such analyses provide the aggregate effect of bridging and bonding, but not their independent and interrelated effects.



**Figure 1: The Countervailing Causal Pathways of Social Bridging and Social Bonding**

Overall, this approach has three major limitations. First, it assumes that bridging and bonding are necessarily opposing mechanisms. Second, it assumes that an organization's social composition is a reliable indicator of its cohesiveness. Third, it cannot assess the independent and interrelated effects of bridging and bonding on performance.

Reagans and Zuckerman (2001) address the first limitation by drawing on the network theory of social capital literature (see Lin 1999a; Moody and Paxton 2009). They note the connection between social bridging and structural holes (c.f., Burt 1992) and the connection between social bonding and network density (c.f., Coleman 1988). Moreover, they argue that in the context of organizations those network properties need not oppose one another—an organization can concurrently bridge structural holes and increase network density. To clarify their argument, Reagans and Zuckerman distinguish between *internal* structural holes, which exist *inside* an organization, and *external* structural holes, which exist *outside* the organization. Internal structural holes—the absence of ties between organizational members—reduce an organization’s network density, which can undermine its performance. External structural holes—the absence of ties to networks outside the organization—are unrelated to an organization’s network density, but they limit the range of social resources the organization can access, which can undermine its performance. Accordingly, an organization can increase performance by concurrently increasing the number of external structural holes it bridges and increasing its internal network density. This conceptualization presents bridging and bonding as distinct mechanisms that can: (1) be measured independently, (2) vary independently of one another, and (3) be independently related. Recasting the diversity-performance debate in network terms provides conceptual clarity and addresses the inaccurate assumption that social bridging and bonding are necessarily opposing

mechanisms. Specifically, it clarifies that bridging is related to an organization's external ties and bonding is related to an organization's internal ties.

With regard to the second limitation, the assumption that an organization's social composition is a reliable indicator of its cohesiveness, many scholars cite Pfeffer (1983) to defend their use of an organization's demographic characteristics as proxies for organizational dynamics, such as cohesiveness, when predicting organizational performance. Lawrence (1997), however, argues that Pfeffer's "black box" approach to analyzing the diversity-performance relationship has serious theoretical problems. When researchers use this approach, they explain observed diversity-performance relationships with hypothesized organizational dynamics that they assume are associated with diversity. Researchers assume that an organization's social composition corresponds with its internal processes such as communication, coordination, or conflict, and that these processes influence organizational performance. Congruence between demographic predictors and organizational dynamics, however, cannot be assumed. For example, the relationship between an organization's social composition and its cohesiveness can vary by context. In organizational settings characterized by strong homophily, an organization's social composition can be an adequate indicator of its cohesiveness; however, within some diverse organizations the level of homophily is not sufficiently strong enough to justify using social composition variables as proxies for organizational cohesion (Lawrence 1997; Reagans et al. 2004). Reagans and Zuckerman

(2001) use simulations to illustrate how organization's with the same social composition can have different interaction patterns, and they argue that especially in organizational settings characterized by weak homophily, an organization's interaction patterns are independent of its social composition. In addition, the level of homophily can be further reduced within organizations that encourage members to develop cross-category relationships (Chatman et al. 1998; Ely and Thomas 2001; Polzer et al. 2002). Such conditions can increase the likelihood that people from different backgrounds will interact with each other (Blau and Schwartz 1997; Feld 1982). Consequently, diversity-performance studies that assume social composition is congruent with social cohesion can be flawed and limited in their capacity to understand the mechanisms underlying the observed relationships.

Given the problems with this congruence assumption, scholars can improve their analyses by using more direct measures of organizational dynamics. Specifically with regard to the effect of social bonding, assessing an organization's interactions rather than its composition provides a more direct measure of its cohesiveness and thus better indicator of organizational cohesion (Shaw 1981). A few studies measure cohesion using social interaction variables to examine the effect of social bonding on organizational performance. Reagans and McEvily (2003) estimate organizational cohesion by measuring how often organizational members communicate with each other and their emotional closeness. Han and her colleagues (2014) estimate organizational bonding by

measuring how often organizational members discuss work-related topics and emotional issues with each other. Oh and his colleagues (2004) estimate organizational cohesion by measuring how often organizational members informally socialize with each other (see also Smith et al. 1994). These studies provide evidence that an organization's social composition is an inadequate indicator of its cohesiveness, and they demonstrate how the social interaction on an organization's members provides a more direct measure of organizational cohesion. Furthermore, these studies suggest that, in addition to the frequency of interaction, the type and content of the interaction influences organizational cohesion.

Finally, the third limitation of this approach—its inability to isolate the individual contributions of bridging and bonding on performance—prevents analyses from assessing the independent effects of these mechanisms. Furthermore, this limitation precludes scholars from testing hypotheses that predict interrelated effects of bridging and bonding on performance (Newell et al. 2004); namely, predictions that social interaction can be particularly helpful in boosting the performance of socially diverse organizations (Maznevski 1994).

To address the three limitations associated with the approach depicted in Figure 1, this study specifies bridging and bonding as distinct mechanisms and measures them independently—bridging based on the organization's social composition and bonding based on the members' social interaction. This approach does not rely on the assumption



that bridging and bonding are necessarily opposing mechanisms, it does not rely on the assumption that an organization's social composition is an adequate indicator of its cohesiveness, and it allows analyses to assess the independent and interrelated effects of bridging and bonding on performance.

## ***2.2 Social Diversity and Organizational Performance***

Although an organization's social composition is not always a reliable indicator of its cohesiveness, it does reliably indicate the range of social resources it can access (Lin et al. 1981). This claim relies on two assumptions: (1) an organization's level of diversity corresponds with the diversity of its external network and (2) the diversity of an organization's external network corresponds with the range of social resources it can access. Regarding the first assumption, regardless of whether people are members of a homogeneous or heterogeneous organization, because of homophily their contacts outside the organization likely share their social characteristics (McPherson et al. 2001; Smith et al. 2014). This means that an organization's external network exhibits roughly the same level of diversity that exists within the organization. As the diversity of an organization increases, the diversity of its external network will increase because its members are less likely to have the same contacts outside their organization. Regarding the second assumption, social bridging occurs when a tie between two actors spans a social boundary or structural hole (Burt 1992; Granovetter 1973). The resulting bridge provides the actors access to unique social resources (Lin 2001), and actors with a more

diverse social network have access to a greater variety of social resources (Son and Lin 2008). At the organizational level, bridging provides organizations access to resources through their members, and organizations with more diverse members have access to a greater variety of resources. Under conditions where these two assumptions hold, an organization's social composition can reliably indicate the range of social resources it can access.

Social resources, which include influence, information, and experience, can facilitate organizational performance, and organizations with access to a greater variety of these resources are likely to perform better (Page 2007). Diverse organizations tend to have ties to a broader range of influential people and institutions, which can increase an organization's capacity to accomplish its goals (Gazley et al. 2010; Reagans et al. 2004). Similarly, having non-redundant sources of information increases the variety of ideas, which can promote creativity and lead to innovation (Burt 2004; Ruef 2002). Furthermore, because demographic differences are often associated with different life experiences, social diversity can provide alternative perspectives and practices which can increase an organization's strategic capacity (Ganz 2000; Hillman et al. 2002). The relationship between social diversity and the variety of social resources and its association with organizational performance leads to the following hypothesis.

*H1: Social diversity is positively associated with organizational activities that involve accessing external resources.*

## ***2.3 Social Interaction and Organizational Performance***

While an organization's social composition can influence its performance by affecting the range of social resources it can access, an organization's social interaction can influence its performance by affecting its cohesiveness. Social bonding occurs when a tie between two actors is strengthened through social interaction (Granovetter 1973). The resulting bond produces social cohesion between the actors, and greater interaction produces greater cohesion (Homans 1950). At the organizational level, social interaction produces cohesion among organizational members, and the more intense the interaction, the more cohesive the organization (Smith et al. 1994).

When estimating the strength of ties between actors, it is important to measure multiple components of interaction. Granovetter (1973) conceptualizes tie strength as a combination of four indicators—time together, emotional intensity, intimacy, and providing reciprocal services. Similarly, Marsden and Campbell (1984) distinguish between the amount of interaction and the depth of interaction, and they use the breadth of topics discussed as an indicator of tie strength. Among the few studies that use social interaction to assess organizational cohesion, most use multiple components of interaction.<sup>6</sup> The frequency of interaction is expected to contribute to organizational cohesion because members who interact more often tend to exhibit greater trust, better

---

<sup>6</sup> See Smith et al. 1994; Oh et al. 2004, Han et al. 2014, Reagans and McEvily 2003.

communication, and more cooperation (Chatman and Flynn 2001; Reagans and Zuckerman 2001). The type of interaction can also influence an organization's level of social cohesion. For example, an organization can help forge a shared group identity by incorporating bridging cultural practices into its activities (Braunstein et al. 2014). Members of organizations that engage in these types of practices tend to be more cohesive and committed to working together. Similarly, the content of interaction is expected to be related to organizational cohesion (Marsden and Campbell 1984). In particular, members of organizations in which social differences are regularly discussed are more likely to report feeling valued and respected by their colleagues, a stronger emotional attachment to their colleagues, and a greater commitment to the organization (Ely and Thomas 2001; Pettigrew 1998; Tyler and Lind 1992).

Social cohesion is associated with trust, cooperation, and interdependence among organizational members (Bettenhausen 1991), and organizations with these characteristics are likely to perform better (Beal et al. 2003; Chiocchio and Essiembre 2009; Krackhardt 1992). Because organizations often seek consensus when making decisions, those that exhibit high levels of trust can navigate decision-making processes with greater ease (Bergman et al. 2012). Members of cohesive organizations tend to be more cooperative, which can facilitate knowledge transfer and coordinating activities (Reagans and McEvily 2003). Furthermore, because cohesive organizations tend to be more interdependent, this can assist task delegation and project implementation (Newell

et al. 2004). The relationship between social interaction and cohesiveness and its association with organizational performance leads to the following hypothesis.

*H<sub>2</sub>: Social interaction is positively associated with organizational activities that involve internal coordination.*

## **2.4 Discussing Social Differences and Organizational Performance**

Bridging and bonding are not necessarily inversely related (Jehn et al. 1999; Smith et al. 1994). They are distinct mechanisms that can independently affect organizational performance (Newell et al. 2004). Furthermore, research suggests that among internally diverse organizations, social interaction that engages members' differences can enhance organizational performance. Burt (2004) demonstrates how networks that span structural holes are effective at generating innovative ideas, but not necessarily at implementing them. Meanwhile, Granovetter (2005) demonstrates how densely connected networks are effective at implementing innovative ideas, but not necessarily at generating them. Bridging facilitates idea generation and bonding facilitates idea implementation (Tortoriello and Krackhardt 2010). In the context of diverse organizations, these findings suggest that social diversity provides access to a broad range of social resources and social interaction that engages differences enables organizations to mobilize those resources (Reagans et al. 2004; Simons et al. 1999).

Although social diversity endows an organization with a variety of social resources, realizing the benefits of those resources depends on the organization's ability

to identify and incorporate them into its activities (Newell et al. 2004). Social interaction that engages members' differences can facilitate this process by helping to ensure that the differences among the members are known and understood (Maznevski 1994). This involves members interacting with each other in ways that promote collective learning (Ayas and Zeniuk 2001; Boland and Tenkasi 1995) and are conducive for sharing novel or deviant perspectives (Nemeth and Kwan 1987). Specifically, when members of a diverse organization regularly discuss their social differences, it can increase the likelihood that the members' diverse social resources will be identified and used (Amabile 1996; Ely and Thomas 2001; Nemeth 1986).

Research suggests that realizing the performance benefits associated with being a socially diverse organization depends on how its members respond to their social differences (Simons et al. 1999; Tsui and O'Reilly 1989; Van der Vegt and Janssen 2003). Diverse organizations whose members avoid or rarely discuss their relevant differences can limit their ability to realize the benefits of being diverse (Ely and Thomas 2001; Leondar-Wright 2014). Furthermore, among diverse organizations, the hypothesized relationship between engaging differences and performance depends on the type of task being performed (Jehn et al. 1999). A positive relationship is expected among activities that involve knowledge sharing and internal coordination (Mors 2010; Reagans and McEvily 2003). For example, if a diverse organization is seeking to leverage its diversity to generate alternative ideas, then regular discussions about differences can facilitate this

process (Fiol 1994). Similarly, if a diverse organization is seeking to plan a large-scale event that will appeal to its broad base of constituents, then talking about their members' differences will be important (Kurtz 2002). In contrast, if a diverse organization is seeking to leverage its diversity to expand its range of potential sponsors, then talking about differences is less critical (Miller and Triana 2009).

This suggests that within diverse organizations, realizing the benefits associated with being diverse is related to how often the member's discuss their social differences, which leads to the following hypothesis.

*H<sub>3</sub>: Within diverse organizations, regularly discussing members' differences is positively associated with organizational activities that involve both accessing external resources and internal coordination.*

## **2.5 Data and Methods**

To examine how the mechanisms of bridging and bonding are associated with organizational performance, this study uses data from the National Study of Community Organizing Coalitions (NSCOC) (Fulton et al. 2011).<sup>7</sup> The coalitions in this study are located throughout the country and share a similar organizational form,

---

<sup>7</sup> The population for the NSCOC included every institution-based community organizing coalition in the U.S. that has an office address, at least one paid employee, and organizational members. Institution-based organizing coalitions, sometimes referred to as "broad-based," "congregation-based," or "faith-based" organizing coalitions, differ from other types of community organizing coalitions in that they have organizational members rather than individual members. The NSCOC did not include community organizing coalitions that have only individual members. Based on these criteria, the study identified 189 active coalitions by using databases from every national and regional community organizing network, databases from fourteen foundations and denominational bodies that fund community organizing, and archived IRS 990 Forms.

structure, and mission. Each coalition recruits a broad array of community organizations to become dues-paying members, which include religious congregations, nonprofit organizations, schools, unions and neighborhood associations. Each coalition has a board of directors consisting of representatives from its member organizations and they meet together on a regular basis to lead their coalition. These commonalities mean that analyses can hold the coalitions' organizational form relatively constant, while varying their social composition, internal interactions, and organizational outcomes.

The NSCOC surveyed the entire field of these coalitions by distributing a two-part survey to the director of every coalition. Part one was an online survey that gathered extensive data on each coalition's history, interactions, and activities. Part two consisted of customized spreadsheets that directors used to provide detailed demographic information about their organizational members, board members, and paid staff. The census achieved a response rate of 94 percent—gathering data on 178 of the 189 coalitions in the country and demographic information on the 4,145 member organizations, 2,939 board members, and 628 paid staff affiliated with these coalitions (Fulton 2014). These survey data are supplemented with qualitative data collected from observations of multiple coalition meetings and events in California, Florida, Illinois, New York, North Carolina, Ohio, and Washington, D.C., and from conversations and correspondence with several coalition directors.



### 2.5.1 Measures of social bridging

The analysis operationalizes social bridging as the diversity of the coalition's social composition, which is measured by tabulating the race, gender, household income level, education level, and religious affiliation of the coalition's board members. The racial diversity of a coalition's board is calculated using the Blau Index which takes into account both the number of racial groups and the proportion of each group represented on the board.<sup>8</sup> It generates a diversity score that ranges from 0 to .75, and the score can be interpreted as the probability that two randomly selected board members of a coalition are of a different race.<sup>9</sup> Based on this index, a mono-racial board has a diversity score of 0. As the number of different racial groups increases and as the proportion of each group becomes more evenly distributed, the coalition's racial diversity score approaches .75. The Blau Index is also used to calculate the gender and religious diversity of a coalition's board.<sup>10</sup>

The variable for the board members' household income has five categories: less than \$25,000 per year, \$25,000 to \$49,000 per year, \$50,000 to \$74,999 per year, \$75,000 to \$100,000 per year, and more than \$100,000 per year. The variable for the board members' education attainment level has three categories: less than a bachelor's degree, a

---

<sup>8</sup> Diversity =  $1 - \sum_k \rho_k^2$  where  $\rho_k$  is the proportion of board members in group  $k$ .

<sup>9</sup> Because the racial diversity score is calculated using four racial groups (i.e.,  $k = 4$ ), the maximum possible score is .75.

<sup>10</sup> The racial and religious groups reported in Table 1 are the groups used to calculate the respective diversity scores.

bachelor's degree, and more than a bachelor's degree. Using the Blau Index to calculate the income and education level diversity of a coalition's board is inappropriate because the "groups" represented in these variables have an inherent ordering (Reardon 2009). Therefore, the standard deviation of the board members' income and education level is used to calculate the diversity (i.e., the spread) of levels represented on the coalition's board.

### **2.5.2 Measures of social bonding**

The analysis operationalizes social bonding based on the board members' social interactions, which includes their frequency of interaction, how often their activities involved bridging cultural practices, and how often they discussed their social differences. The variable used to measure the frequency of interaction is the number of board meetings the coalition had in the previous 12 months. Because the relationship between frequency of interaction and performance is expected to be curvilinear, the analysis includes a quadratic term (Lechner et al. 2010). To measure how often the board members participated in bridging cultural activities, the analysis uses responses from the following survey item. Directors were asked to indicate how often their coalition's activities included members singing songs together over the past 12 months. This ordered categorical variable has five response options (never, rarely, sometimes, often, and always) and the analysis converted this variable to a Likert-type scale ranging from 1 to 5. To measure how often the board members discussed their social differences, the

analysis uses responses from the following survey item. Directors were asked to indicate how often their coalition explicitly discussed racial differences in their meetings over the past 12 months. This ordered categorical variable has five response options (never, rarely, sometimes, often, and always) and the analysis converted this variable to a Likert-type scale ranging from 1 to 5. Directors were asked identical questions related to gender, socioeconomic, and religious differences.

One limitation of the national study dataset is that it does not contain measures for individual-level board member interactions. Given that board members' level of involvement can vary substantially and because this study focuses on interactions among board members, it restricts the sample of board members to those who attended at least half of their coalition's board meetings in the previous year.<sup>11</sup> On average, 76 percent of a coalition's board members meet this criteria. This subset is defined as the "active" board members, and the analyses include only these board members. These high-attending board members are more likely to interact with each other, and they also provide a more accurate measure of the board's functional level of diversity, since the level of diversity represented by an organization's list of board members tends to be

---

<sup>11</sup> As part of the customized spreadsheet portion of the survey, the coalition directors were asked to indicate the proportion of board meetings each board member had attended in the previous 12 months. This ordered categorical variable has five response options (zero; less than half, but not zero; half; more than half, but not all; and all).

greater than the level of diversity represented by the board members who regularly attend the organization's board meetings.

### **2.5.3 Measures of organizational performance**

The analysis draws on scholarship from management, organizations, and social movements to construct a multidimensional framework for assessing organizational performance, which includes an organization's ability to acquire sponsorship, develop strategies, and mobilize people (Davis et al. 2005). Nonprofit organizations often rely on sponsors who will support their activity, and sponsorship capacity represents the range of individual and institutional sponsors an organization can solicit for support (Baum and Oliver 1991; Jenkins 2006). Nonprofit organizations tend to seek financial and political sponsorship through their board members' personal networks, but they must compete with other organizations to obtain support (Barman 2002; Cress and Snow 1996). It is expected that organizations with a diverse board possess greater sponsorship capacity, because they tend to have a broader network of potential sponsors (Gazley et al. 2010; Walker and McCarthy 2010). Furthermore, organizations whose members meet often cultivate accountability that can increase each person's likelihood of following through on soliciting support. Finally, when members of a diverse organization regularly discuss their differences and the importance of those differences, this can increase the range of potential sponsors the members are willing to engage.

The analysis includes two dependent variables related to a coalition's sponsorship acquisition. *Annual revenue*—which is the total amount of funding the coalition received in 2010. For the coalitions in this study, the majority of their revenue comes from grants from faith-based funding agencies, secular foundations, and corporations. *Number of city officials*—the number of different city officials the coalition met with in the past 12 months. Unlike the boards of most nonprofit organizations, the boards of the coalitions in this study are not the coalition's primary donors nor are they necessarily high profile public figures, rather they are representatives of the coalition's member organizations.

Strategies are the means by which an organization mobilizes resources to achieve its goals (Porter 1996; Walker and McCarthy 2010), and an organization's strategic capacity represents the range of effective strategies it is likely to generate (Ganz 2000). When people develop strategies, they draw from their life experiences which shape the way they frame issues, see political opportunities, and mobilize resources (Ganz 2009). Because people with different backgrounds develop different strategies, it is expected that organizations with greater social diversity possess greater strategic capacity. For example, people possess tactical repertoires that enable them to accomplish goals with different methods in different settings, and a socially diverse organization has access to a more expansive repertoire of tactics (Hamel 1996; Moore 1995). Furthermore, because organizational strategies are often developed through members interacting with each

other, an organization's strategic capacity can grow as the frequency of interaction increases. Finally, when members of a diverse organization regularly talk about their differences, this enables them to encounter different perspectives and consider alternative approaches, which can lead to new strategies (Ganz 2000; 2009).

The analysis includes two dependent variables related to a coalition's strategy development. *Number of organizing tactics used by the coalition*—the number of different organizing tactics the coalition used in the past two years to address socio-political issues. Respondents could select up to nine different tactics, which included boycotts, leafleting, mass letter-writing, prayer vigils, press conferences, accountability sessions, rallies, sit-ins, and strikes. *Number of modes used for mass communication*—the number of different modes of communication the coalition used in the past year to mass communicate with its constituents. Respondents could select up to eleven different modes, which included bulk mail, robocalling, email listservs, Facebook, Evite, YouTube, Twitter, podcasts, online photo albums, blogs, and websites.

Grassroots organizations demonstrate power through their ability to mobilize people, and an organization's mobilizing capacity represents the pool of potential volunteers it can train and constituents it can turn out to address particular issues (Hackman 2002; Warren 2001; Wood 2002). Organizations tend to recruit participants from their members' personal networks, and because overlapping networks can limit an organization's overall mobilizing capacity, it is expected that diverse organizations can

mobilize a greater number of participants (Tarrow 1994; Tindall et al. 2012).

Furthermore, organizations whose members meet often tend to be more cohesive, which can increase their motivation to recruit participants from their respective communities.

Finally, within diverse organizations, mobilizing efforts can be enhanced when members regularly talk about their social differences and discuss how to appeal to those differences through their events (Hart 2001; Lichterman 1995).

The analysis includes two dependent variables related to a coalition's mobilization outcomes. *Number of volunteer leaders*—the number of volunteer leaders who regularly attend planning meetings or work on the coalition's projects. *Total turnout*—which is the total number of people who attended at least one of the coalition's events in the past year.

The analyses also control for the coalition's annual revenue, age, and the number of paid staff, member organizations, and board members. Each of these organizational characteristics is known to be associated with the performance measures and the independent variables. Additional analyses (not displayed) included controls for the characteristics of the community in which the coalition is located such as its population density, demographic diversity, median household income, and political orientation. Including these variables did not significantly change the observed relationships between the bridging and bonding variables and the performance measures, but it did reduce the model fit, so these variables were omitted from the final models. Table 1 displays descriptive statistics for the variables used in the analyses.

**Table 1: Descriptive Statistics for the Community Organizing Coalitions and Their Boards**

Variable	Mean	SD	Min.	Max.
Measures of Social Bridging <sup>a</sup>				
Racial diversity of the coalition's board	.43	.18	.00	.73
Proportion Caucasian	.51	.27	.00	1.00
Proportion African American	.29	.27	.00	1.00
Proportion Hispanic	.16	.22	.00	1.00
Proportion other	.04	.08	.00	.58
Gender diversity of the coalition's board	.44	.08	.00	.50
Proportion female	.52	.18	.00	.89
Income level diversity of the coalition's board	.94	.32	.00	1.72
Proportion that earns less than \$25,000 per year	.23	.21	.00	1.00
Proportion that earns \$25,000 to \$49,999 per year	.35	.19	.00	1.00
Proportion that earns \$50,000 to \$74,999 per year	.25	.18	.00	.90
Proportion that earns \$75,000 to \$100,00 per year	.12	.15	.00	.93
Proportion that earns more than \$100,000 per year	.05	.10	.00	.67
Education level diversity of the coalition's board	.72	.19	.00	1.15
Proportion with less than a bachelor's degree	.23	.19	.00	.79
Proportion with a bachelor's degree	.35	.19	.00	.90
Proportion with more than a bachelor's degree	.42	.21	.00	1.00
Religious diversity of the coalition's board	.57	.16	.00	.78
Proportion Catholic	.36	.23	.00	1.00
Proportion Mainline Protestant	.30	.21	.00	.81
Proportion Black Protestant	.20	.22	.00	1.00
Proportion Conservative Protestant	.06	.09	.00	.38
Proportion Jewish	.04	.08	.00	.33
Proportion Muslim	.01	.03	.00	.18
Proportion other	.03	.08	.00	.50
Measures of Social Bonding				
Number of board meetings	9.29	3.09	1.00	18.00
How often activities include members singing together	3.03	.99	1.00	5.00
Measures of Organizational Performance				
Annual revenue (x \$100,000)	3.18	6.90	.11	75.00
Number of city officials the coalition met with	14.75	12.07	.00	80.00
Number of organizing tactics used by the coalition	3.82	1.82	.00	7.00
Number of modes used for mass communication	5.36	2.39	.00	11.00
Number of volunteer leaders (x 100)	1.11	.99	.07	6.00
Total turnout (x 1,000)	1.27	1.48	.00	11.86
Characteristics of the Coalition				
Age of coalition	13.47	8.73	1.00	40.00
Number of paid staff	3.02	2.76	1.00	19.00
Number of member organizations	23.02	13.21	4.00	77.00
Number of "active" board members <sup>a</sup>	13.18	6.37	3.00	40.00

Source: 2011 National Study of Community Organizing Coalitions; N = 148

<sup>a</sup> Based on the board members who attended at least half of their coalition's board meetings.



## ***2.6 Analysis and Discussion***

The first analysis examines whether the social composition and social interaction of a coalition's board is associated with its performance by conducting a Poisson regression for each of the dependent variables.<sup>12</sup> Table 2 displays the results of the six multivariate regression models. The analysis indicates that the racial, gender, and religious diversity of a coalition's board are positively associated with its revenue. Because the coalitions in this study obtain a majority of their funding from grants, which are often identified and secured by their board members, coalitions with more diverse boards have access to a greater variety of funding sources. For example, faith-based foundations can be a substantial source of funding for these coalitions, and a coalition with members from several different religious traditions, compared to a coalition with members from only one religious tradition, typically has ties to a greater variety of faith-based foundations. Furthermore, a coalition is more likely to obtain money from a particular faith-based funding agency if it has a board member whose religious tradition is the same as that of the funding agency. Similarly, coalitions that are more racially and gender diverse have access to a greater variety of funding sources and ones for which they have a competitive advantage. On the other hand, it is not surprising that the

---

<sup>12</sup> Because this study surveyed the entire population of institution-based community organizing coalitions in the U.S. and received responses from 94 percent of the coalitions, a finite population correction factor —  $\sqrt{(N - n)/(N - 1)}$  — is applied to each analysis (Cochran 1977). The finite population correction factor is based on the 148 coalitions (out of 189) that provided data for all of the variables used in the analysis.

income and education level diversity of a coalition's board are not associated with its revenue, since people's access to funding sources corresponds with their income and education level. Additional analyses (not displayed) indicate that the mean income and education level of a coalition's board are positively related to its revenue; however, the proportion of white board members and male board members are not significantly associated with the coalition's revenue. Furthermore, the racial, gender, and religious diversity of the board remain significant in the models that control for the board's mean income and education level. These analyses demonstrate that the observed relationships are driven by social diversity rather than social privilege.

**Table 2: Poisson Regressions Estimating the Relationship between Social Bridging and Bonding and Organizational Performance**

	Annual revenue	Number of city officials with whom the coalition met	Number of organizing tactics used by the coalition	Number of modes used for mass communication	Number of volunteer leaders	Total turnout
Racial diversity of board <sup>a</sup>	1.143*** (3.521)	1.078* (2.524)	.993 (-.967)	.969 (-1.686)	1.108*** (3.867)	1.011 (.238)
Gender diversity of board <sup>a</sup>	1.075** (2.576)	.826*** (-4.990)	.935*** (-4.435)	.944** (-3.241)	.976 (-.946)	1.028 (.776)
Income level diversity of board <sup>a</sup>	.959 (-1.173)	1.086** (2.790)	1.020 (1.099)	1.025 (1.725)	.974 (-.883)	.975 (-.772)
Education level diversity of board <sup>a</sup>	1.046 (.759)	1.066* (1.970)	1.116*** (5.732)	.986 (-.978)	.955 (-1.772)	.814*** (-4.870)
Religious diversity of board <sup>a</sup>	1.125** (2.820)	.989 (-.354)	1.053** (2.922)	1.105*** (5.130)	.975 (-.955)	.852** (-3.298)
Number of board meetings	.912 (-.483)	.891 (-1.036)	1.0432 (.641)	1.277*** (4.082)	1.340* (2.126)	1.809* (2.259)
Number of board meetings <sup>2</sup>	.965 (-.168)	1.093 (.814)	1.006 (.102)	.781*** (-4.293)	.727* (-2.128)	.515* (-2.403)
How often activities include members singing together	.958 (-1.274)	.951 (-1.718)	1.169*** (9.812)	1.144*** (9.067)	1.098*** (3.629)	1.238*** (4.753)
Annual revenue <sup>b</sup>		1.226**** (5.087)	1.039 (1.394)	1.088*** (4.051)	1.063 (1.396)	1.070 (1.090)
Age of coalition <sup>b</sup>	1.147*** (4.053)	1.004 (.122)	1.025 (1.413)	1.017 (1.005)	1.191*** (5.472)	1.209*** (4.638)

Number of paid staff <sup>b</sup>	2.334*** (11.081)	1.074 (1.945)	1.170*** (6.238)	1.177*** (8.121)	1.116** (3.324)	1.203*** (3.545)
Number of member organizations <sup>b</sup>	1.099* (2.528)	1.032 (.868)	1.003 (.173)	.966 (-1.903)	1.152*** (4.084)	1.159** (2.872)
Number of board members <sup>a,b</sup>	.736*** (-4.161)	1.120** (3.316)	.971 (-1.476)	.963* (-2.198)	1.328*** (8.908)	1.164*** (4.650)
<i>N</i>	148	148	148	148	148	148

*Note:* Coefficients reported as standardized incidence-rate ratios; z-statistics reported in parentheses; constants are not displayed.

<sup>a</sup> Based on the board members who attended at least half of their coalition's board meetings.

<sup>b</sup> Logged values.

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$  (two-tailed tests).

A similar pattern is observed for the number of city officials a coalition met with in the past year. The racial, income, and education diversity of a coalition's board is related to meeting with a greater number of city officials. This finding is expected because coalitions with a diverse board have a greater proportion of non-redundant external ties, which corresponds with a greater number of different city officials the board can access. For example, members of a racially diverse board, compared to members of an all-white board, likely have less overlap in the city officials they know. Similarly, members of an income and education diverse board likely have ties to different city officials. Contrary to hypothesis, the analysis indicates a negative relationship between gender diversity and the number of city officials. A subsequent analysis (not displayed) indicates that the proportion of male board members is negatively related to the number of city officials, which suggests that gender, not gender diversity, is driving this relationship; coalitions with a higher proportion of male board members meet with fewer city officials. It is unclear why gender is related to this activity in this way.

Among the performance variables related to strategy development, their relationship to social diversity is less consistent. The religious and class diversity of a coalition's board is positively associated with the number of tactics and modes of mass communication used by the coalition. Although religion is a common motivator for social action, the tactics used to address social issues vary by religious tradition (Wood

1999; 2002). For example, a Catholic board member reared in the Jesuit tradition draws on a set tactics that differs from a Jewish board member influenced by the social justice teaching of Reform Judaism. A coalition that has a greater variety of religious traditions represented on its board has access to a broader repertoire of tactics. Similarly, the organizing tactics and modes of mass communication used by advocacy groups vary by the class of its members (Croteau 1995; Leondar-Wright 2014). A subsequent analysis (not displayed) indicates that coalitions with low-income board members are more likely to use “low-tech” modes (e.g., newsletters and phone calls) to mass communicate with their constituents and coalitions with high-income board members are more likely to use “hi-tech” modes (e.g., Twitter and blogs). These relationships help explain why the spread of income levels represented on a coalition’s board is positively associated with the number of different modes of mass communication it uses.

Although the analysis indicates a positive relationship between religious and class diversity and strategy development, it indicates that racial diversity is not related to a coalition’s strategy development and that gender diversity is negatively related to it. This finding suggests that merely having access to a greater variety of perspectives may not be enough to realize its benefits. This unexpected outcome is explored further in the second analysis which examines whether discussing social differences within diverse boards is associated with their performance.

Most striking is the solitary positive relationship between social diversity and the mobilization outcomes. Apart from racial diversity being positively associated with the number of volunteer leaders, the analysis indicates either no significant relationship or a negative relationship between the social diversity of a coalition's board and the number of volunteer leaders it has and the total number of people it turned out for events. The negative associations are consistent with the "pessimistic" view that diverse organizations are less effective at mobilizing people (Costa and Kahn 2003; Tilly 1973); however, the numerous null findings could mean that the conditions needed for effective mobilization differ for homogeneous and diverse organizations. In particular, although a coalition with a diverse board has access to a broader range of constituents (McAdam 2010; Oberschall 1973), its ability to mobilize them may depend on how much "cross-talk" occurs among the board members (Huckfeldt et al. 2004; Weare et al. 2009). The second analysis examines whether realizing the benefits of being diverse is associated with how often board members talk about their social differences.

The mixed findings observed when analyzing the relationship between diversity and performance is consistent with previous research. Had this study used only the social composition of the coalition boards and assumed that heterogeneity corresponded with social bridging and homogeneity corresponded with social bonding, the conclusion would be that social bridging is positively associated with acquiring sponsorship, social bonding is positively associated with mobilizing people, and neither are associated with

strategy development. However, because this study uses social interaction to measure social bonding, it can assess the effects of social bonding within an organization independent of its social composition.

The analysis indicates that the number of board meetings a coalition has is not associated with its revenue or with the number of city officials it met with in the past year. Because these activities do not require much internal coordination, it is not surprising that the frequency of board member interaction is unrelated to the outcome of these activities. Conversely, the analysis indicates a positive relationship between the number of board meetings a coalition has and its ability to develop strategies and mobilize people. The relationship, however, is curvilinear, which means that the positive association diminishes and becomes negative once the number of board meetings exceeds a certain amount. This inverted U-shaped relationship is expected since developing strategies and mobilizing people often involve extensive internal coordination, which can be facilitated by meeting together; but having too many meetings can hinder performance. The analysis indicates a similar pattern between how often a coalition's activities involved bridging cultural practices (e.g., members singing together) and its performance. Regularly incorporating bridging cultural practices into a coalition's activities is not associated with a coalition's ability to acquire sponsorship, but it is positively associated with a coalition's ability to develop strategies and mobilize



people. Participating in bridging cultural activities promotes social cohesion which can enhance the performance of organizational activities that involve internal coordination.

Summarizing the first analysis, it suggests that social interaction is not related to a coalition's ability to implement activities that need little internal coordination (e.g., acquiring sponsorship). Conversely, social interaction can enhance a coalition's ability to implement activities that require greater internal coordination (e.g., developing strategies and mobilizing people). The first analysis also suggests that social diversity can enhance a coalition's ability to perform activities that involve accessing external resources and minimal internal coordination. On the other hand, social diversity has mixed effects for activities that both involve accessing external resources and require greater internal coordination.

To further explore the mixed findings observed when analyzing the relationship between diversity and performance, the second analysis examines whether engaging members' differences within a diverse organization is associated with its performance. The analysis restricts the sample to the coalitions with boards that are sufficiently diverse. It uses Kanter's (1977) "tipping point" criteria to determine whether a coalition's board is sufficiently diverse along a particular social dimension (i.e., at least two groups need to each represent at least 20 percent of the organization).<sup>13</sup> The analysis performs a

---

<sup>13</sup> A coalition is define as being racially diverse if two racial groups each represent at least 20 percent of its board; 71 percent of the coalitions have boards that meet this criteria. A coalition is defined as being gender diverse if males and females each represent at least 20% of its board; 100 percent of the coalitions have

Poisson regression on each of the dependent variables to examine whether regularly discussing members' social differences is positively associated with a coalition's ability to acquire sponsorship, develop strategies, and mobilize people. To isolate the relationship between a particular dimension of diversity and board members discussing differences related to that dimension, separate analyses for each dimension of diversity are conducted. Table 3 displays the results of the six multivariate regression models for each dimension of diversity.

The analysis indicates no significant relationship between board members discussing their racial, gender, or religious differences and their coalition's revenue. This finding is not surprising since obtaining grants is not expected to be associated with how often board members discuss their differences. However, it is interesting to note that among income and education diverse coalitions, regularly discussing class differences in meetings is positively associated with the coalition's revenue. This suggests that strategies for obtaining funding may differ by class and that by engaging these differences a coalition might discover alternative sources of revenue that would otherwise remain untapped.

---

boards that meet this criteria. A coalition is defined as being income diverse if at least 20 percent of its board members earn less than \$50,000 per year; 82 percent of the coalitions have boards that meet this criteria. A coalition is defined as being education diverse if at least 20 percent of its board members have less than a bachelor's degree; 51 percent of the coalitions have boards that meet this criteria. A coalition is defined as being religiously diverse if at least four different major religious traditions are represented on its board; 66 percent of the coalitions have boards that meet this criteria.

**Table 3: Poisson Regressions Estimating the Relationship between Discussing Members' Social Differences and Organizational Performance among Coalitions with Diverse Boards<sup>a</sup>**

	Mean (SD)	Annual revenue	Number of city officials with whom the coalition met	Number of organizing tactics used by the coalition	Number of modes used for mass communication	Number of volunteer leaders	Total turnout
<i>Racially Diverse Coalitions</i>							
Frequency of discussing racial differences in meetings	3.26 (.99)	1.050 (.892)	1.258*** (4.521)	1.114*** (4.084)	1.130*** (5.545)	1.066 (1.590)	1.203*** (4.238)
N	105	105	105	105	105	105	105
<i>Gender Diverse Coalitions</i>							
Frequency of discussing gender differences in meetings	2.09 (.84)	.985 (-.534)	1.061* (2.068)	1.071*** (3.742)	1.083*** (4.883)	1.060* (2.292)	1.068* (2.014)
N	148	148	148	148	148	148	148
<i>Income Diverse Coalitions</i>							
Frequency of discussing class differences in meetings	3.02 (.96)	1.246* (2.250)	1.173** (3.246)	1.062** (2.808)	1.112*** (5.482)	1.085* (2.189)	1.109* (2.389)
N	121	121	121	121	121	121	121
<i>Education Diverse Coalitions</i>							
Frequency of discussing class differences in meetings	3.00 (.99)	1.486* (2.436)	1.103 (1.207)	1.055 (1.653)	1.123*** (3.765)	1.132* (2.199)	1.071 (.855)
N	76	76	76	76	76	76	76
<i>Religiously Diverse Coalitions</i>							
Frequency of discussing religious differences in meetings	2.79 (.89)	.937 (-1.586)	1.005 (.114)	1.036 (1.024)	1.010 (.310)	1.024 (.537)	1.125* (2.101)
N	97	97	97	97	97	97	97

*Note:* Coefficients reported as standardized incidence-rate ratios; z-statistics reported in parentheses; each model also contains all of the bonding and control variables in Table 2; the coefficients for these variables are not displayed.

<sup>a</sup> Based on board members who attended at least half of their coalition's board meetings.

\* p < .05; \*\* p < .01; \*\*\* p < .001 (two-tailed tests).

Among diverse coalitions, the frequency of discussing racial, gender, and class differences is related to meeting with a greater number of city officials. The first analysis suggests that having a socially diverse board expands the pool of city officials the coalition can access, and this analysis suggests that regularly discussing racial, gender, and class differences can increase the number of city officials with whom the coalition is willing to meet. Discussing religious differences, on the other hand, is not significantly related to the number of city officials the coalition met with in the past year. Perhaps this is because a city official's religious affiliation has less bearing on whether the coalition is willing to meet with him or her.

With regard to a coalition's ability to develop strategies, the analysis indicates that discussing racial, gender, and class differences are positively related to the number of organizing tactics and modes of mass communication a coalition uses. While the first analysis indicates that having a racially or gender diverse board is not positively associated with using a greater number of organizing tactics or modes of mass communication, this analysis indicates that among coalitions with a racially or gender diverse board, those that regularly discuss racial or gender differences use a greater number of tactics and communication modes. This finding suggests that when a diverse organization is developing strategies, realizing the benefits of being diverse depends on how often the members talk about their differences. It is through discussing differences that coalitions can identify and implement alternative strategies.

Qualitative data collected from coalitions with diverse board members who regularly talk about their social differences during their planning meetings reveal how discussing differences can enhance strategy development. In one coalition with a racially diverse board, their discussions of tactical strategies often involved African American board members describing the historical roots and effectiveness of civil rights-era tactics such as sit-ins and boycotts and Caucasian board members highlighting the benefits of relational approaches such as scheduling meetings with influential leaders. Observations of a strategic planning meeting in another coalition with an income diverse board revealed lower income board members describing their experience participating in labor strikes and higher income board members describing their experience holding press conferences. In another coalition with a religiously diverse board that regularly discussed religious differences, members often cited practices of their religious tradition when proposing tactics such as prayer vigils and rallies. In all three cases, having a diverse board whose members talk about their social differences contributed to the coalitions implementing new organizing tactics that they previously had not used. Having these types of cross-race, cross-class, and cross-religion discussions can create an openness to alternative organizing tactics that would otherwise remain unfamiliar (Koch-Gonzalez et al. 2009). Rather than becoming divided over tactical differences, these diverse coalitions expanded their repertoire of tactics to address community concerns by talking about their social differences.

Similarly, discussing differences can help a coalition become more aware of social differences in the preferred modes of mass communicating, which can lead it to adopt more modes. Observations of diverse coalitions reveal how discussing differences contributed to them increasing the number of modes they use to mass communicate with their constituents. In one case, a Hispanic board member of a predominantly Caucasian coalition facilitated a discussion about the linguistic and literacy challenges faced by some members of her community. Through this discussion, the coalition decided to adopt modes of mass communication that could easily transmit information in multiple languages—a website with a built-in translator—as well as modes that did not require recipients to be literate—a podcast, an online photo album, and robocalling. By talking about their differences, the board members discovered limitations associated with their coalition’s current modes of mass communicating and they generated ideas to address those limitations.

The analysis indicates a similar positive relationship between a diverse coalition discussing differences and the number of volunteer leaders it has and the total number of people it turned out for events. While the first analysis indicates only one positive relationship between having a diverse board and mobilizing people, this analysis indicates that among coalitions with a diverse board, those that regularly discuss differences mobilize more people to volunteer as leaders and to attend its public events. This finding suggests that when a diverse organization is seeking to mobilize people,

realizing the benefits related to being diverse depends on how often the members talk about their differences.

Qualitative data collected from coalitions with diverse board members who regularly talk about their differences during their planning meetings reveal how discussing differences can improve mobilization outcomes. In one coalition with a gender diverse board whose members regularly discuss gender differences, a single parent board member described the childcare challenges she faced when she tried to attend one of the coalition's training events for volunteer leaders. Following this discussion, the coalition decided to provide childcare during their training events. In another case, a racially diverse coalition was organizing a potluck for its volunteers to occur in conjunction with Black History Month, and the African American organizers had planned to ask participants to bring an African dish to share. A Hispanic board member, however, challenged this component of the event and explained that it might discourage her Hispanic constituents from attending because they would feel uncomfortable preparing such a dish. This led the board members to discuss more broadly how their coalition could organize events that celebrate particular racial/ethnic communities while not alienating other communities in the process.

Similarly, discussing differences can help a coalition become more sensitive to how characteristics of their large-scale public events might encourage or discourage participation. Qualitative data collected from diverse coalitions illustrate how discussing

differences contributed to them planning events that accommodate and appeal to the broadest base of constituents. During an evaluation meeting in an income diverse coalition, a lower income board member reasserted that the low turnout occurred partly because the location of the event was not easily accessible by public transportation. The board member explained that many of his constituents do not own cars and thus rely on public transportation. For some of the higher income board members it was evident that public transportation routes were not a factor they had considered when selecting a location for the event. The discussion that ensued represented the board members efforts to engage class differences and to accommodate those differences when planning large-scale events. In another coalition with a religiously diverse board that regularly discussed religious differences, a Jewish board member contended that the coalition's public events tended to have a strong Christian ethos, which members of his synagogue found off-putting. He challenged the board to adapt its event so that they incorporated the characteristics and values of the various faith traditions represented among their constituents. This discussion prompted the board to be more intentional about taking into account the faith traditions of the main speakers, the texts cited, the types of food provided, and the dates of holy days when planning events. All of which helped the coalition make their events more appealing to people with a religious affiliation other than Christian. In each case mentioned above, the cross-race, cross-class, and cross-religious discussions led the coalitions to adjust their events in ways that would



encourage a broader base of participation, and the adjustments were more likely to be proposed and implemented because the coalitions had a diverse board whose members regularly discussed their social differences.

In summary, the first analysis provides strong evidence that social interaction is positively related to the performance of activities that involve internal coordination. On the other hand, the first analysis indicates mixed findings for the relationship between social diversity and organizational performance. Social diversity is positively related to activities that involve accessing external resources and minimal internal coordination, but the relationship is diminished or negative for activities that involve greater internal coordination. This suggests that realizing the benefits related to diversity is constrained for activities that involve internal coordination and that being diverse can hinder the performance of such activities. The second analysis restricts the sample to only coalitions with a diverse board and examines the content of interaction. It provides strong evidence that talking about social differences is positively related to the performance of activities that involve both accessing external resources and internal coordination. Among coalitions with a diverse board, realizing the benefits related to diversity depends on how often the members discuss their social differences. Overall, the analyses suggest that an organization can improve its performance by having socially diverse members who interact often, participate in bridging cultural activities, and talk about their social differences.

## **2.7 Conclusion**

Studies analyzing the diversity-performance relationship emphasize the importance of social bridging and social bonding. Although scholars agree that both mechanisms are positively related to organizational performance, many see them as being in opposition to one another—an organization that exhibits high bridging will exhibit low bonding and vice versa. This view persists because many studies operationalize bridging and bonding using the same measure—the organization’s social composition, where diversity is positively related to bridging and negatively related to bonding. This approach assumes that bridging and bonding are necessarily opposing mechanisms, and it precludes the possibility that an organization could exhibit both high bridging *and* high bonding. Furthermore, specifying these mechanisms as the inverse of each other prevents analyses from assessing their independent and interrelated effects.

This study addresses the aforementioned limitations and advances diversity-performance research by specifying bridging and bonding as distinct mechanisms and measuring them independently. It operationalizes bridging as the diversity of the organization’s social composition and bonding as the intensity of its members’ social interaction. This approach does not rely on the assumption that bridging and bonding are necessarily opposing mechanisms, it does not rely on the assumption that an organization’s social composition is an adequate indicator of its cohesiveness, and it

allows analyses to assess the independent and interrelated effects of bridging and bonding on performance. Unconstrained by the approach that models bridging and bonding as countervailing causal pathways that link diversity and performance, this study provides an expanded understanding of the social mechanisms underlying the diversity-performance relationship. In addition to demonstrating the independent effects of social diversity and social interaction on organizational performance, it demonstrates how discussing members' differences can influence the performance of a diverse organization.

Building on Tortoriello and Krackhardt's (2010) finding that the benefits associated with bridging ties depend on the nature of the ties forming the bridge, this study demonstrates the importance of analyzing the content of interaction between diverse actors. When members of a diverse organization discuss their social differences, it can increase their absorptive capacity—their ability to value, assimilate, and apply new ideas (Burt 2004; Cohen and Levinthal 1990). It can also lead to greater trust and to members feeling more valued and respected by their colleagues (Tyler and Lind 1992). Conversely, organizations that minimize differences, avoid discussions about differences, or claim to be blind to differences tend to exhibit lower trust, collaboration, and morale (Ely and Thomas 2001).

Given that organizations vary in how they respond to internal social differences, it is important to measure not only the degree of diversity within an organization, but

also how its members engage their social differences (Chatman et al. 1998). Some organizations have norms that discourage discussions about social differences, while other organizations actively encourage such discussions (Kurtz 2002). This study suggests that realizing the performance benefits associated with being diverse is associated with how often the members discuss their differences. Even though diversity provides access to a greater variety of social resources, those resources risk being overlooked if the members rarely discuss their differences. If, however, the members regularly discuss their differences, this can help the organization tap those resources to develop alternative approaches and novel solutions (Obstfeld 2005). Idea generation and implementation can be improved by bringing together people from diverse backgrounds, having them interact with each other about their different perspectives, and combining their unique social resources to implement innovative ideas that address organizational challenges.

Being diverse does not always improve performance. For activities that involve accessing external resources and internal coordination, realizing the performance benefits of diversity depends on the organization's ability to identify and incorporate the variety of social resources diversity provides. A diverse organization can improve its ability to integrate resources and coordinate action by encouraging its members interact in ways that engage their differences. Discussing differences can help members appreciate divergent perspectives and it can promote collaboration. In the context of

socially diverse organizations, diversity provides access to a greater variety of social resources and discussing social differences provides the mechanism needed to identify and incorporate those resources into its operations. Social bridging provides the pathways across social boundaries for social resources to travel and social bonding facilitates the transmission of those resources. Within a diverse organization, these two mechanisms can work together to improve its performance.

### **3. Network Ties and Organizational Action: Explaining Variation in Social Service Provision Patterns**

Social capital research often analyzes how involvement in voluntary associations benefits individuals or communities. For individuals, being involved in voluntary associations can generate social capital which they can mobilize to facilitate action (Burt 1992; Granovetter 1974; Lin 2001). For communities, having their members involved in voluntary associations can generate social capital which they can mobilize to coordinate action (Coleman 1988; Putnam 1993). Even though voluntary associations promote the accumulation of both forms of social capital, less is known about how social capital affects voluntary associations themselves (Hardy et al. 2003; Paarlberg and Varda 2009; Schneider 2009). Social capital theory suggests that a voluntary association can generate social capital for itself by participating in interorganizational collaborations, and it can mobilize this capital to increase its capacity for action (Knoke 1983; Passey and Lyons 2006; Zahra 2010). It also suggests that a collective of organizations established through interorganizational collaborations can generate social capital which it can mobilize to coordinate the action of its members (Galaskiewicz et al. 2006; Knoke 2009). This study integrates social capital theory and network analysis to explore the relationship between interorganizational networks and organizational action (Burt 2000; Lin 1999a; Moody and Paxton 2009). Specifically, it analyzes the collaborative ties congregations form to provide social services and it examines their association with the number of programs and types of services congregations offer.

### ***3.1 Social Capital, Social Networks, and Organizational Action***

Social capital is the resources embedded in an actor's network that can be mobilized to facilitate action (Lin et al. 1981). By collaborating with other organizations, an organization can gain access to resources such as expert knowledge, best practices, training, and referrals (Knoke 1983; Knoke 1999). Specifically among nonprofit organizations, collaborative ties can provide access to facilities, human resources, and new funding sources—all of which are associated with an organization's capacity for action (Minzner et al. 2014; Passey and Lyons 2006). The amount of external resources an organization has access to is influenced by the extent and diversity of its interorganizational network (Burt 1997; Lin 1999b). Organizations with more extensive collaborator networks have access to a larger amount of resources which can increase their capacity for action (Lin and Dumin 1986). Similarly, organizations with more diverse collaborator networks have access to a greater variety of resources which can also increase their capacity for action (Burt 1992; Granovetter 1973; Son and Lin 2008).

Having a more extensive and/or diverse collaborator network, however, does not necessarily increase an organization's capacity for action. Sometimes resources acquired through collaborative ties do not offset the costs of developing those ties (Smith-Doerr and Powell 2005). Organizations can incur substantial costs establishing and maintaining collaborative partnerships, and sometimes the resources expended to find partners, accommodate differences, and build trust exceed the resources acquired

through the collaboration (Ebers and Grandori 1997). Because interorganizational collaborations might not be beneficial for all organizations, some organizations might be more productive by limiting collaborative ties or by functioning as organizational isolates (Burt 1992; Rogers and Mulford 1982).

Social capital is also conceptualized as the common values and priorities of a collective that can be mobilized to coordinate action (Coleman 1988; Putnam 2000). A collective of organizations established through interorganizational collaborations can possess shared interests which it can mobilize to coordinate the activity of its members (Knoke 2009). Consequently, just as collaborative ties can be associated with an organization's capacity for action, they can also be related to its scope of action (Knoke 1999). The relationship is a function of the organization's structural position within an interorganizational network. Organizations embedded in similar collaborator networks occupy regularly equivalent positions, and network theory predicts that these organizations will exhibit similar behavior (Borgatti and Everett 1992; White and Reitz 1983). When an organization joins an interorganizational network, it can influence and be influenced by the shared interests of the network members (Knoke 2009; Phillips et al. 2000). By virtue of collaborative efforts, organizations must negotiate competing interests to arrive at mutually agreeable outcomes (Eden and Huxham 2001; Galaskiewicz et al. 2006). Networks can also be a source of information from which organizations learn about new opportunities and adopt new practices (Dimaggio and



Powell 1983; Galaskiewicz and Wasserman 1989; Hardy et al. 2003). As a result, the scope of an organization's action can be related to its structural position within the interorganizational network. Organizations that have the same types of collaborators occupy similar network positions and are likely to behave similar to each other.

### ***3.2 Case Study: Congregations, Collaborators, and Social Service Provision***

To examine these claims and develop testable hypotheses, this study analyzes congregations and the collaborative ties they form to provide social services.

Congregations are an appropriate unit of analysis for several reasons. First, congregations are the most ubiquitous voluntary association in the U.S. and they exist in communities throughout the country. Second, congregations expend resources not only for their internal operations, but also for programs that serve the broader community. Over 80 percent of congregations in the U.S. offer at least one social service program and by conservative estimates this represents over 250,000 congregations.<sup>1</sup> Third, because the resource requirements associated with offering social services often exceed a congregation's capacity, many congregations participate in interorganizational collaborations to provide services (Chaves 2004; Cnaan and Boddie 2002). Among the congregations involved in social service provision, 68 percent collaborate with outside

---

<sup>1</sup> Estimates based on data from the National Congregations Study (Chaves and Anderson 2008) and Hadaway and Marler (2005).

organizations. Given congregations' ubiquity, resource scarcity, and propensity to form interorganizational ties, they represent an excellent sample for assessing the relationship between network ties and organizational action.

When compared with other voluntary associations whose primary function is not social service provision, congregations contribute more resources toward meeting social needs than any other voluntary association (Chaves 2004). Even though congregations as a collective make a substantial contribution, not all congregations contribute equally. Congregations vary substantially in the number of programs and types of social services they offer (Chaves and Tsitsos 2001; Cnaan and Boddie 2002; Unruh and Sider 2005; Wuthnow 2004). Most attempts to explain this variation focus on congregations' internal characteristics, and they ignore congregations' collaborative ties with external organizations. This study broadens the analytical frame by identifying congregations' interorganizational networks and assessing their association with congregations' social service provision patterns.

Congregations with more resources provide more social services, and a congregation's most important resource is its members (Chaves 2004; Roozen et al. 1984; Wineburg 2001). In addition to human resources, congregations with more financial resources offer more social services (Ammerman 2005). Congregations with meager budgets are severely limited in the social services they can provide because most of their resources go toward organizational survival (Ammerman and Farnsley 1997). Larger

congregations, on the other hand, tend to have greater economic stability and more resources available to support social services (Chaves 2004).<sup>2</sup>

Another internal factor influencing a congregation's social service activity is its leadership. Clergy play a pivotal role in directing and mobilizing congregational activity, and shifts in a congregation's focus often correspond with changes in its leadership (Warner 1988). In particular, innovative and entrepreneurial pastors can use their position to convince their members to embrace social activism (McRoberts 2003). Specifically regarding social services, the clergy's education level is positively associated with a congregation's involvement in social service provision (Chaves and Tsitsos 2001; Cnaan et al. 2004).

Beyond resources and leadership, congregations' theological orientation and religious tradition shape their social service activity. Conservative beliefs undermine social activism (Kanagy 1992; Stark and Glock 1965), which leads conservative congregations to be less involved in providing social services (Chaves and Tsitsos 2001; Wuthnow 2004). Also, because conservative congregations tend to be less connected with their surrounding communities, they are less likely to recognize and respond to community needs (Beyerlein and Hipp 2006; Chaves et al. 2002). Overall, theologically

---

<sup>2</sup> As a congregation gathers more resources it will not necessarily direct them toward providing social services, unless that is one of its stated goals (Ammerman 2005). Consequently, even though congregations with more resources tend to offer more services, the amount they offer is not necessarily proportional to their size.

conservative congregations tend to focus more on meeting people's spiritual needs rather than addressing their material needs. Along with theological orientation, social service provision patterns correspond with religious tradition. Mainline Protestant congregations offer more programs than Conservative Protestant and Catholic congregations, which tend to provide the same amount (Chaves and Tsitsos 2001; Wuthnow 1999).

Although research demonstrates a relationship between congregations' internal characteristics and their social service provision patterns, these factors do not explain all of the variation. Developing a fuller understanding requires expanding the frame of analysis to include the interorganizational ties congregations form to provide social services (Ammerman 2005; Campbell 2011; Fulton 2011; Roozen et al. 1984). Rather than being autonomous units driven solely by internal characteristics, congregations are social institutions embedded within a network of interdependent organizations (Granovetter 1985). In particular, when congregations engage in community outreach, they often develop connections with other organizations through ecumenical alliances, secular coalitions, and other institutional networks (Ammerman 2005; Campbell 2002; Schneider 2006; Wood 2002). Research on congregation-based social services reveals that most programs are conducted in collaboration with other organizations (Cnaan et al. 2004; McCarthy and Castelli 1998; Wuthnow 2000). Eighty-four percent of congregations offering social services have at least one collaborator and 72 percent of all programs are

done in collaboration with others (Chaves and Tsitsos 2001). Establishing collaborative ties has become an institutionalized part of congregations' involvement in social service provision, and as a result, many social services offered by congregations are embedded within and dependent on interorganizational networks.

Even though organizational collaborators play a substantial role in congregation-based social service provision, little is known about the relationships between a congregation's collaborator network and the volume and scope of its activity. Several studies find that most congregations participate in interorganizational collaborations to provide social services; however, these studies neglect to analyze whether and how collaborative ties influence a congregation's social service activity.<sup>3</sup> Although previous research indicates a significant relationship between a congregation's resources and the number of programs it offers, a congregation's collaborators is a resource that often gets overlooked. Congregations that collaborate with other organizations can gain access to new resource streams which can increase their capacity to provide social services. Because congregations vary in the number and types of collaborators they have, this variation can help explain the variation in congregations' social service activity. Applying social capital theory to congregations as organizational actors suggests that the extent and diversity of congregations' collaborator network will be associated with

---

<sup>3</sup> A handful of studies examine the effects of congregations collaborating specifically with the government to provide social services (Bartkowski and Regis 2003; Chaves and Wineburg 2010); however, these studies are limited in that they analyze only one type of congregational collaborator (Bielefeld and Cleveland 2013).

the number of programs they offer. Specifically, congregations with more extensive and diverse collaborator networks will offer more social services. This leads to the following two hypotheses:

*H1: Congregations with a greater number of collaborators will offer more social service programs.*

*H2: Congregations with a greater diversity of collaborators will offer more social service programs.*

The types of organizations a congregation collaborates with can also influence the types of services it offers. Several studies indicate that when congregations partner with other organizations to provide social services they often join a network of collaborators (Ammerman 2005; Chaves 2004; Cnaan and Boddie 2002). By joining these networks, congregations can become exposed to other community needs and opportunities to serve. Indeed, a congregation might initially establish a collaborative relationship to implement a particular program, but through the relationship the congregation might also adopt a priority of its collaborator and expand its menu of services. When Wuthnow (2004) discusses the relationship between congregations, their collaborators, and adopting new social service programs, he describes the congregation as “a node in a number of overlapping networks involving other organizations in the community,” and he notes that “ideas, talents, and resources flow back and forth through these channels of cooperation.” Wuthnow illustrates how collaborators can influence a congregation’s scope of service activity by describing how one

congregation's collaboration led to a prominent speaker visiting the church and persuading its members to be more concerned about the broader needs of the poor. In Lichterman's (2005) analysis of community service coalitions he provides several examples of how collaborator networks operate to influence congregations to expand their range of services. He describes instances where coalition members provide information on new programs and encourage other members to become involved.

Ammerman (2005) speculates that congregations are likely to emulate the patterns of social service provision practiced by their collaborators. Similarly, institutional theory predicts that as congregations become interconnected with other sectors they will begin to mimic their practices (Galaskiewicz and Wasserman 1989). Recent research has identified relationships between congregations collaborating with outside organizations and offering particular types of programs (Fulton 2011; Werber et al. 2012); however, no study has used a nationally representative sample of congregations to differentiate between collaborator types and assess their relationship with the menu of services congregations provide. This study argues that a congregation's structural position within a collaborator network will be associated with the types of services it offers. A congregation's structural position is based on the types of organizations it collaborates with, and according to network theory, congregations that occupy equivalent network positions will exhibit similar behavior. Specifically,

congregations that collaborate with similar types of organizations will offer similar types of services. This leads to the following hypothesis:

*H<sub>3</sub>: Congregations with a similar portfolio of collaborators will offer a similar menu of social services.*

### **3.3 Data and Methods**

To assess the relationship between a congregation's collaborator network and its social service provision patterns, this study uses cross-sectional and panel data from the National Congregations Study (NCS)—a nationally representative survey of religious congregations (Chaves and Anderson 2008). Wave 2 of the NCS, conducted in 2006-7, had a response rate of 78 percent and collected data on 1,506 congregations. In addition to the cross-section of congregations sampled for Wave 2, a panel component was added which surveyed a stratified random sample of congregations that participated in Wave 1 of the NCS. As a result, the NCS has a panel dataset which contains data on the 262 congregations that participated in both waves of the NCS.<sup>4</sup> Because this study focuses on congregations that provide social services, it restricts the sample to congregations that reported sponsoring at least one social service program.<sup>5</sup> The resulting cross-sectional

---

<sup>4</sup> The sampling procedure used by the NCS yields a probability-proportional-to-size sample which means that larger congregations are more likely than smaller congregations to be included in the sample. The data for this study has been weighted to undo the probability-proportional-to-size feature of the NCS sample.

<sup>5</sup> This study does not focus on identifying the determinants of *whether* a congregation provides social services; rather it focuses on congregations that provide social services and examines the relationship between a congregation's collaborator network and its social service provision patterns. Furthermore, if a congregation did not offer social services, the NCS did not ask it any of the collaborator questions. As a result, this study analyzes only those congregations that provide social services.



sample includes 1,348 congregations, 999 of which collaborate with at least one other organization to provide their program(s). The resulting panel sample includes 202 congregations, 175 of which collaborate with at least one other organization to provide their program(s).<sup>6</sup>

The first analysis uses the cross-sectional data to determine if the extent and diversity of a congregation's collaborator network is associated with the number of programs it offers. It constructs the dependent variables using the number of programs and types of social services a congregation offers. For congregations that sponsor social service programs, the NCS asked respondents to describe each of the programs in an open-ended manner. Interviewers did not limit the number of programs a respondent could mention, and for each program mentioned the interviewer probed for its purpose and recorded the verbatim responses. The NCS created a count variable to tabulate the total number of programs and coded the open-ended responses into 24 dichotomous variables each indicating whether the respondent mentioned that type of service.

Among congregations that offer programs, the median number of programs a congregation has is 2, the mean is 3, and the maximum is 14. Half of all congregations that provide social services participate in food distribution programs, one-third have programs for serving children, and one-quarter are involved in programs that address

---

<sup>6</sup> The panel sample includes every congregation that reported sponsoring at least one social service program at time 1 regardless of whether it sponsored any programs at time 2.

physical health needs or build/repair homes. Table 4 displays the descriptive statistics related to congregations' social service provision.

**Table 4: Descriptive Statistics of Congregation-Based Social Services**

Type of service	Percentage of congregations offering the service
Feeding the hungry	52%
Serving children or youth	33%
Addressing physical health needs	25%
Home building or repair	25%
Religious programs	23%
Distributing clothing or blankets	20%
Serving senior citizens	16%
Serving homeless people	15%
Non-religious education	14%
Disaster relief	13%
Addressing issues specific to men or women	13%
Serving people outside the United States	13%
Providing cash and items for housing needs	11%
Serving prisoners	6%
Serving victims of rape or domestic violence	5%
Cleaning highways or parks	5%
Volunteering	4%
Substance abuse programs	4%
Helping with crime prevention	2%
Helping people obtain jobs	2%
Addressing issues of race/ethnicity	2%
Serving immigrants, migrants, or refugees	2%
Serving college students or young adults	1%

*Source:* National Congregations Study, 2006-7 (Includes only the subset of congregations that offered at least one social service program; N=1,348)

The analysis constructs the independent variables using the number and types of organizations a congregation collaborates with to provide social services. For congregations

that sponsor social service programs, the NCS asked respondents if their programs are run in collaboration with other organizations, and if so, they were asked to name their collaborators. The NCS created a count variable to tabulate the total number of collaborators mentioned. Among congregations that offer programs, 32 percent have no collaborators. Among congregations that collaborate, the median number of collaborators a congregation has is 2, the mean is 2.2, and the maximum is 17. For each collaborator mentioned, the NCS coded the verbatim responses into one of eight categories to indicate the type of collaborator. The collaborator types include: the government, secular nonprofits, businesses, schools, congregations, denominations, and other kinds of secular and religious organizations. Two-thirds of all congregations that provide social services have at least one organizational collaborator, one-third collaborate with other congregations, and one-quarter collaborate with nonprofit organizations. To calculate the diversity of a congregation's portfolio of collaborators the analysis uses the Herfindahl index which takes into account both the number of collaborator types and the proportion of each collaborator type represented in the congregations collaborator network.<sup>7</sup> It generates a diversity score that ranges from 0 to 1, and the score can be interpreted as the probability that two randomly selected collaborators of a congregation will be of a different type. Based on this index, a congregation that collaborates with only one type of organization has a diversity score of 0.<sup>8</sup> As the number

---

<sup>7</sup> Diversity =  $1 - \sum_k \rho_k^2$  where  $k$  represents the collaborator type and  $\rho_k$  is the proportion of collaborators of type  $k$ . The diversity scores have been normalized to range from 0 to 1 by multiplying by  $k/(k-1)$  where  $k=8$ .

<sup>8</sup> Congregations with no collaborators were coded 0 for this variable.

of different collaborator types increases and as the proportion of each type becomes more evenly distributed, the congregation's collaborator diversity score approaches 1.

The analysis also incorporates measures of congregations' internal characteristics which include the congregation's size (the number of regularly participating adults).<sup>9</sup> A set of dummy variables distinguishes between congregations based on their religious tradition (Catholic, Mainline Protestant, Conservative Protestant, Black Protestant, and Non-Christian), and another set differentiates based on how the key informants describe their congregation's theological orientation (conservative, moderate, or liberal). Binary variables indicate whether the congregation has a clergy member who has graduated from seminary or theological school, whether the congregation has a staff member who spends at least 25 percent of his/her time overseeing its social service programs, and whether the congregation received government funding to help run its programs. The analysis also controls for the congregation's geographic location (southern versus non-southern) and community context (urban versus non-urban). Table 5 displays the descriptive statistics for social service providing congregations' and their collaborators.

---

<sup>9</sup> Due to the large number of missing values [370 (27%)] for the variables related to the congregation's financial data, the analysis does not include these variables. Since a congregation's size is an adequate proxy for its financial resources, the analysis controls for a congregation's access to internally-derived resources using the number of regularly participating adults. Among congregations that offer programs, the median size is 60, the mean size is 137, and the maximum size is 14,000.

**Table 5: Descriptive Statistics of Social Service Providing Congregations and Their Collaborators**

Variable	Mean/ Proportion	SD	Min	Max	N <sup>a</sup>
Number of social service programs	2.81	1.99	1	14	1,348
Has at least one collaborator	.68	.47	0	1	1,348
Number of collaborators	1.48	1.69	0	17	1,348
<i>Types of collaborators</i>					
Congregations	.33	.47	0	1	1,348
Denominations	.03	.18	0	1	1,348
Other (Religious)	.15	.36	0	1	1,348
Nonprofit organizations	.25	.43	0	1	1,348
Government	.10	.30	0	1	1,348
Schools	.04	.19	0	1	1,348
Businesses	.03	.18	0	1	1,348
Other (Secular)	.12	.32	0	1	1,348
Diversity of collaborator types	.15	.27	0	1	1,348
Size of congregation <sup>b</sup>	136.86	314.94	5	14,000	1,348
<i>Religious tradition and Theological orientation</i>					
Mainline Protestant	.20	.40	0	1	1,348
Roman Catholic	.06	.24	0	1	1,348
Conservative Protestant	.49	.50	0	1	1,348
Black Protestant	.22	.42	0	1	1,348
Non-Christian	.03	.16	0	1	1,348
Conservative	.62	.49	0	1	1,312
Moderate	.30	.46	0	1	1,312
Liberal	.08	.28	0	1	1,312
Clergy graduated	.64	.48	0	1	1,303
Has staff for social services	.14	.34	0	1	1,300
Received government funding	.05	.22	0	1	1,331
<i>Geographic region and Community context</i>					
Northeast	.13	.34	0	1	1,348
Midwest	.26	.44	0	1	1,348
South	.46	.50	0	1	1,348
West	.15	.36	0	1	1,348
Urban	.48	.50	0	1	1,348
Suburban	.21	.41	0	1	1,348
Rural	.31	.46	0	1	1,348

Source: National Congregations Study, 2006-7

<sup>a</sup> Includes only the subset of congregations that offered at least one social service program

<sup>b</sup> Based on the number of adult participants

The second analysis uses the panel data to control for unobserved heterogeneity and to provide evidence for the hypothesized causal direction. It uses a change score model to estimate the lagged effect of a congregation's collaborator network on its provision of social services, while controlling for the number of programs offered at time 1 (Allison 1990). Specifically, it assesses whether a change in the extent and/or diversity of a congregation's collaborator network is associated with a change in the number of programs it offers. The dependent variable for this analysis is the change in the number of programs a congregation offered between Wave 1 and Wave 2. The independent variables are the change in the number of collaborators between Wave 1 and Wave 2, and the change in the diversity of collaborator types. The analysis also includes the change in the congregation's size as well as changes in theological orientation, clergy's education level, having staff for social services, and receiving government funding. The possible change score values for the dichotomous variables are 1, -1, and 0. For example, for the variable *Δ with conservative theological orientation*, congregations that changed from being theologically liberal or moderate at time 1 to being theologically conservative at time 2 are coded as 1, congregations that changed from being theologically conservative to being theologically liberal or moderate are coded as -1, and congregations that did not change their theological orientation are coded as 0. The time-invariant control variables, which include the congregation's religious tradition,

geographic location, and community context, are not included in the models.<sup>10</sup> Table 6 displays the descriptive statistics for the change scores of the panel data.

**Table 6: Descriptive Statistics of Panel Data—Change Scores (Wave 2 – Wave 1) of Time-Varying Variables**

Variable	Mean/ Proportion	SD	Min	Max	N <sup>a</sup>
Δ in number of social service programs	-.83	2.42	-11	10	202
Δ in number of collaborators	-.76	2.76	-10	8	202
Δ in diversity of collaborator types	-.08	.45	-.91	.89	202
Δ in size of congregation <sup>b</sup>	40.07	322.15	-6,300	5,700	202
Δ with conservative theological orientation	.04	.43	-1	1	192
Δ with having clergy graduated	.10	.52	-1	1	187
Δ with having staff for social services	.01	.35	-1	1	183
Δ with receiving government funding	.04	.20	-1	1	192

*Source:* National Congregations Study panel data from Wave 1 (1998) and Wave 2 (2006-7)

<sup>a</sup> Includes only the subset of congregations that offered at least one social service program in 1998

<sup>b</sup> Based on the number of adult participants

The third analysis uses the cross-sectional data to determine if congregations with a similar portfolio of collaborators offer a similar menu of services. It performs a network analysis to examine congregations' collaborator networks and assess whether a congregation's structural position within the collaborator network is associated with the types of services it offers. Unlike traditional research methods that analyze attributes of individual actors, this approach analyzes similarities among actors to identify those that occupy equivalent network positions (Knoke and Kuklinski 1982; Wasserman and Faust

<sup>10</sup> This analysis assumes that the time-invariant controls have identical effects at both time points and thus can be omitted from the equation without biasing the estimates (Allison 1990).

2008). To accomplish this, the analysis transforms the attribute dataset into a relational dataset representing 743,590 congregational dyads, and for each variable it constructs a matrix comprised of similarity scores for each congregational dyad. The similarity measure for the types of social services provided – *similar social services* – is Pearson’s product-moment correlation for each congregational dyad between the 23 dichotomous variables indicating whether a congregation offers a particular type of service.<sup>11</sup> The values for this measure range between -.59 and 1.000 where dyads with high correlation values offer a similar menu of services. The similarity measure for congregations’ collaborators – *common collaborator types* – is Pearson’s product-moment correlation for each congregational dyad between the 8 dichotomous variables indicating whether the congregation partners with a particular type of collaborator. The values for this measure range between -1 and 1 where dyads with high correlation values have a similar set of collaborator types with which they partner. The control variables for this analysis include: *similar congregation size, same religious tradition, similar theological orientation, clergy graduated, has staff for social services, received government funding, geographic proximity, and equivalent community context.*

To assess the relationship between the extent and diversity of a congregation’s collaborator network and the number of programs it offers, the first analysis uses the

---

<sup>11</sup> For services that did not fit into any of the 23 categories, the NCS placed them in a 24<sup>th</sup> category called “Other.” Because this portion of the analysis focuses on the similarity of services offered, this category was omitted.



cross-sectional data and performs a series of zero-truncated Poisson regressions.<sup>12</sup> Model 1 regresses the dependent variable on all of the control variables. Model 2 includes the dichotomous variable indicating whether a congregation has any collaborators. Model 3 includes the count variable representing the number of collaborators a congregation has. Model 4 includes the continuous variable indicating the diversity of the congregation's collaborator network. Model 5 includes both variables representing the number and diversity of collaborators a congregation has.

Although the cross-sectional models can identify contemporaneous associations, they cannot account for causal order. The second analysis uses the panel data to assess the hypothesized direction of the relationship. Panel analyses can be used to provide evidence of causality by demonstrating a relationship between  $X_{t-1}$  and  $Y_t$  while controlling for  $Y_{t-1}$  (Finkel 1995). When only two waves of data are available, scholars typically propose one of two statistical methods to control for  $Y$  at time 1 — the lagged dependent variable method and the change score method (Allison 1990; Johnson 2005). The primary advantage of the change score method is that it controls for the effects of all time-invariant variables—whether or not they were measured. As a result, change score models provide unbiased estimates that are not contaminated with the confounding effects of any enduring unmeasured variables, and the estimates can be interpreted as

---

<sup>12</sup> Because every congregation in the sample offers at least one social service program, the zero-truncated Poisson regression is more appropriate to use than the standard Poisson regression because it is designed to model count data for which the value zero cannot occur.

those above and beyond any fixed effects (Liker et al. 1985).<sup>13</sup> Following the recommendations of Allison (1990) and Firebaugh and Beck (1994), this analysis uses the full-difference model, where the change in the number of programs between Wave 1 and Wave 2 is regressed on the concurrent change in the number of collaborators and the change in the diversity of collaborators types. The models are estimated using ordinary least squares regression and they control for changes in the time-varying independent variables.

For the third analysis, several methods could be used to model the relationship between a congregation's collaborator types and the menu of services it offers; yet, many of these attribute-based methods face limitations because the dependent variable is a non-exclusive multinomial variable (i.e., a categorical variable in which multiple categories can be selected) (Agresti and Liu 2001). Conducting a multinomial logistic regression, which requires exclusivity, is infeasible because constructing a categorical variable with exclusive categories using the 23 different services results in over thirty million categories. An alternative method uses a marginal logit model which functionally involves conducting a separate logistic regression for each service type. However, this method does not account for the interdependence among service types

---

<sup>13</sup> Furthermore, when using two-wave panel data in which X is measured contemporaneously with Y at both time points, it is not appropriate to use the lagged dependent variable method because it assumes a temporal ordering from Y<sub>1</sub> to X<sub>1</sub> to Y<sub>2</sub> (Allison 1990). Also, because the lagged dependent variable method includes Y<sub>1</sub> as an independent variable in the, the presence of measurement error in Y can lead to biased estimates. The change score method avoids this problem because Y<sub>1</sub> is not included as an independent variable (Johnson 2005).

(Bilder and Loughin 2007). Another option is a Poisson multinomial logistic regression which involves a two-step process that begins by identifying the number of services a congregation offers ( $n$ ) and then computes the probability of offering a particular combination of services given  $n$  (Gilbert and Modena 2007). Although this is the optimal model using attribute data, the similarity estimates are constrained by the number of services a congregation offers.

Given the limitations of these analytical methods, using a network-based, two mode analysis provides the most appropriate and best fitting model for assessing the relationship between a congregation's collaborator types and the menu of services it offers. Because the 743,590 congregational dyads were constructed through the multiple relations among only 1,220 congregations, the cases are not independent. This dependency of observations, which is characteristics of relational data, produces potential autocorrelation problems that can cause p-values to be overestimated when testing hypotheses. To avoid autocorrelation problems, the analysis uses Quadratic Assignment Procedure (QAP) correlation and regression methods that assume neither independence of observations nor random sampling of cases from a population (Krackhardt 1987; 1988). The analysis assesses the bivariate relationships between congregations offering a similar menu of services and each of the independent variables, and the subsequent multivariate analyses perform linear regressions of social service provision patterns (see appendix A for an extended discussion of QAP analysis).

### 3.4 Results

The zero-truncated Poisson regressions in Table 7 show the relationships between the independent variables and the number of programs a congregation offers. Model 1 indicates that a congregation's size, clergy education, having staff for social services, and receiving government funding are associated with having more programs, while a congregation's geographic location and community context has no significant relationship with the number of programs it offers. Apart from Black Protestant congregations having fewer programs than Mainline Protestant congregations, neither religious tradition nor theological orientation is significantly associated with the number of programs a congregation offers. Although previous research indicates that religious tradition and theological orientation are associated with *whether* a congregation provides services, this analysis demonstrates that these characteristics are not related to *how many* programs a service-providing congregation offers. The lack of explanatory power offered by religious tradition and theological orientation reveals an even wider gap in our understanding of the sources of variation in social service activity among service-providing congregations.

In an attempt to fill this gap, the subsequent models analyze the relationship between a congregation's collaborator network and the number of programs it offers. Although previous studies provide evidence that a congregation's internal characteristics determine both who it collaborates with and how many programs it

provides (Ammerman 2005; Chaves and Tsitsos 2001), the following models demonstrate a significant relationship between a congregation's collaborator network and the number of programs it offers even when controlling for its internal characteristics. Model 2 indicates that having at least one collaborator is associated with having 33 percent more programs. This outcome is roughly equivalent to having a staff member dedicated to providing social services. Model 3 indicates that an increase in the number of collaborators is associated with having more programs. Each additional collaborator is associated with having 18 percent more programs. Meanwhile, in this model clergy education, being Black Protestant, and receiving government funding become insignificant. Model 4 indicates that an increase in the diversity of collaborator types is associated with having significantly more programs. Model 5 indicates that the number and diversity of collaborators remain significant even when included in the same model. In the models that account for the number of collaborators, receiving government funding becomes insignificant. This indicates that although government funding can provide resources to help congregations have more programs, the stronger predictor is the size of a congregation's collaborator network. Consistent with social capital theory, the analysis suggests that congregations with a greater number and variety of collaborators, have access to more resources, and thus, can offer more programs.

**Table 7: Zero-truncated Poisson Regressions on the Number of Programs a Congregation Offers [anti-logs displayed]**

	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>	<i>Model 5</i>
Size of congregation <sup>a</sup>	1.172** (.059)	1.162** (.058)	1.124** (.050)	1.151** (.053)	1.124** (.056)
<i>Religious tradition<sup>b</sup></i>					
Roman Catholic	.694 (.148)	.716 (.150)	.786 (.104)	.796 (.147)	.804 (.106)
Conservative Protestant	.870 (.087)	.909 (.089)	1.024 (.086)	.967 (.088)	1.033 (.086)
Black Protestant	.644** (.084)	.685** (.092)	.871 (.113)	.800 (.102)	.890 (.094)
Non-Christian	.919 (.152)	0.893 (.147)	.987 (.145)	1.009 (.139)	1.003 (.138)
Theologically conservative <sup>c</sup>	.994 (.075)	1.018 (.076)	1.054 (.070)	1.015 (.072)	1.051 (.070)
Clergy graduated	1.277* (.132)	1.237* (.129)	1.169 (.113)	1.205 (.118)	1.163 (.112)
Has staff for social services	1.335* (.163)	1.370* (.167)	1.357* (.163)	1.380** (.162)	1.365** (.162)
Received government funding	1.534* (.260)	1.491* (.246)	1.268 (.156)	1.423* (.210)	1.267 (.158)
South	.904 (.067)	.889 (.065)	.840** (.056)	.869* (.060)	.841** (.056)
Urban	1.012 (.083)	1.037 (.084)	1.043 (.076)	.999 (.078)	1.037 (.076)
Has at least one collaborator		1.334** (.137)			
Number of collaborators			1.178*** (.016)		1.157*** (.017)
Diversity of collaborator types				2.71*** (.304)	1.300* (.152)
Constant	1.247	1.013	.999	1.052	.978
Log pseudo likelihood	-1803.800	-1788.209	-1672.494	-1729.931	-1669.415

\*p < .05, \*\*p < .01, \*\*\*p < .001; Number of congregations = 1,220

Robust standard errors in parentheses

<sup>a</sup>Based on the number of adult participants (logged)

<sup>b</sup>Reference group Mainline Protestant

<sup>c</sup>Reference group Theologically liberal/moderate

Turning to the panel analysis, the change score models in Table 8 show the standardized estimates for the relationships between the change in the number and diversity of collaborators between Wave 1 and Wave 2 and the concurrent change in the number of programs. Model 1 regresses the dependent variable on the time-varying control variables, and it indicates that a change in the congregation's size is the only variable significantly associated with a change in the number of programs. This suggests that the effects of clergy education, having staff for social services, and receiving government funding observed in the cross-sectional models might be spurious (i.e., they reflect correlations with some unobserved time-invariant variables that affect the number of programs a congregation offers). Models 2 and 3 include the variables representing the change in the number of collaborators and the change in the diversity of collaborator types respectively, and both indicate a positive relationship above and beyond the controls and any fixed effects.<sup>14</sup> Compared to the change in congregation size, the magnitude of the standardized effect associated with a change in number of collaborators is four times greater and the change in the diversity of collaborator types is nearly three times greater. Summarizing the first two analyses, the cross-sectional analysis demonstrates a relationship between the extent and diversity of a

---

<sup>14</sup> To assess the robustness of the results, semi-difference models and models that include the number of programs offered at time 1 as an independent variable were tested. These models, compared with the change score models, yielded no significant differences in estimating the relationship between a congregation's collaborator network and the number of programs it offers.

congregation's collaborator network and the number of programs it offers, and the change score analysis, which controls for the number of programs at time 1, provides evidence for the hypothesized causal direction of this relationship.

**Table 8: Standardized Coefficients from OLS Regression Models Estimating the Change in the Number of Programs a Congregation Offers between Wave 1 and Wave 2**

	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>
$\Delta$ in size of congregation <sup>a</sup>	.385*** (.373)	.171** (.284)	.260*** (.295)
$\Delta$ with conservative theological orientation	.125 (.583)	.061 (.402)	.097 (.468)
$\Delta$ with having clergy graduated	.053 (.368)	.000 (.368)	.016 (.476)
$\Delta$ with having staff for social services	.008 (.470)	.018 (.431)	-.004 (.464)
$\Delta$ with receiving government funding	-.026 (.530)	-.056 (.678)	-.059 (.826)
$\Delta$ in number of collaborators		.679*** (.067)	
$\Delta$ in diversity of collaborator types			.467*** (.304)
R <sup>2</sup>	.184	.588	.381

\*p < .05, \*\*p < .01, \*\*\*p < .001; Number of congregations = 158;

Robust standard errors in parentheses

<sup>a</sup>Based on the number of adult participants (logged)

The third analysis uses the cross-sectional data to examine the relationship between a congregation's portfolio of collaborators and the menu of services it offers. Table 9 displays the descriptive statistics for the dependent variable and each of the independent variables constructed for the network analysis. Also displayed are the QAP matrix correlation results of the observed correlation between congregations offering



similar social services and each independent variable.<sup>15</sup> The results indicate a significant correlation between congregations' collaborator networks and the menu of services they offer.

---

<sup>15</sup> The test of parameter significance is based on 2,000 permutations. When the observed value of the coefficient is positive, its statistical significance is based on the proportion as large and when the coefficient is negative, it is based on the proportion as small. Although not displayed, the function also generates the average correlation value derived from the random permutations. As expected, the average value consistently approaches zero.

**Table 9: Descriptive Statistics and QAP Matrix Correlation between Similar Social Services and Each of the Independent Variables**

<i>Variable</i>	<i>Type</i>	<i>Description</i>	<i>Min</i>	<i>Max</i>	<i>Mean</i>	<i>Pearson correlation coefficient</i>
Similar social services	Continuous	The correlation between congregation <i>i</i> and <i>j</i> 's social services	-.59	1.00	.16	—
Common collaborator types	Continuous	The correlation between congregation <i>i</i> and <i>j</i> 's collaborator types	-1.00	1.00	.14	.03***
Similar congregation size <sup>a</sup>	Continuous	The more similar the size of congregation <i>i</i> and <i>j</i> , the higher the value	0.00	7.60	6.05	.05***
Same religious tradition	Binary	1 if congregation <i>i</i> and <i>j</i> are from the same religious tradition; otherwise 0	0.00	1.00	.27	.02***
Similar theological orientation	Continuous	The more similar the theological orientation of congregation <i>i</i> and <i>j</i> , the higher the value	0.00	2.00	1.33	-.01
Clergy graduated	Binary	1 if the clergy of congregation <i>i</i> and <i>j</i> have advanced degrees; otherwise 0	0.00	1.00	.71	.06***
Has staff for social services	Binary	1 if congregation <i>i</i> and <i>j</i> have staff assigned to help with social service programs; otherwise 0	0.00	1.00	.04	.01
Received government funding	Binary	1 if congregation <i>i</i> and <i>j</i> received government funding; otherwise 0	0.00	1.00	.00	.01*
Geographic proximity	Binary	1 if congregation <i>i</i> and <i>j</i> are located in the same region of the country; otherwise 0	0.00	1.00	.28	.00
Equivalent community context	Binary	1 if congregation <i>i</i> and <i>j</i> are located in the same type of community context; otherwise 0	0.00	1.00	.52	.01

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ ;  $N = 743,590$  dyads among 1,220 congregations; Number of random permutations = 2,000

<sup>a</sup> Based on the number of adult participants (logged)

Table 10 provides the standardized coefficients from the QAP regression analysis that estimates the relationship between congregations having common collaborator types and offering similar social services while controlling for other shared affiliations and characteristics (see appendix A for an explanation of how to interpret the  $R^2$  values). Standardizing the values of the coefficients enables a straightforward comparison of the average association between each shared affiliation or characteristic and congregations' social service provision patterns. A positive coefficient corresponds with similarity while a negative coefficient corresponds with dissimilarity, and the p-value assesses the likelihood of this correspondence occurring by chance. Model 1 regresses the measure of similar social services on each of the control variables, and the results indicate that being similar in size, sharing the same religious tradition, having clergy with similar educational experience, and receiving government funding are all associated with offering similar types of services. This demonstrates, for example, that Catholic congregations offer a menu of services that differ significantly from the menu of services offered by other religious traditions. It also demonstrates that the types of services congregations offer differ depending on whether they receive government funding. On the other hand, the analysis finds no relationship between congregations that have a staff person dedicated to providing social services and offering similar types of services. Nor are congregations located in similar community context or region of the country likely to provide similar types of services.

Model 2 includes the measure of common collaborator types and the results indicate a significant relationship between congregations having similar collaborator networks and offering a similar menu of services.<sup>16</sup> The magnitude of the relationship is greater than those associated with a congregation's religious tradition, theological orientation, staffing allocation, and funding sources. This demonstrates, for example, that congregations that have only faith-based collaborators will offer a similar menu of services or that congregations that have schools among their portfolio of collaborators will offer a similar set of services. Identifying specific portfolios of collaborators and the specific menu of services associated with them could be accomplished through a complex cluster analysis; however, this is beyond the scope of this study. The primary purpose of this analysis is to demonstrate that a congregation's structural position within a collaborator network is significantly associated with the types of services it offers. One possible counterargument is that the relationship between services and collaborators is unidirectional because certain types of services require specific types of collaborators. This analysis, however, provides evidence of causality occurring in the opposite direction. It indicates that a congregation's portfolio of collaborators is associated with the congregation's entire menu of services not just those that are offered in collaboration with other organizations. This suggests that while a congregation's

---

<sup>16</sup> This finding addresses a counterargument that a congregation's internal characteristics determine both its collaborator network and the menu of services it provides.

programming priorities can influence who it collaborates with, the congregation's collaborator network can also influence the types of services it offers.

**Table 10: QAP Regression of Similar Social Services on Common Collaborator Types and Measures of Shared Characteristics**

	<i>Model 1</i>	<i>Model 2</i>
Similar congregation size <sup>a</sup>	.046*** (.000)	.046*** (.000)
Same religious tradition	.011* (.012)	.011* (.021)
Similar theological orientation	-.007 (.199)	-.007 (.188)
Clergy graduated	.051*** (.000)	.051*** (.001)
Has staff for social services	.010 (.124)	.010 (.122)
Received government funding	.008* (.042)	.008* (.045)
Geographic proximity	-.002 (.365)	-.002 (.368)
Equivalent community context	.001 (.446)	.001 (.453)
Common collaborator types		.028*** (.000)
<i>R</i> <sup>2</sup>	.006***	.007***

\**p* < .05, \*\**p* < .01, \*\*\**p* < .001; Standardized regression coefficients

N = 743,590 dyads among 1,220 congregations

Number of random permutations = 2,000

QAP proportions in parentheses

<sup>a</sup> Based on the number of adult participants (logged)

### ***3.5 Discussion and Conclusion***

Most congregations are involved in providing social services; however, they vary substantially in the number of programs and types of services they offer. While most studies attempt to explain this variation by focusing on congregations' internal characteristics, this study exposes the limitations of this approach and broadens the analytical frame by analyzing congregations' collaborator networks. Although previous studies document the types of organizations congregations collaborate with to provide social services, they neglect to analyze how these collaborators might influence the volume and scope of a congregation's social service activity. By integrating social capital theory and network analysis, this study demonstrates that the extent and diversity of a congregation's collaborator network are positively associated with the number of programs it offers, and it demonstrates a significant relationship between a congregation's portfolio of collaborators and the menu of services it offers.

The variables most consistently associated with the number of programs a congregation offers are those related to its resources. A congregation's size, having staff for social services, and receiving government funding are all indicators of its resources and they are all positively associated with having more programs. Similarly, a congregation's collaborator network is another measure of its resources. Congregations often lack sufficient internal resources to run social service programs on their own, and as a way to acquire additional resources many collaborate with other organizations. Collaborators not only

provide resources for the initial program, they have the potential to provide resources for additional programs. This is consistent with social capital theory which predicts that the more collaborators a congregation has, the more access to resources it has to support additional programs. Likewise, a congregation with a diverse collaborator network has access to a greater variety of resources, which can enable it to offer more programs.

While the number of programs a congregation offers is related to the amount of resources it has, the types of services a congregation offers is related to its external ties. Being affiliated with the same religious tradition, having clergy with ties to institutions of higher education, and having the government as a funding source each corresponds with offering a similar menu of services. Furthermore, congregations with ties to similar organizational collaborators offer similar services. Although a congregation might initially select collaborators that will help it accomplish its programming objectives, these collaborators can expose the congregation to other community needs and encourage it to expand its range of services. The studies by Wuthnow (2004) and Lichterman (2005) mentioned above provide examples of collaborators influencing congregations to adopt new programs; however, research that examines the underlying processes associated with a congregation's collaborator network and the types of services it offers remains limited.

Given the limited data, the following examples represent three plausible scenarios of how this process could occur. A congregation wants to start a tutoring program, so it decides to collaborate with a local school. As the members of the

congregation interact with school officials, they learn that many of the students lack sufficient nutrition, and as a result, the congregation decides to set up a food distribution program. Another congregation wants to help people in their community who are unemployed so they collaborate with a local nonprofit organization to start a job training program. The nonprofit organization also has a prison education program that helps prisoners earn their GED, and eventually the nonprofit asks the congregation to participate in this program as well. A third congregation decides to collaborate only with its denomination in providing social services. Consequently, the services it provides reflect the priorities of its denomination. In each scenario, the collaborating organization exposes the congregation to particular needs and influences it to adopt a new program that reflects its priorities.

It is also common for community organizations to initiate partnerships with congregations to help carry out their programs (Cnaan and Boddie 2002). For example, public health agencies often collaborate with congregations to implement community-based health initiatives (Chatters et al. 1998). In other scenarios, organizations like Alcoholics Anonymous and the Red Cross will ask congregations to collaborate with them by providing meeting space and volunteers (Ammerman 2005). In instances when an organization recruits a local congregation to co-sponsor a program, the collaborating organization directly influences the congregation's involvement in providing a particular type of service.



Clearly there are multiple pathways by which a congregation arrives at starting a new program and there are several factors that influence the congregation along the way. According to Wuthnow (2004), the question remains unanswered as to how congregations decide to sponsor particular service programs. Furthermore, he asserts that this process cannot be understood by only analyzing congregations' internal characteristics. The primary empirical contribution of this study is to establish that a congregation's collaborator network, above and beyond its internal characteristics, is significantly associated with the number of programs and types of services it offers. The panel analysis provides evidence for the hypothesized causal direction; however, analyses using only two waves of data are limited in their capacity to determine causality (Finkel 1995). Developing a better understanding of the causal processes underlying the relationship between a congregation's collaborator network and the services it provides will require three waves of data along with extended qualitative case studies.

This study has implications for the broader field of organizational studies. Most organizations are embedded within a network of interrelated institutions that can influence their activity. Analyses that focus exclusively on organizations' internal characteristics, without giving attention to the networks in which they are embedded, fail to account for the relationship between network ties and organizational action. Expanding the analytical frame to include interorganizational collaborations reveals an association between organizations' network resources and their capacity for action, and an association between organizations' structural position within a collaborator network and their scope of action.

Research on organizations lacks comprehensive theoretical and empirical explanations of how social capital formed through interorganizational ties can enable and constrain action (Knoke 2009). This study offers a more comprehensive model for explaining organizational action, by integrating social capital theory and network analysis to examine both the content and structure of interorganizational networks. The social capital and social networks literatures are complementary and combining them can yield richer theory, improve model specification, and produce better predictions (Baker and Faulkner 2009; Walker et al. 1997). Social capital theory provides a conceptual framework for analyzing the content of a network and network analysis provides methods for describing the network's structure and generating valid measures of social capital. Together, they can be used to better explain the relationships between interorganizational networks and organizational activity. Scholars can measure the extent and diversity of an organization's network to estimate the quantity and variety of resources available to the organization and their association with its capacity for action. They can also analyze the structural position of organizations within collaborator networks to identify commonalities among otherwise dissimilar organizations and to predict an organization's behavior by observing the behavior of organizations in different networks that occupy equivalent positions. By specifying both the content and structure of interorganizational networks, scholars can better understand the processes by which an organization's network ties can influence its capacity for action and scope of action.

## **4. Black Churches and HIV/AIDS: Factors Influencing Congregations' Responsiveness to Social Issues**

Historically, black churches have served as institutional hubs within their communities. During the 20<sup>th</sup> century, sociologists consistently demonstrated the central role black churches played in addressing the challenges facing African Americans (DuBois 1903; Mays and Nicholson 1933; Thompson 1974). These findings led Lincoln (1974) to conclude that black churches have been at the forefront of virtually every movement for social change within black communities. However, as early as the 1960s, scholars began questioning the contemporary role of black churches (Frazier 1964; Lewis 2008; Mukenge 1983; Wilmore 1998). They argue that black churches' ambivalent response to current social issues (e.g., domestic violence, substance abuse, high unemployment) has undermined their status as the hub of social support for African Americans. On the other hand, many scholars argue that the factors which made black churches institutional hubs still operate and serve to maintain black churches' central role within their communities (Billingsley 1999; Chaves and Higgins 1992; Laudarji and Livezey 2000; Lincoln and Mamiya 1990). They claim that black churches continue to be important institutions that confront African American issues by providing social services and advocating structural reform.

This study engages the debate about the institutional centrality of black churches by focusing on their response to HIV/AIDS. This crisis serves as a helpful indicator of

black churches' responsiveness to current social problems because the stigma associated with HIV/AIDS makes it an especially controversial issue for many churches (Douglas 1999; Lindley et al. 2010). Deciding how to respond becomes complex because the predominant modes of infection often violate church teachings. Additionally, HIV/AIDS remains a growing problem within black communities. Despite a decline in the overall HIV incidence rate, the rate for African Americans continues to rise. Although African Americans represent only 12 percent of the U.S. population, they now account for over 50 percent of new HIV cases, and currently over 500,000 African Americans are living with HIV (Center for Disease Control 2009).

Given the spread of HIV/AIDS within black communities coupled with the historical role of black churches in confronting social issues, it is particularly important to understand the factors influencing church responsiveness to this public health crisis. Using data from a nationally representative sample of black congregations, this study examines whether a congregation's ideological orientation and external engagement are associated with its likelihood of sponsoring an HIV/AIDS program. More broadly, it provides insight into the diversity among black churches, their changing roles within their communities, and the factors influencing their responsiveness to social issues.

#### ***4.1 Ideological Orientation and External Engagement***

A common view within the sociology of religion has been that a congregation's liberal-conservative ideological orientation strongly influences its priorities. The

perception among sociologists and the general public is that conservative congregations tend to emphasize moral chastity over social advocacy, and this becomes particularly salient when assessing a congregation's social service activity. Researchers consistently find that conservative beliefs undermine social activism (Hoge et al. 1978; Kanagy 1992; Will and Cochran 1995), and that conservative congregations are less involved in providing social services (Ammerman 2005; Chaves and Tsitsos 2001; Wuthnow 2004). Evidence also suggests that the controversial moral issues often associated with becoming HIV-positive may further undermine church responsiveness to this particular issue (Leong 2006). Thomas and his colleagues (1994:578) find that "many churches struggle with moral issues related to the sexual and drug behaviors at the root of health problems such as HIV/AIDS." Even though Douglas (1999) observes many black churches becoming generally more tolerant toward people living with HIV/AIDS, she notes that some of these churches remain conflicted about the controversial aspects of the disease.

As the negative relationship between conservatism and social activism has become evident, several scholars have attempted to explain this relationship. Wilson and Janoski (1995) attribute the lack of social engagement among conservative congregations to their "other-worldly" focus suggesting that it causes them to be less concerned with "this-worldly" issues (see also Johnson 1967; Roozen et al. 1984). Hollinger (1983) argues that conservative congregations espouse an individualist orientation and view personal

transformation as the key to changing society. Because they believe that an aggregation of individual conversions will lead to broad-scale social transformation, they emphasize personal salvation over structural reform (see also Bartkowski 2004; Smith and Emerson 1998).

While many scholars focus on a congregation's liberal-conservative orientation to explain its responsiveness to social issues, some scholars suggest that it may be a poor indicator when analyzing black churches. Pattillo-McCoy's (1998) ethnography of a black neighborhood in Chicago analyzes the role of churches in facilitating community activism. She finds that a congregation's liberal-conservative orientation does not influence its level of community involvement. McRoberts (1999:52) analyzes conservative, black Pentecostal churches in Boston and he observes some becoming more socially active despite maintaining "a biblical literalist, morally strict, conversionist faith." This research suggests that ideological orientation may operate differently in black churches. Consequently, this study assesses the influence of liberal-conservative ideological orientation on the likelihood of black churches having an HIV/AIDS program by testing the following hypothesis:

*H<sub>1</sub>: Conservative black congregations will be less likely to have an HIV/AIDS program.*

Organization theory offers another framework for explaining congregations' responsiveness to social issues. According to institutionalism, organizations are not isolated, autonomous units driven solely by internal characteristics. Instead, they are

open systems which are embedded within a network of interrelated institutions that can influence their activity (Scott and Davis 2007). Institutional theory proposes that the external environment establishes standards of legitimacy and pressures organizations to adopt its interests (DiMaggio and Powell 1983). The amount of pressure an organization faces depends on the degree of interdependence between the organization and its environment (DiMaggio and Powell 1991).

Because congregations are organizations embedded within a social environment, they also are susceptible to environmental pressure. Likewise, the pressure they experience will vary since congregations vary in their engagement with the external world (Roozen et al. 1984). Some congregations are insular—they view the world as corrupt and avoid interacting with it. By minimizing their attachments to the world, these congregations reduce the influence of external demands. Other congregations are externally engaged—they value interacting with the world and choose to cultivate external ties. By establishing interdependent relationships with their environment, these congregations face greater pressure to adopt its priorities. Among black churches, McRoberts (2003) observes that externally focused congregations are more aware of community needs, and he suggests that environmental pressure contributes to their increased social service activity. Similarly, Billingsley (1999) finds that some black churches are choosing to be more outward oriented, and, as a result, they are becoming more responsive to social concerns. Consequently, since HIV/AIDS among African

Americans has become a high priority issue, and since HIV/AIDS programs have become an institutionalized social service (Eke et al. 2010), institutional theory suggests that black churches that interact with their surrounding environment will be more responsiveness to this issue and more likely to sponsor a program. This leads to the following hypothesis:

*H<sub>2</sub>: Externally engaged black congregations will be more likely to have an HIV/AIDS program.*

## **4.2 Data and Methods**

To assess the influence of ideological orientation and external engagement on program sponsorship among black churches, this analysis uses data from Wave II of the National Congregations Study (NCS). Conducted in 2006-7, this nationally representative survey of religious congregations had a response rate of 78 percent and collected data from key informants on 1,506 congregations (Chaves and Anderson 2008). Because this study focuses on black churches, it restricts the sample to congregations that report having a member base greater than 60 percent African American.<sup>1</sup> The resulting sample includes 203 congregations representing approximately 100,000 regularly attending adults.

---

<sup>1</sup> Using a percentage threshold to define a congregation as “black” is consistent with previous research (see Barnes 2005; Cavendish 2000; Chaves and Higgins 1992; Dudley and Roozen 2001). Additional analyses which shift the percentage threshold for qualifying as a black congregation do not generate significantly different outcomes.



This study analyzes the data from the perspective of church attenders because of its focus on congregation-based social services (Chaves 2004).<sup>2</sup> When researchers want to know the social impact of congregational activity, it is more meaningful to analyze the number of churchgoers exposed to an activity rather than the number of churches sponsoring the activity (Wuthnow 2004). For example, a social service program in a large congregation affects many more people than the same program in a small congregation. In particular, while only 4 percent of black congregations have an HIV/AIDS program, 19 percent of people who attend a black congregation attend one that has an HIV/AIDS program. The reason for this substantial difference is twofold—larger congregations are more likely to have a program and they account for a much larger share of the churchgoing public than smaller congregations. Because this study concerns the role of black churches in responding to HIV/AIDS, analyzing the data from the attendee level provides qualitatively more meaningful results. However, analyzing the data from the congregation level produces results with similar patterns of significance and non-significance among the key independent variables.

---

<sup>2</sup> The NCS constructed two types of weights that enable users to analyze the data from either the congregation level or attendee level. Deciding which level to analyze depends on the focus of the study. The congregation level is more appropriate for studies that assess trends among congregations (e.g., Do congregations located in urban areas tend to be more liberal?). This type of research benefits from using weights that treat each congregation as one unit regardless of its size. On the other hand, the attendee level is more appropriate for studies concerned with the social impact of congregational activity. This type of research benefits from using weights that treat congregations in proportion to their size.

The dependent variable for this analysis—*HIV/AIDS Program*—is a dichotomous measure drawn from the NCS question, “Does your congregation currently have any program or activity specifically intended to serve persons with HIV or AIDS?”—“yes” responses are coded 1 and “no” responses 0.<sup>3</sup> Table 11 displays the descriptive statistics for the dependent variable as well as all of the relevant independent variables.<sup>4</sup>

Researchers face several challenges when attempting to measure a congregation’s ideological orientation. Given the multidimensional nature of ideological orientation, five dummy variables are constructed to operationalize the congregation’s liberal-conservative ideology. *Theologically Conservative* is constructed from the question, “Theologically speaking, would your congregation be considered more on the conservative side, more on the liberal side, or right in the middle?” The variable is coded 1 for congregations that report being “more on the conservative side” and 0 for congregations that report being “more on the liberal side” or “right in the middle.” *Politically Conservative* is constructed from an identical question related to the congregation’s political orientation (coded 1 for congregations that report being

---

<sup>3</sup> An anonymous reviewer noted a critical limitation of this question. Because of its wording, it can only identify whether congregations have an HIV/AIDS *treatment* program; it cannot identify whether congregations have an HIV *prevention* program. Because treatment programs (e.g., support groups, food distribution, hospice care) can be less controversial than prevention programs (e.g., safe-sex education, condom distribution, needle exchange), this may dampen the effect of liberal-conservative ideological orientation on program sponsorship (Cunningham et al. 2009; Hernández et al. 2007; Weatherford and Weatherford 1999).

<sup>4</sup> Missing values for the independent variables were imputed using the Amelia II program (King et al. 2001). Neither the dependent variable nor any of the significant independent variables had any missing values, and additional analyses indicate that the cases with imputed values do not significantly affect the outcome.

politically “more on the conservative side” and 0 for congregations that report being “more on the liberal side” or “right in the middle”)<sup>5</sup> *Bible is Inerrant* is constructed from the question, “Does your congregation consider the Bible to be the literal and inerrant word of God?” (“Yes” responses are coded 1 and “no” responses 0). *No Statement Welcoming Homosexuals* comes from a question asking informants if the congregation has a statement that officially welcomes homosexuals (1 for congregations that do not have a welcome statement and 0 for congregations that have a statement). *Forbids Homosexual Leaders* is constructed from a question about whether the congregation would allow an openly gay or lesbian person to hold a volunteer leadership position (“yes” is coded 1 and “don’t know” and “no” are coded 0).<sup>6</sup>

Five dichotomous variables measure a congregation’s engagement with the external environment. Each of these variables is coded 1 if the congregation has the particular characteristic and 0 if it does not. Congregations that engage their surrounding community by surveying its needs are often better positioned to recognize and respond to social issues (Ammerman and Farnsley 1997; McRoberts 2003; Wuthnow 2004). The variable *Has a Group Assessing Community Needs* is coded 1 if informants

---

<sup>5</sup> Alternative coding schemes were used for *Theological Orientation* in other analyses not reported here. In one, the variable is coded 1 for congregations on the conservative side or in the middle and 0 for congregations on the liberal side. In another, two dummy variables were created (liberal and conservative) and theologically moderate was the reference category. The same alternative coding schemes were used for political orientation. None of these alternative coding schemes produced significantly different results.

<sup>6</sup> Sixteen (8%) of the informants responded “don’t know” to this question. “Don’t know” responses are coded as 0 because the variable is used to identify congregations that explicitly forbid homosexual leaders.

reported their congregation had a group that assessed community needs. Many congregations develop external ties by collaborating with outside organizations to provide social services (Ammerman 2005; Chaves and Tsitsos 2001; Thomas et al. 1994). *Collaborates with Outside Organizations* is constructed from the questions that asked respondents if they run their programs in collaboration with other organizations. Congregations that promote political participation are more likely to influence and be influenced by their external environment (Brown 2006; McAdam 1999; Wald and Calhoun-Brown 2007). *Promotes Political Participation* is drawn from the question that asked informants if the members of their congregation had been informed of opportunities to participate in political activities within the past year. Congregations that apply for government funding must comply with certain conditions which can constrain and influence the programs they sponsor (Bartkowski and Regis 2003; Chaves 1999). *Seeks Government Funding* comes from the question that asked respondents if their congregation had applied for a grant from any government agency within the past two years. Congregations can increase their interaction with the external environment by inviting outside speakers (Chaves 1999). Visiting speakers can expose congregations to community needs and influence their responsiveness to these issues (Wood 2002). *Has Outside Speakers* is constructed from the questions that asked informants if their congregation had any visiting speakers address their members within the past year.

The analysis also incorporates several control variables that both sociological theory and prior research suggest would influence a congregation's likelihood of having an HIV/AIDS program. Numerous studies demonstrate that large congregations tend to have more resources which increase their ability to provide social services (Barnes 2004; Brown 2008; Chaves and Tsitsos 2001; Tsitsos 2003). To control for a congregation's access to financial and human resources, the index variable *Congregational Size* is constructed using continuous variables indicating the congregation's total number of participating adults, volunteers, and full-time staff.<sup>7</sup> Because clergy's education level is an important predictor of a congregation's social service activity (Chaves and Tsitsos 2001; Thomas et al. 1994), the analysis includes the dichotomous variable *Clergy Graduated* which is coded 1 for congregations with a senior clergy person who has graduated from a seminary or theological school and 0 if not. The analysis also controls for the congregation's age, its geographic region (southern versus non-southern), and its community context (urban versus non-urban).

---

<sup>7</sup> Because the distribution for each of these variables is skewed their values were logged when constructing the index (Cronbach alpha = .82). The congregation's total income variable could not be used because of missing values for 45 percent of congregations. The congregation's size serves as adequate proxy for the congregation's financial resources.

**Table 11: Descriptive Statistics of Black Congregations (N=203)**

Variable	Mean / Proportion	Standard Error
HIV/AIDS Program Sponsorship	.19	.034
<i>Theological Orientation</i>		
Liberal	.11	.025
Moderate	.41	.039
Conservative	.48	.040
<i>Political Orientation</i>		
Liberal	.13	.028
Moderate	.53	.040
Conservative	.34	.037
Bible is Inerrant	.92	.026
No Statement Welcoming Homosexuals	.96	.015
Forbids Homosexual Leaders	.94	.026
Has a Group Assessing Community Needs	.69	.037
Collaborates with Outside Organizations	.53	.040
Promotes Political Participation	.42	.040
Seeks Government Funding	.14	.029
Has Outside Speakers	.49	.031
Total # of Participating Adults <sup>b</sup>	5.07	.126
Total # of Volunteers <sup>b</sup>	2.65	.144
Total # of Full-time Staff <sup>b</sup>	1.19	.087
Clergy Graduated	.61	.039
Age of Congregation <sup>b</sup>	4.07	.069
South	.72	.035
Urban	.67	.038
Suburban	.15	.028
Rural	.18	.032

Source: National Congregations Study, 2006-7

<sup>a</sup>Attendee level weights applied (Chaves and Anderson 2008)

<sup>b</sup>Logged values

The first analysis assesses the bivariate relationships between black congregations having an HIV/AIDS program and each variable measuring ideological orientation and external engagement. The subsequent multivariate analyses perform

logistic regressions of black congregations having an HIV/AIDS program.<sup>8</sup> Models 1 and 2 regress the dependent variable on the variables measuring ideological orientation and external engagement respectively. Model 3 regresses the dependent variable on both the ideological orientation and external engagement variables, and Model 4 includes all of the control variables. Model 5 retains the variables that significantly affect having a program to produce a more parsimonious model and the best model fit. To illustrate the effects of external engagement on having a program, the final analysis uses the results from Model 5 to calculate the predicted probabilities that a semi-large, urban, non-southern, black congregation will have a program given the presence of particular external engagement characteristics.<sup>9</sup>

### **4.3 Results**

Figure 2 shows the bivariate relationships between having an HIV/AIDS program and each of the variables measuring ideological orientation and external engagement. Each pair of bars displays the likelihood that a congregation will have a program when the particular characteristic is present and absent. Most noteworthy, the percentage of theologically conservative, black congregations that have a program is

---

<sup>8</sup> The diagnostic tests recommended by Winship and Radbill (1994) indicate no misspecification related to the probability-proportional-to-size feature of the sample; thus, each model is estimated using unweighted data.

<sup>9</sup> "Semi-large" refers to a congregation that is one standard deviation above the mean for the index variable *Congregational Size*.

almost the same as the percentage of non-conservative, black congregations.<sup>10</sup> In addition, based on the other ideological dimensions, even though conservative congregations appear to be slightly less likely to have a program, chi-square tests reveal that none of these differences is statistically significant.<sup>11</sup> Contrary to the hypothesis, this zero-order analysis indicates that conservative black congregations are just as likely to offer an HIV/AIDS program.

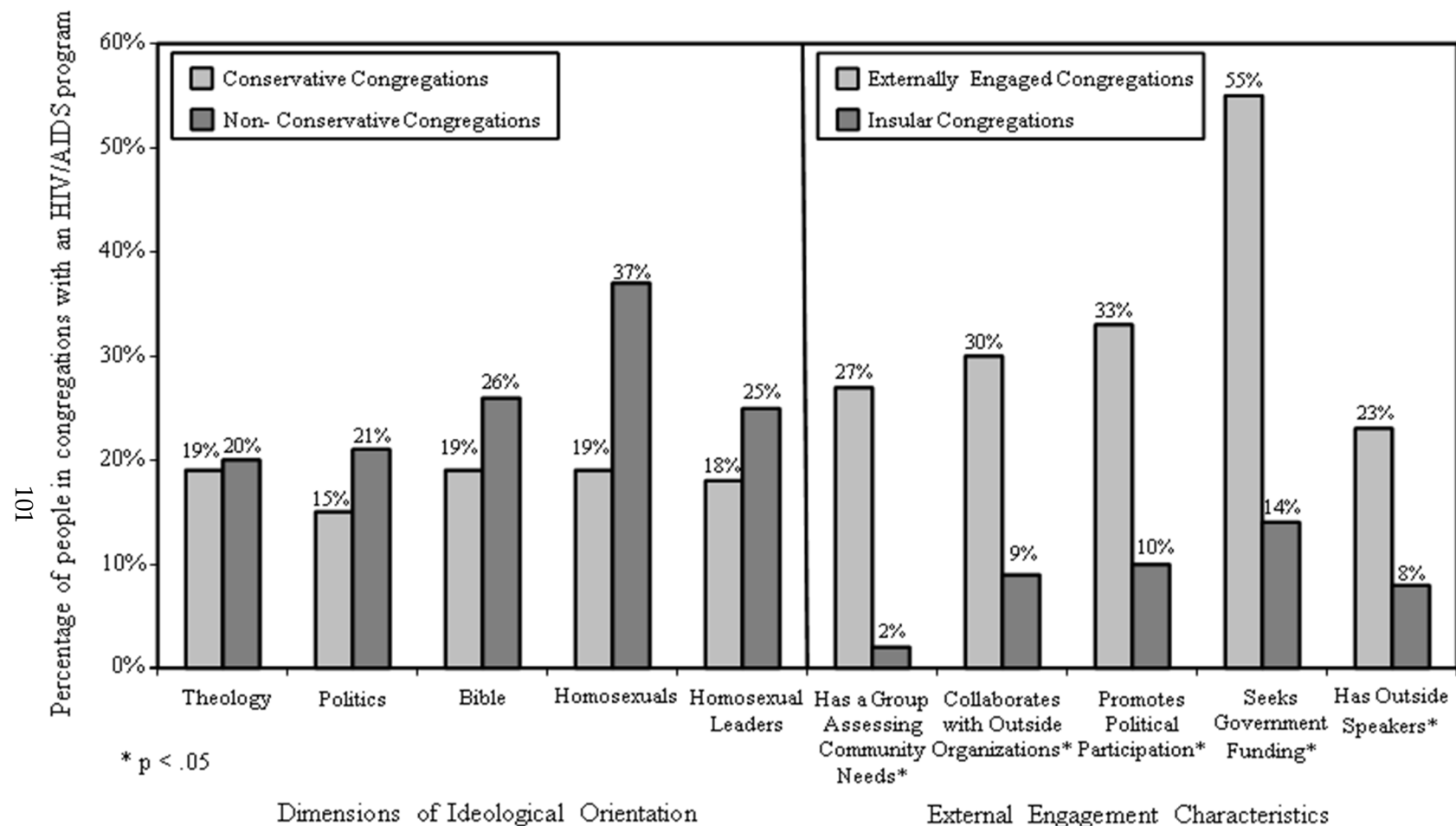
On the other hand, chi-square tests indicate that black congregations with any of the external engagement characteristics are significantly more likely to offer a program. Among congregations that have a group assessing community needs, 27 percent have an HIV/AIDS program. In comparison, only 2 percent without such a group have a program. Thus, congregations with a group assessing community needs are 13 times more likely to have a program. Similarly, congregations that seek government funding are almost 4 times more likely to offer a program, and congregations that collaborate with outside organizations, promote political participation, or have outside speakers are each 3 times more likely to offer a program. Each of these results supports the hypothesis that externally engaged black congregations are significantly more likely to have an HIV/AIDS program.

---

<sup>10</sup> 19.13 percent of theologically conservative congregations compared with 19.52 percent of non-conservative congregations ( $\chi^2 = .0049$ ).

<sup>11</sup> It appears that having a statement welcoming homosexuals doubles the likelihood of having a program. However, because the percentage of people in black congregations with a welcome statement is relatively small (4 percent), the standard errors for this variable are large, and the difference is not statistically significant. Nevertheless, of the people in black churches with a welcome statement, 37 percent are in a church that has a HIV/AIDS program.





**Figure 2: Bivariate Analysis of Black Congregations with HIV/AIDS Programs Comparing Conservative with Non-conservative Congregations and Externally Engaged with Insular Congregations**

Table 12 reports the odds ratios from logistic regressions modeling whether a black congregation has an HIV/AIDS program. Model 1 regresses program sponsorship on the ideological orientation variables. Contrary to the hypothesis, none of these variables has a significant effect; the odds of having a program are not significantly different for conservative congregations. Model 2 regresses program sponsorship on the variables measuring external engagement. Consistent with the hypothesis, each of the variables, except having an outside speaker, has a significant effect. Having a group that assesses community needs, collaborating with outside organizations, promoting political participation, and seeking government funding increase the odds of having a program by factors of 10, 2.5, 4, and 3, respectively. Model 3 regresses HIV/AIDS program sponsorship on both the ideological orientation and external engagement variables. The results demonstrate that the ideological orientation effects remain insignificant and the effects of external engagement remain significant with the magnitudes of its coefficients remaining relatively stable as well. A black congregation's ideological orientation does not influence the effects external engagement has on program sponsorship.

**Table 12: Odds Ratios from Logistic Regressions Model of whether a Black Congregation has an HIV/AIDS Program**

	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>	<i>Model 5</i>
Theologically Conservative	1.175 (.418)		1.318 (.589)	1.363 (.540)	
Politically Conservative	.669 (-.933)		.595 (-.980)	.711 (-.558)	
Bible is Inerrant	.784 (-.332)		.998 (-.002)	.745 (-.269)	
No Statement Welcoming Homosexuals	.410 (-1.210)		.595 (-.576)	.301 (-1.225)	
Forbids Homosexual Leaders	.989 (-.020)		.625 (-.725)	.794 (-.286)	
Has a Group Assessing Community Needs		10.031** (2.972)	9.995** (2.936)	11.397** (2.730)	11.977** (2.992)
Collaborates with Outside Organizations		2.685* (2.147)	2.591* (1.998)	3.662* (2.160)	3.442* (2.255)
Promotes Political Participation		4.222** (3.222)	4.383** (3.191)	5.593** (2.957)	6.393*** (3.458)
Seeks Government Funding		3.161* (2.168)	3.524* (2.335)	2.647 (1.531)	
Has Outside Speakers		1.386 (.529)	1.249 (.355)	1.249 (.298)	
Congregation Size <sup>a</sup>				1.563*** (3.303)	1.560*** (3.818)
Clergy Graduated				2.072 (1.025)	
Age of Congregation <sup>b</sup>				.658 (-1.358)	
South				.081*** (-3.833)	.090*** (-3.881)
Urban				.129* (-2.395)	.214* (2.029)
Constant	.663	.005***	.014**	.723	.045**
BIC	219.119	172.257	196.414	188.870	146.808

\*p<.05; \*\*p<.01; \*\*\*p<.001; z scores in parentheses

Number of Congregations = 203

<sup>a</sup>Index created using number of participating adults, volunteers, and full-time staff

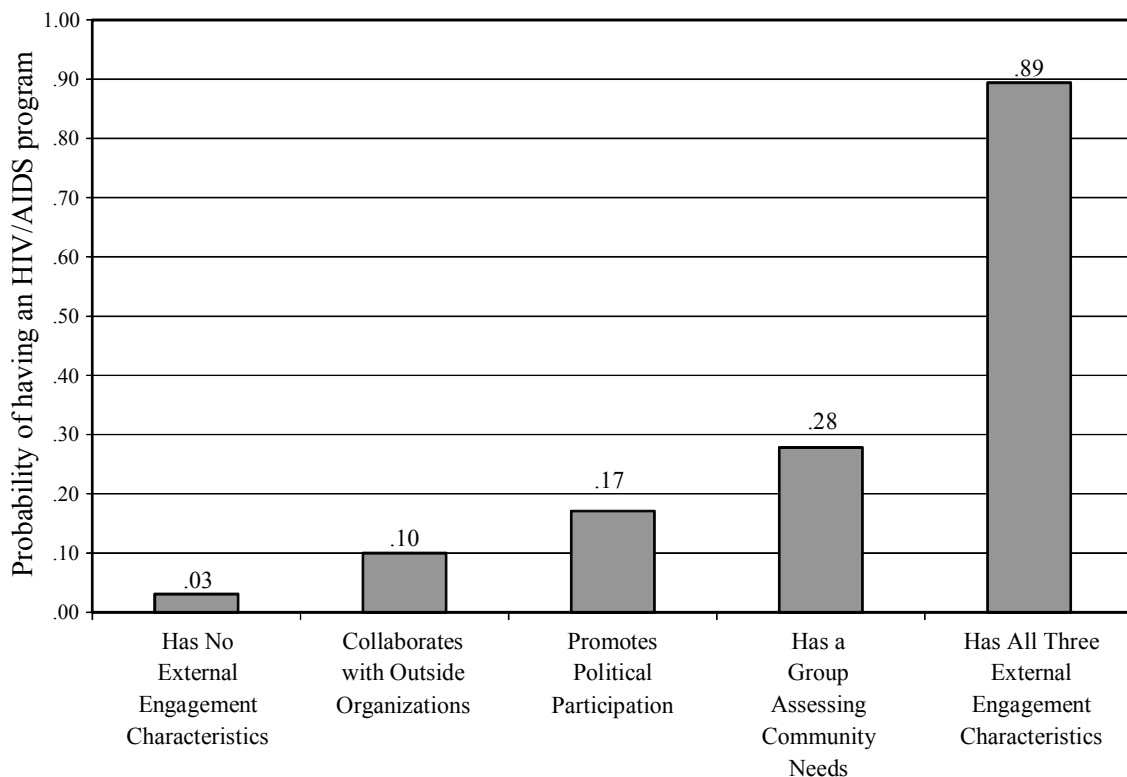
<sup>b</sup>Logged values

Model 4 demonstrates that the effects found in the previous models remain robust even when controlling for other factors that may influence having a program. Including the controls does not alter the non-significant effects of the ideological orientation variables; yet, it increases the magnitude of the coefficients for three of the external engagement variables. In this model, having a group that assesses community needs, collaborating with outside organizations, and promoting political participation increase the odds of having a program by factors of 11, 3.5, and 5.5, respectively. On the other hand, the effect of seeking government funding becomes insignificant perhaps because the congregation size mediates this effect. The only other external tie which fails to demonstrate a significant effect is having outside speakers. Its non-significance may be explained by Chaves' (1999) research which distinguishes between secular and religious speakers and identifies their varied effects on congregational behavior. As expected, increasing the size of a congregation increases the odds of having a program. However, contrary to expectations, clergy education level and the congregation's age have no significant effect. Finally, the results indicate that a congregation's geographic region and community context have significant effects. Not being in the south increases the odds of having a program by a factor of 12, and the odds for program sponsorship are about 8 times greater for non-urban congregations.

The next analysis uses results from Model 5 in Table 12 to calculate the predicted probabilities that a semi-large, urban, non-southern, black congregation will have a

program given the presence of particular external engagement characteristics. Figure 3 illustrates how being externally engaged increases the probability that this type of congregation will have a program. When the hypothetical congregation has no external engagement characteristics, its predicted probability of having a program is .03.

Collaborating with an outside organization increases the probability to .10, promoting political participation increases the probability to .17, and having a group that assesses community needs increases the probability to .28. When the congregation has all three external engagement characteristics its predicted probability of having a program is .89.



**Figure 3: Predicted Probabilities of a Semi-large, Urban, Non-southern, Black Congregation having an HIV/AIDS Program Given the Presence of Particular External Engagement Characteristics**

Additional analyses assess the robustness of the significant and non-significant findings. The first analysis regresses each external engagement characteristic on the ideology variables to determine if they influence a congregation's likelihood of being externally engaged. The results (not displayed) indicate that a congregation's political orientation significantly affects the odds of collaborating with an outside organization, but does not significantly affect any other external engagement characteristic. Moreover, none of the other ideology variables significantly affects any of the external engagement characteristics. Contrary to previous research, these results consistently demonstrate that a black congregation's liberal-conservative ideology is not associated with whether it will be externally engaged. The second analysis divides the sample into two subsets based on the congregation's theological orientation and regresses the dependent variable on the external engagement variables to see if the relationships are significant among both theologically conservative and non-conservative congregations. The results (not displayed) demonstrate that external engagement characteristics are significantly associated with an increase in the odds of program sponsorship independent of theological orientation. The final analysis tests for interactions and the results (not displayed) indicate that theological orientation does not significantly interact with any of the external engagement variables.

#### **4.4 Discussion and Conclusion**

As complex social issues confronting black communities persist, scholars are questioning whether black churches are maintaining institutional centrality. During times of crisis, many African Americans have relied on black churches as sources of social support. Thus, understanding the current capacity of black churches and the factors influencing their responsiveness to social issues has serious implications for effectively addressing the challenges facing black communities. HIV/AIDS is an important issue to which black churches have displayed mixed responses – although many congregations remain unresponsive, a few are actively addressing this crisis (Eke et al. 2010). This study demonstrates this variation and indicates that a congregation's responsiveness to HIV/AIDS depends more on its engagement with the external environment than on its ideological orientation.

These findings highlight the importance of analyzing heterogeneity among black churches when assessing their responsiveness to social issues. While it is common to differentiate among white churches, the prevailing scholarly practice is to treat black churches as a singular, homogenous unit. For example, when Tsitsos (2003) studies congregations providing social services, he compares black churches to non-black churches, but neglects to analyze the variation that may exist among black churches (see also Chaves and Higgins 1992; Cavendish 2000; Chaves and Tsitsos 2001; Wuthnow 2004; Brown 2008; for exceptions see Thomas et al. 1994; Barnes 2004). Analyzing

heterogeneity among black churches reveals that a congregation's degree of external engagement influences its responsiveness to HIV/AIDS and ability to maintain institutional centrality.

The most consistent and most surprising result is that none of the variables measuring ideological orientation has a significant effect on HIV/AIDS program sponsorship.<sup>12</sup> This finding differs from several studies which demonstrate that a congregation's liberal-conservative orientation significantly influences its social service activity. However, it agrees with ethnographic research which reveals that a black congregation's commitment to social service provision can operate independent of its liberal-conservative orientation. This suggests that the relationship between a congregation's liberal-conservative ideology and its social service activity may be salient only for white churches. To test this hypothesis, a replication of this entire analysis was conducted for the white congregations in the NCS sample. The results (not displayed) reveal that a white congregation's liberal-conservative orientation significantly affects its likelihood of having an HIV/AIDS program. The bivariate analyses indicate that each of the conservative characteristics significantly reduces the likelihood of having a program.

---

<sup>12</sup> This non-significant finding may be explained by the fact that the dependent variable measures only treatment programs (i.e., caring for those who are already sick) which can be less controversial than prevention programs. However, some congregations stigmatize certain types of sickness more than others, which can affect the degree of controversy associated with particular health-related programs. Consequently, a program for people with HIV/AIDS will likely be more controversial than one for people with a less stigmatized sickness, and thus, the distinction between treatment and prevention programs does not adequately explain the non-significant finding.



Moreover, in each of the logistic regression models, ideological conservatism significantly reduces the odds of program sponsorship. This analysis demonstrates that liberal-conservative ideology operates differently and generates different outcomes in white churches than it does in black churches. This difference may be the result of a methodological artifact created by the smaller sample of black congregations which would be less likely to produce significant results; however, the extensive sensitivity analyses and the stable significant effects found among the other variables suggest otherwise. While explaining differences between black and white congregations exceeds the scope of this study, future research could explore if they view HIV/AIDS differently and if these differences influence the ways ideological orientation affects responsiveness.

Placed in a broader context, the findings challenge research that makes causal claims about the effects of liberal-conservative religious beliefs on congregations' social service activity. Rather than being rigid predictor variables, religious beliefs can be malleable tools used by innovative black congregations (McRoberts 1999). The flexibility of religious beliefs suggests that theologically conservative beliefs need not impede the development of social service programs within black churches. Viewing religious ideas as a resource rather than a constraint, McRoberts reveals how pastors use elements of their conservative faith to promote social activism. He finds pastors of conservative congregations who "mold and shape [their religion] to justify their own activist imperatives" (McRoberts 1999:61). Cavendish (2000) describes how a predominantly

black Catholic congregation uses theologically conservative themes, such as “spreading the seed of God’s Word,” to mobilize its members for social action. Just as individuals can select religious ideas to justify their actions, congregations can emphasize certain religious ideas to support their organizational imperatives. Because congregations have autonomy in deciding which religious ideas to employ, they can incorporate new activities without undergoing a fundamental theological transformation. Consequently, the flexibility of religious beliefs undermines the ability of liberal-conservative orientation to predict black congregations’ responsiveness to social issues.

Alternatively, institutional theory provides a compelling explanation for congregations’ responsiveness to HIV/AIDS. Congregations that interact with their surrounding environment face greater pressure to embrace its concerns, and externally engaged congregations are significantly more likely to have an HIV/AIDS program. Although applying organization theory to congregational research is not new (Demerath 1998), it is an underdeveloped practice. Despite DiMaggio’s (1998) assertion that recent trends in organization theory have made it more amenable to religious organizations, relatively few studies use these theories to explain congregational behavior (e.g., Ammerman and Farnsley 1997; Chaves 2004; Edgell 1999). While many studies analyze congregations as closed systems and focus primarily on their internal characteristics, a more expansive approach would analyze congregations as open systems that can be impacted by their surrounding environment. Scholars adopting this model could assess

congregations' relationship with the external world and how it influences their responsiveness to social issues.

When seeking to explain a black church's responsiveness to social issues, rather than determining where it fits along the liberal-conservative continuum, a more helpful approach would be to focus on the congregation's interactions with the external environment. Even though this analysis is limited to HIV/AIDS programs, the findings have implications for congregation-based social services in general. Future research could analyze how environmental pressures influence externally engaged congregations and the types of social service programs they offer.

## **Appendix A: Quadratic Assignment Procedure (QAP) Analyses**

A QAP analysis begins by calculating the initial parameter estimates and then estimates the probabilities of obtaining these coefficients using a nonparametric technique. In this second step, it randomly permutes the rows and columns of the dependent variable matrix, recalculates the parameter estimates, and compares the original coefficients with the coefficients obtained from the random permutations. Analogous to a simulation, this reordering procedure rearranges the cases assigned to each set of values while maintaining the underlying structure of the network data. It obtains a sampling distribution of the estimates by repeating this process several (e.g., 2,000) times. By comparing the observed coefficient value with the estimates from the permutations, it calculates the proportion of permuted estimates that are as extreme as the observed value.

Statistical significance of the correlation is based on the proportion of random measures that are as extreme as the observed measure. From these proportions, the probability that the observed network structure (and the observed coefficient values) could have occurred by chance can be estimated. The proportions represent the p-values for the initial estimates, where small p-values (i.e.,  $< .05$ ) suggest a small likelihood that the observed relationship between the matrices occurred by chance. For example, if only 100 out of 2,000 permutations of the matrix yield estimated regression coefficients

greater than or equal to the observed value (or less than or equal to for negative values), then the probability that the observed coefficient is the result of random sampling error is approximately .05 (Burris 2005). Simulation studies demonstrate that regardless of the degree of autocorrelation, QAP regression produces unbiased standard error estimates which can be interpreted like the estimates of standard correlation and regression models (Krackhardt 1988).

The QAP analyses in this study are performed using the QAP correlation function and the Full Partialling method in the QAP Matrix Regression module in the UCINET 6.0 network analysis program (Borgatti et al. 2002). The regression tool performs a standard multiple regression across corresponding cells of the dependent and independent matrices, and it assesses the significance of the  $R^2$  value and regression coefficients by comparing them with the values generated from the random permutations. Statistical significance is derived from the proportion of randomly generated coefficient values that exceed the observed value. For the  $R^2$  value and each coefficient, the program counts the proportion of random permutations that yielded a coefficient as extreme as the initial value. This proportion represents the p-values for the QAP regression coefficients. Small p-values (i.e.,  $< .05$ ) suggest a small likelihood that the observed relationship between the matrices occurred by chance.

The relatively small size of  $R^2$  values can be easily misinterpreted; however, the small  $R^2$  values are a by-product of how the dyadic variables were constructed. Because

congregational ties through common collaborator types only represent a small percent of the 771,903 dyads in the sample, the explained variance associated with these ties will be equivalently small (Burris 2005). Consequently, the models are expected to generate relatively low  $R^2$  values and model fitness can be assessed by comparing the corresponding  $R^2$  values. The key measure is the statistical significance of the  $R^2$  value rather than its size (Nagpaul 2003). In each model, the  $R^2$  value is statistically significant ( $p < .001$ ) since none of the random trials yield an  $R^2$  as large as the observed value.

## References

- Agresti, Alan and Ivy Liu. 2001. "Strategies for modeling a categorical variable allowing multiple category choices." *Sociological Methods & Research* 29(4):403-34.
- Allison, Paul D. 1990. "Change scores as dependent variables in regression analysis." *Sociological Methodology* 20:93-114.
- Amabile, Teresa M. 1996. *Creativity and innovation in organizations*. Boston: Harvard Business School.
- Ammerman, Nancy T. 2005. *Pillars of faith: American congregations and their partners*. Berkeley: University Press.
- Ammerman, Nancy T. and Arthur E. Farnsley. 1997. *Congregation and community*. New Brunswick, NJ: Rutgers University Press.
- Ancona, Deborah Gladstein and David F. Caldwell. 1992. "Demography and design: Predictors of new product team performance." *Organization Science* 3(3):321-41.
- Ayas, Karen and Nick Zeniuk. 2001. "Project-based learning: building communities of reflective practitioners." *Management Learning* 32(1):61-76.
- Baker, Wayne and Robert R. Faulkner. 2009. "Social capital, double embeddedness, and mechanisms of stability and change." *American Behavioral Scientist* 52(11):1531-55.
- Bantel, Karen A. and Susan E. Jackson. 1989. "Top management and innovations in banking: Does the composition of the top team make a difference?" *Strategic Management Journal* 10(S1):107-24.
- Barman, Emily A. 2002. "Asserting difference: The strategic response of nonprofit organizations to competition." *Social Forces* 80(4):1191-222.
- Barnes, Sandra. 2004. "Priestly and prophetic influences on black church social services." *Social Problems* 51(2):202-21.
- \_\_\_\_\_. 2005. "Black church culture and community action." *Social Forces* 84(2):967-94.
- Bartkowski, John P. 2004. *The Promise Keepers: Servants, soldiers, and godly men*. New Brunswick, NJ: Rutgers University Press.
- Bartkowski, John P. and Helen A. Regis. 2003. *Charitable choices: Religion, race, and poverty in the post-welfare era*. New York: New York University.
- Baum, Joel A. C. and Christine Oliver. 1991. "Institutional linkages and organizational mortality." *Administrative Science Quarterly* 36(2):187-218.
- Beal, Daniel J., Robin R. Cohen, Michael J. Burke, and Christy L. McLendon. 2003. "Cohesion and performance in groups: A meta-analytic clarification of construct relations." *Journal of Applied Psychology* 88(6):989-1004.
- Bell, Suzanne T., Anton J. Villado, Marc A. Lukasik, Larisa Belau, and Andrea L. Briggs. 2011. "Getting specific about demographic diversity variable and team performance relationships: A meta-analysis." *Journal of Management* 37(3):709-43.

- Bergman, Jacqueline Z., Joan R. Rentsch, Erika E. Small, Shaun W. Davenport, and Shawn M. Bergman. 2012. "The shared leadership process in decision-making teams." *Journal of Social Psychology* 152(1):17-42.
- Bettenhausen, Kenneth L. 1991. "Five years of groups research: What we have learned and what needs to be addressed." *Journal of Management* 17(2):345-81.
- Beyerlein, Kraig and John R. Hipp. 2005. "Social capital, too much of a good thing? American religious traditions and community crime." *Social Forces* 84(2):995-1013.
- \_\_\_\_\_. 2006. "From pews to participation: The effect of congregation activity and context on bridging civic engagement." *Social Problems* 53(1):97-117.
- Bielefeld, Wolfgang and William Suhs Cleveland. 2013. "Faith-based organizations as service providers and their relationship to government." *Nonprofit and Voluntary Sector Quarterly* 42(3):468-94.
- Bilder, Christopher R. and Thomas M. Loughin. 2007. "Modeling association between two or more categorical variables that allow for multiple category choices." *Communications in Statistics - Theory and Methods* 36(2):433-51.
- Billingsley, Andrew. 1999. *Mighty like a river: The black church and social reform*. New York : Oxford University Press.
- Blau, Peter M. and Joseph E. Schwartz. 1997. *Crosscutting social circles: Testing a macrostructural theory of intergroup relations*. New Brunswick: Transaction Publishers.
- Boland, Richard J. and Ramkrishnan V. Tenkasi. 1995. "Perspective making and perspective taking in communities of knowing." *Organization Science* 6(4):350-72.
- Borgatti, Stephen P. and Martin G. Everett. 1992. "Notions of position in social network analysis." *Sociological Methodology* 22(1):1-35.
- Borgatti, Stephen P., Martin G. Everett, and Linton C. Freeman. 2002. "Ucinet for Windows: Software for social network analysis."
- Bourdieu, Pierre. 1980. "Le capital social: Notes provisoires." *Actes de la recherche en sciences sociales* 31(1):2-3.
- Braunstein, Ruth, Brad R. Fulton, and Richard L. Wood. 2014. "The role of bridging cultural practices in racially and socioeconomically diverse civic organizations." *American Sociological Review* 79(4):705-25.
- Brown, Khari. 2006. "Racial differences in congregation-based political activism." *Social Forces* 84(3):1581-604.
- \_\_\_\_\_. 2008. "Racial/Ethnic differences in religious congregation-based social service delivery efforts." *Journal of Sociology and Social Welfare* 35(4):95-113.
- Burris, Val. 2005. "Interlocking directorates and political cohesion among corporate elites." *American Journal of Sociology* 111(1):249-83.
- Burt, Ronald S. 1992. *Structural holes*. Cambridge: Harvard University Press.
- \_\_\_\_\_. 1997. "The contingent value of social capital." *Administrative Science Quarterly* 42(2):339-65.



- \_\_\_\_\_. 2000. "The network structure of social capital." *Research in Organizational Behavior* 22:345-423.
- \_\_\_\_\_. 2004. "Structural holes and good ideas." *American Journal of Sociology* 110(2):349-99.
- Campbell, David. 2002. "Beyond charitable choice: The diverse service delivery approaches of local faith-related organizations." *Nonprofit and Voluntary Sector Quarterly* 31(2):207-30.
- \_\_\_\_\_. 2011. "Reconsidering the implementation strategy in faith-based policy initiatives." *Nonprofit and Voluntary Sector Quarterly* 40(1):130-48.
- Cavendish, James C. 2000. "Church-based community activism: A comparison of black and white catholic congregations." *Journal for the Scientific Study of Religion* 39(3):371-84.
- Center for Disease Control. 2009. *HIV/AIDS surveillance report, 2007*. Atlanta: U.S. Department of Health and Human Services.
- Chatman, Jennifer A. and Francis J. Flynn. 2001. "The influence of demographic heterogeneity on the emergence and consequences of cooperative norms in work teams." *Academy of Management Journal* 44(5):956-74.
- Chatman, Jennifer A., Jeffrey T. Polzer, Sigal G. Barsade, and Margaret A. Neale. 1998. "Being different yet feeling similar: The influence of demographic composition and organizational culture on work processes and outcomes." *Administrative Science Quarterly* 43(4):749-80.
- Chatters, Linda M., Jeffrey S. Levin, and Christopher G. Ellison. 1998. "Public health and health education in faith communities." *Health Education & Behavior* 25(6):689-99.
- Chaves, M. and B. Wineburg. 2010. "Did the faith-based initiative change congregations?" *Nonprofit and Voluntary Sector Quarterly* 39(2):343-55.
- Chaves, Mark. 1999. "Religious congregations and welfare reform: Who will take advantage of 'charitable choice'?" *American Sociological Review* 64(6):836-46.
- \_\_\_\_\_. 2004. *Congregations in America*. Cambridge, MA: Harvard University Press.
- Chaves, Mark and Shawna L. Anderson. 2008. "Continuity and change in American congregations: Introducing the second wave of the National Congregations Study." *Sociology of Religion* 69(4):415-40.
- Chaves, Mark, Helen Giesel, and William Tsitsos. 2002. "Religious variation in public presence." Pp. 108-28 in *The quiet hand of God: Faith-based activism and the public role of Mainline Protestantism*, edited by Robert Wuthnow and John H. Evans. Berkeley: University of California Press.
- Chaves, Mark and Lynn M. Higgins. 1992. "Comparing the community involvement of black and white congregations." *Journal for the Scientific Study of Religion* 31(4):425-40.
- Chaves, Mark and William Tsitsos. 2001. "Congregations and social services: What they do, how they do it, and with whom." *Nonprofit and Voluntary Sector Quarterly* 30(4):660-83.

- Chiocchio, François and Hélène Essiembre. 2009. "Cohesion and performance: A meta-analytic review of disparities between project teams, production teams, and service teams." *Small Group Research* 40(4):382-420.
- Cnaan, Ram A., Jill W. Sinha, and Charlene C. McGrew. 2004. "Congregations as social service providers: Services, capacity, culture, and organizational behavior." *Administration in Social Work* 28(3):47-68.
- Cnaan, Ram and Stephanie Boddie. 2002. *The invisible caring hand: American congregations and the provision of welfare*. New York: New York University Press.
- Cochran, William G. 1977. *Sampling techniques*. New York: John Wiley & Sons.
- Coffé, Hilde and Benny Geys. 2007. "Toward an empirical characterization of bridging and bonding social capital." *Nonprofit and Voluntary Sector Quarterly* 36(1):121-39.
- Cohen, Wesley M and Daniel A Levinthal. 1990. "Absorptive capacity: a new perspective on learning and innovation." *Administrative science quarterly* 35(1).
- Coleman, James S. 1988. "Social capital in the creation of human capital." *American Journal of Sociology* 94:95-120.
- Costa, Dora L and Matthew E Kahn. 2003. "Civic engagement and community heterogeneity: An economist's perspective." *Perspective on Politics* 1(1):103-11.
- Cress, Daniel M. and David A. Snow. 1996. "Mobilization at the margins: Resources, benefactors, and the viability of homeless social movement organizations." *American Sociological Review* 61(6):1089-109.
- Croteau, David. 1995. *Politics and the class divide: Working people and the middle-class Left*. Temple University Press.
- Cunningham, Shayna, Deanna Kerrigan, Clea McNeely, and Jonathan Ellen. 2009. "The role of structure versus individual agency in churches' responses to HIV/AIDS: A case study of baltimore city churches." *Journal of Religion and Health* 50(2):1-15.
- Davis, Gerald F., Doug McAdam, W. Richard Scott, and Mayer N. Zald. 2005. *Social movements and organization theory*. NY: Cambridge University Press.
- Demerath, Nicholas J. 1998. *Sacred companies: Organizational aspects of religion and religious aspects of organizations*. NY: Oxford University Press.
- DiMaggio, Paul. 1998. "The relevance of organizational theory to the study of religion." Pp. 7-23 in *Sacred companies: Organizational aspects of religion and religious aspects of organization*, edited by Nicholas Demerath, Peter Hall, Terry Schmitt, and Rhys Williams. New York: Oxford University Press.
- Dimaggio, Paul and Walter Powell. 1983. "The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields." *American Sociological Review* 48(2):147-60.
- DiMaggio, Paul and Walter W. Powell. 1991. *The New institutionalism in organizational analysis*. Chicago: University of Chicago Press.
- Douglas, Kelly Brown. 1999. *Sexuality and the Black Church: A Womanist perspective*. Maryknoll, NY: Orbis Books.

- DuBois, William B. 1903. *The Negro church*. Alanta: Atlanta University Press.
- Dudley, Carl and David Roozen. 2001. *Faith communities today: A report on religion in the United States today*. Hartford: Hartford Seminary, Hartford Institute for Religion Research.
- Ebers, Mark and Anna Grandori. 1997. "The forms, costs, and development dynamics of interorganizational networking." Pp. 265-86 in *The formation of inter-organizational networks*, edited by M. Ebers. New York: Oxford University Press.
- Eden, Colin and Chris Huxham. 2001. "The Negotiation of Purpose in Multi-Organizational Collaborative Groups." *Journal of Management Studies* 38(3):373-91.
- Edgell, Penny. 1999. *Congregations in conflict: Cultural models of local religious life*. Cambridge, MA: Harvard University Press.
- Eke, Agatha N., Aisha L. Wilkes, and Juarlyn Gaiter. 2010. "Organized religion and the fight against HIV/AIDS in the black community: The role of the Black Church." Pp. 53-68 in *African Americans and HIV/AIDS*, edited by Donna Hubbard McCree, Kenneth Terrill Jones, and Ann O'Leary. NY: Springer.
- Ely, Robin J. and David A. Thomas. 2001. "Cultural diversity at work: The effects of diversity perspectives on work group processes and outcomes." *Administrative Science Quarterly* 46(2):229-73.
- Feld, Scott L. 1982. "Social structural determinants of similarity among associates." *American Sociological Review* 47(6):797-801.
- Finkel, Steven E. 1995. *Causal analysis with panel data*. Sage.
- Finkelstein, Sydney, Donald C Hambrick, and Albert A Cannella. 2009. *Strategic leadership: Theory and research on executives, top management teams, and boards*. NY: Oxford University Press.
- Finkelstein, Sydney and Donald C. Hambrick. 1996. *Strategic leadership: Top executives and their effects on organizations*. Minneapolis: West.
- Fiol, C. Marlene. 1994. "Consensus, diversity, and learning in organizations." *Organization Science* 5(3):403-20.
- Firebaugh, Glenn and Frank D. Beck. 1994. "Does Economic Growth Benefit the Masses? Growth, Dependence, and Welfare in the Third World." *American Sociological Review* 59(5):631-53.
- Frazier, Edward Franklin. 1964. *The Negro church in America*. NY: Schocken Books
- Friedkin, Noah E. 2004. "Social cohesion." *Annual Review of Sociology* 30:409-25.
- Fulton, Brad R. 2011. "Black churches and HIV/AIDS: Factors influencing congregations' responsiveness to social issues." *Journal for the Scientific Study of Religion* 50(3):617-30.
- \_\_\_\_\_. 2014. "Organizational Surveys: Using Response Enhancing Strategies and Conducting Nonresponse Analyses." *Academy of Management Best Paper Proceedings* doi: 10.5465/AMBPP.2014.162

- Fulton, Brad R., Richard L. Wood, and Interfaith Funders. 2011. "National Study of Faith-Based Community Organizing Coalitions: Data file." Durham, NC: Duke University, Department of Sociology.
- Galaskiewicz, Joseph, Wolfgang Bielefeld, and Dowell Myron. 2006. "Networks and organizational growth: A study of community based nonprofits." *Administrative Science Quarterly* 51(3):337-80.
- Galaskiewicz, Joseph and Stanley Wasserman. 1989. "Mimetic processes within an interorganizational field: An empirical test." *Administrative Science Quarterly* 34(3):454-79.
- Ganz, Marshall. 2000. "Resources and resourcefulness: Strategic capacity in the unionization of California agriculture, 1959-1966." *American Journal of Sociology* 105(4):1003-62.
- \_\_\_\_\_. 2009. *Why David sometimes wins: Leadership, organization, and strategy in the California farm worker movement*. New York: Oxford University Press.
- Gazley, Beth, Won K. Chang, and Lisa B. Bingham. 2010. "Board diversity, stakeholder representation, and collaborative performance in community mediation centers." *Public Administration Review* 70(4):610-20.
- Gilbert, Christopher L and Francesca Modena. 2007. "Models for non-exclusive multinomial choice, with application to Indonesian rural households." Department of Economics, University of Trento.
- Granovetter, Mark. 1973. "The strength of weak ties." *American Journal of Sociology* 78(6):1360-80.
- \_\_\_\_\_. 1974. *Getting a job*. Chicago, IL: University of Chicago Press.
- \_\_\_\_\_. 1985. "Economic action and social structure: The problem of embeddedness." *The American Journal of Sociology* 91(3):481-510.
- \_\_\_\_\_. 2005. "The impact of social structure on economic outcomes." *The Journal of Economic Perspectives* 19(1):33-50.
- Hackman, J. Richard. 2002. *Leading teams: Setting the stage for great performances*. Cambridge: Harvard Business School Press.
- Hadaway, C. Kirk and Penny L. Marler. 2005. "How many Americans attend worship each week? An alternative approach to measurement." *Journal for the Scientific Study of Religion* 44(3):307-22.
- Hamel, Gary. 1996. "Strategy as revolution." *Harvard Business Review* 74(4):69-82.
- Han, Jing, Jian Han, and Daniel J. Brass. 2014. "Human capital diversity in the creation of social capital for team creativity." *Journal of Organizational Behavior* 35(1):54-71.
- Hardy, Cynthia, Nelson Phillips, and Thomas B. Lawrence. 2003. "Resources, knowledge and influence: The organizational effects of interorganizational collaboration." *Journal of Management Studies* 40(2):321-47.
- Hart, Stephen. 2001. *Cultural dilemmas of progressive politics: Styles of engagement among grassroots activists*. Chicago: University of Chicago Press.

- Hernández, Edwin I, Rebecca Burwell, and Jeffrey Smith. 2007. *Answering the call: How Latino churches can respond to the HIV/AIDS epidemic*. South Bend: University of Notre Dame, Institute for Latino Studies.
- Hillman, Amy J., Albert A. Cannella, and Ira C. Harris. 2002. "Women and racial minorities in the boardroom: How do directors differ?" *Journal of Management* 28(6):747-63.
- Hoge, R., Everett L. Perry, and Gerald L. Klever. 1978. "Theology as a source of disagreement about protestant church goals and priorities." *Review of Religious Research* 19(2):116-38.
- Hollinger, Dennis P. 1983. *Individualism and social ethics: An evangelical syncretism*. Lanham, MD: University Press of America.
- Homans, George. 1950. *The human group*. New York: Harcourt, Brace & World.
- Horwitz, Sujin K. and Irwin B. Horwitz. 2007. "The effects of team diversity on team outcomes: A meta-analytic review of team demography." *Journal of Management* 33(6):987-1015.
- Huckfeldt, R. Robert, Paul E. Johnson, and John D. Sprague. 2004. *Political disagreement: The survival of diverse opinions within communication networks*. Cambridge: Cambridge University Press.
- Jackson, Susan E., Aparna Joshi, and Niclas L. Erhardt. 2003. "Recent research on team and organizational diversity: SWOT analysis and implications." *Journal of Management* 29(6):801-30.
- Jehn, Karen A., Gregory B. Northcraft, and Margaret A. Neale. 1999. "Why differences make a difference: A field study of diversity, conflict and performance in workgroups." *Administrative Science Quarterly* 44(4):741-63.
- Jenkins, J. Craig. 2006. "Nonprofit organizations and political advocacy." Pp. 307-32 in *The nonprofit sector: A research handbook*, edited by Walter W. Powell and Richard S. Steinberg. New Haven: Yale University Press.
- Johnson, Benton. 1967. "Theology and the position of pastors on public issues." *American Sociological Review* 32(3):433-42.
- Johnson, David. 2005. "Two-Wave Panel Analysis: Comparing Statistical Methods for Studying the Effects of Transitions." *Journal of Marriage & Family* 67(4):1061-75.
- Kanagy, Conrad. 1992. "Social action, evangelism, and ecumenism: The impact of community, theological, and church structural variables." *Review of Religious Research* 34(1):34-50.
- Kanter, Rosabeth Moss. 1977. "Some effects of proportions on group life: Skewed sex ratios and responses to token women." *American Journal of Sociology* 82(5):965-90.
- King, Gary, James Honaker, Anne Joseph, and Kenneth Scheve. 2001. "Analyzing incomplete political science data: An alternative algorithm for multiple imputation." *American Political Science Review* 95(1):49-69.

- Knoke, David. 1983. "Organization sponsorship and influence reputation of voluntary associations." *Social Forces* 61(4):1065-87.
- \_\_\_\_\_. 1999. "Organizational networks as social capital." in *Corporate social capital and liability*, edited by Roger Leenders and Shaul Gabbay. Dordrecht, Netherlands: Kluwer Press.
- \_\_\_\_\_. 2009. "Playing well together: creating corporate social capital in strategic alliance networks." *American Behavioral Scientist* 52(12):1690-708.
- Knoke, David and James H. Kuklinski. 1982. *Network Analysis*. Sage Publications, Incorporated.
- Koch-Gonzalez, Jerry, Jennifer Ladd, and Felice Yeskel. 2009. *Talking across the class divide: A manual for cross-class dialogue and learning*. Boston: Class Action.
- Krackhardt, David. 1987. "QAP partialling as a test of spuriousness." *Social Networks* 9(2):171-86.
- \_\_\_\_\_. 1988. "Predicting with networks: Nonparametric multiple regression analysis of dyadic data." *Social Networks* 10(4):359-81.
- \_\_\_\_\_. 1992. "The strength of strong ties: The importance of philos in organizations." Pp. 216-39 in *Networks and organizations: Structure, form, and action*, edited by Nitin Nohria and Robert G. Eccles. Boston: Harvard Business School Press.
- Kurtz, Sharon. 2002. *Workplace justice: Organizing multi-identity movements*. Minneapolis: University of Minnesota Press.
- Laudarji, Isaac and Lowell Livezey. 2000. "The churches and the poor in a "ghetto underclass" neighborhood." Pp. 83-106 in *Public religion and urban transformation*, edited by Lowell Livezey. New York: New York University Press.
- Laurence, James. 2011. "The effect of ethnic diversity and community disadvantage on social cohesion: A multi-level analysis of social capital and interethnic relations in UK communities." *European Sociological Review* 27(1):70-89.
- Lawrence, Barbara S. 1997. "Perspective: The black box of organizational demography." *Organization Science* 8(1):1-22.
- Lechner, Christoph, Karolin Frankenberger, and Steven W. Floyd. 2010. "Task contingencies in the curvilinear relationships between intergroup networks and initiative performance." *Academy of Management Journal* 53(4):865-89.
- Leondar-Wright, Betsy. 2014. *Missing class: How seeing class cultures can strengthen social movement groups*. Ithaca: Cornell University Press.
- Leong, Pamela. 2006. "Religion, flesh, and blood: Re-creating religious culture in the context of HIV/AIDS." *Sociology of Religion* 67(3):295-311.
- Lewis, Charles and Trulear, Harold. 2008. "Rethinking the roles of african american churches as social service providers." *Black Theology: An International Journal* 6(3):343-65.
- Lichterman, Paul. 1995. "Piecing together multicultural community: Cultural differences in community building among grassroots environmentalists " *Social Problems* 42(4):513-34.

- \_\_\_\_\_. 2005. *Elusive togetherness: Church groups trying to bridge America's divisions*. Princeton, NJ: Princeton University Press.
- Liker, Jeffrey K, Sue Augustyniak, and Greg J Duncan. 1985. "Panel data and models of change: A comparison of first difference and conventional two-wave models." *Social Science Research* 14(1):80-101.
- Lin, Nan. 1999a. "Building a network theory of social capital." *Connections* 22(1):28-51.
- \_\_\_\_\_. 1999b. "Social networks and status attainment." *Annual Review of Sociology* 25:467-87.
- \_\_\_\_\_. 2001. *Social capital: A theory of social structure and action*. New York: Cambridge University Press.
- Lin, Nan and Mary Dumin. 1986. "Access to occupations through social ties." *Social Networks* 8(4):365-85.
- Lin, Nan, Walter M. Ensel, and John C. Vaughn. 1981. "Social resources and strength of ties: Structural factors in occupational status attainment." *American Sociological Review* 46(4):393-405.
- Lincoln, C. Eric and Lawrence H. Mamiya. 1990. *The Black church in the African-American experience*. Durham: Duke University Press.
- Lindley, Lisa L., Jason D. Coleman, Bambi W. Gaddist, and Jacob White. 2010. "Informing faith-based HIV/AIDS interventions: HIV-related knowledge and stigmatizing attitudes at Project FAITH churches in South Carolina." *Public Health Reports* 125:12-20.
- Marsden, Peter V. and Karen E. Campbell. 1984. "Measuring tie strength." *Social Forces* 63(2):482-501.
- Mays, Benjamin E. and Joseph William Nicholson. 1933. *The Negro's church*. New York: Russell & Russell.
- Maznevski, Martha L. 1994. "Understanding our differences: Performance in decision-making groups with diverse members." *Human Relations* 47(5):531-52.
- McAdam, Doug. 1999. *Political process and the development of Black insurgency, 1930-1970*. Chicago: University of Chicago Press.
- \_\_\_\_\_. 2010. *Political process and the development of black insurgency, 1930-1970*. Chicago: University of Chicago Press.
- McCarthy, John and Jim Castelli. 1998. *Religion-sponsored social service providers: The not-so-independent sector*. Washington, DC: Aspen Institute.
- McPherson, Miller, Lynn Smith-Lovin, and James M. Cook. 2001. "Birds of a feather: homophily in social networks." *Annual Review of Sociology* 27(1):415.
- McRoberts, Omar. 1999. "Understanding the "new" black pentecostal activism: Lessons from ecumenical urban ministries in Boston." *Sociology of Religion* 60(1):47-70.
- McRoberts, Omar M. 2003. *Streets of glory: Church and community in a black urban neighborhood*. Chicago: University of Chicago.

- Miller, Toyah and Maria D. Triana. 2009. "Demographic diversity in the boardroom: Mediators of the board diversity-firm performance relationship." *Journal of Management Studies* 46(5):755-86.
- Milliken, Frances J. and Luis L. Martins. 1996. "Searching for common threads: Understanding the multiple effects of diversity in organizational groups." *Academy of Management Review* 21(2):402-33.
- Minzner, Amy, Jacob A. Klerman, Carrie E. Markovitz, and Barbara Fink. 2014. "The impact of capacity-building programs on nonprofits: A random assignment evaluation." *Nonprofit and Voluntary Sector Quarterly* 43(3):547-69.
- Moody, James and Pamela Paxton. 2009. "Building bridges: Linking social capital and social networks to improve theory and research." *American Behavioral Scientist* 52(11):1491-506.
- Moore, Mark H. 1995. *Creating public value: Strategic management in government*. Cambridge: Harvard University Press.
- Mors, Marie Louise. 2010. "Innovation in a global consulting firm: when the problem is too much diversity." *Strategic Management Journal* 31(8):841-72.
- Mukenge, Ida Rousseau. 1983. *The Black church in urban America: A case study in political economy*. Lanham, MD : University Press of America.
- Nagpaul, P. S. 2003. "Exploring a pseudo-regression model of transnational cooperation in science." *Scientometrics* 56(3):403-16.
- Nemeth, Charlan J. 1986. "Differential contributions of majority and minority influence." *Psychological Review* 93(1):23-32.
- Nemeth, Charlan J. and Julianne L. Kwan. 1987. "Minority influence, divergent thinking and detection of correct solutions." *Journal of Applied Social Psychology* 17(9):788-99.
- Newell, Sue, Carole Tansley, and Jimmy Huang. 2004. "Social capital and knowledge integration in an ERP project team: the importance of bridging and bonding." *British Journal of Management* 15(S1):S43-S57.
- O'Reilly, Charles A., David F. Caldwell, and William P. Barnett. 1989. "Work group demography, social integration, and turnover." *Administrative Science Quarterly*:21-37.
- Oberschall, Anthony. 1973. *Social conflict and social movements*. Englewood Cliffs, NJ: Prentice-Hall.
- Obstfeld, David. 2005. "Social Networks, the Tertius Iungens Orientation, and Involvement in Innovation." *Administrative Science Quarterly* 50(1):100-30.
- Oh, Hongseok, Myung-Ho Chung, and Giuseppe Labianca. 2004. "Group social capital and group effectiveness: The role of informal socializing ties." *Academy of Management Journal* 47(6):860-75.
- Paarlberg, Laurie E. and Danielle M. Varda. 2009. "Community carrying capacity: A network perspective." *Nonprofit and Voluntary Sector Quarterly* 38(4):597-613.



- Page, Scott E. 2007. *The difference: How the power of diversity creates better groups, firms, schools, and societies*. Princeton: Princeton University Press.
- Passey, Andrew and Mark Lyons. 2006. "Nonprofits and social capital: Measurement through organizational surveys." *Nonprofit Management and Leadership* 16(4):481-95.
- Pattillo-McCoy, M. 1998. "Church culture as a strategy of action in the black community." *American Sociological Review* 63(6):767-84.
- Pelled, Lisa Hope, Kathleen M. Eisenhardt, and Katherine R. Xin. 1999. "Exploring the black box: An analysis of work group diversity, conflict, and performance." *Administrative Science Quarterly* 44(1):1-28.
- Pettigrew, Thomas F. 1998. "Intergroup contact theory." *Annual Review of Psychology* 49:65-85.
- Pfeffer, Jeffrey. 1983. "Organizational demography." *Research in Organizational Behavior* 5:299-357.
- \_\_\_\_\_. 1985. "Organizational demography: Implications for management." *California Management Review* 28(1):67-81.
- Phillips, Nelson, Thomas B. Lawrence, and Cynthia Hardy. 2000. "Inter-organizational collaboration and the dynamics of institutional fields." *Journal of Management Studies* 37(1):23-44.
- Polzer, Jeffrey T., Laurie P. Milton, and William B. Swann, Jr. 2002. "Capitalizing on Diversity: Interpersonal Congruence in Small Work Groups." *Administrative Science Quarterly* 47(2):296-324.
- Porter, Michael E. 1996. "Making Strategy." *Harvard Business Review* 74(6):61-77.
- Portes, Alejandro. 1998. "Social capital: Its origins and applications in modern sociology." *Annual Review of Sociology* 24:1-24.
- Putnam, Robert D. 1993. *Making democracy work: Civic traditions in modern Italy*. Princeton, NJ: Princeton University Press.
- \_\_\_\_\_. 2000. *Bowling alone: The collapse and revival of American community*. NY: Simon & Schuster.
- \_\_\_\_\_. 2007. "E pluribus unum: diversity and community in the twenty-first century the 2006 Johan Skytte Prize Lecture." *Scandinavian Political Studies* 30(2):137-74.
- Reagans, Ray and Bill McEvily. 2003. "Network structure and knowledge transfer: The effects of cohesion and range." *Administrative Science Quarterly* 48(2):240-67.
- Reagans, Ray, Ezra Zuckerman, and Bill McEvily. 2004. "How to make the team: Social networks vs. demography as criteria for designing effective teams." *Administrative Science Quarterly* 49(1):101-33.
- Reagans, Ray and Ezra W. Zuckerman. 2001. "Networks, diversity, and productivity: The social capital of corporate R&D teams." *Organization Science* 12(4):502-17.
- Reardon, Sean F. 2009. "Measures of ordinal segregation." *Research on Economic Inequality* 17(1):129-55.

- Rogers, David L. and Charles L. Mulford. 1982. "The historical development." Pp. 32-53 in *Interorganization coordination: Theory, research, and implementation*, edited by David L. Rogers and David A. Whetten. Ames: Iowa State University.
- Roozen, David A., Jackson W. Carroll, and William McKinney. 1984. *Varieties of religious presence: Mission in public life*. New York: Pilgrim Press.
- Ruef, Martin. 2002. "Strong ties, weak ties and islands: structural and cultural predictors of organizational innovation." *Industrial and Corporate Change* 11(3):427-49.
- Schneider, Jo Anne. 2006. *Social capital and welfare reform: Organizations, congregations, and communities*. New York: Columbia University Press.
- \_\_\_\_\_. 2009. "Organizational social capital and nonprofits." *Nonprofit and Voluntary Sector Quarterly* 38(4):643-62.
- Scott, W. Richard and Gerald F. Davis. 2007. *Organizations and organizing: Rational, Natural, and Open System perspectives*. Upper Saddle River, NJ: Pearson Prentice Hall.
- Shaw, Marvin E. 1981. *Group dynamics: The psychology of small group behavior*. NY: McGraw-Hill.
- Shore, Lynn M., Beth G. Chung-Herrera, Michelle A. Dean, Karen Holcombe Ehrhart, Don I. Jung, Amy E. Randel, and Gangaram Singh. 2009. "Diversity in organizations: Where are we now and where are we going?" *Human Resource Management Review* 19(2):117-33.
- Simons, Tony, Lisa Hope Pelled, and Ken A. Smith. 1999. "Making use of difference: Diversity, debate, and decision comprehensiveness in top management teams." *Academy of Management Journal* 42(6):662-73.
- Smith-Doerr, L. and Walter W. Powell. 2005. "Networks and economic life." Pp. 379-402 in *The handbook of economic sociology, 2nd Ed.*, edited by Neil J. Smelser and Richard Swedberg. Princeton: Princeton University Press.
- Smith, Christian and Michael Emerson. 1998. *American evangelicalism: Embattled and thriving*. Chicago: University of Chicago Press.
- Smith, Jeffrey A., Miller McPherson, and Lynn Smith-Lovin. 2014. "Social distance in the United States: Sex, race, religion, age, and education homophily among confidants, 1985 to 2004." *American Sociological Review* 79(3):432-56.
- Smith, Ken G., Ken A. Smith, Judy D. Olian, Henry P. Sims, Jr., Douglas P. O'Bannon, and Judith A. Scully. 1994. "Top management team demography and process: The role of social integration and communication." *Administrative Science Quarterly* 39(3):412-38.
- Son, Joonmo and Nan Lin. 2008. "Social capital and civic action: a network-based approach." *Social Science Research* 37(1):330-49.
- Stark, Rodney and Charles Y. Glock. 1965. "The 'New Denominationalism'." *Review of Religious Research* 7(1):8-17.
- Tarrow, Sidney. 1994. *Power in movement: Social movements, collective action and politics*. NY: Cambridge University Press.

- Thomas, Stephen B., Sandra C. Quinn, Andrew Billingsley, and Cleopatra Caldwell. 1994. "The characteristics of northern black churches with community health outreach programs." *American Journal of Public Health* 84(4):575-79.
- Thompson, Daniel. 1974. *Sociology of the black experience*. Westport, CT: Greenwood Press.
- Tilly, Charles. 1973. "Revolutions and collective violence." *Center for Research on Social Organization Working Paper* #83.
- Tindall, D. B., Jeffrey Cormier, and Mario Diani. 2012. "Network social capital as an outcome of social movement mobilization: Using the position generator as an indicator of social network diversity." *Social Networks* 34(4):387-95.
- Tortoriello, Marco and David Krackhardt. 2010. "Activating cross-boundary knowledge: The role of simmelian ties in the generation of innovations." *Academy of Management Journal* 53(1):167-81.
- Tsitsos, William. 2003. "Race differences in congregational social service activity." *Journal for the Scientific Study of Religion* 42(2):205-15.
- Tsui, Anne S. and Charles A. O'Reilly. 1989. "Beyond simple demographic effects: The importance of relational demography in superior-subordinate dyads." *Academy of Management Journal* 32(2):402-23.
- Tyler, Tom R. and E. Allan Lind. 1992. "A relational model of authority in groups." *Advances in Experimental Social Psychology* 25:115-91.
- Unruh, Heidi R. and Ronald J. Sider. 2005. *Saving souls, serving society: Understanding the faith factor in church-based social ministry*. New York: Oxford University Press.
- Van der Vegt, Gerben S. and Onne Janssen. 2003. "Joint impact of interdependence and group diversity on innovation." *Journal of Management* 29(5):729-51.
- van Knippenberg, Daan and Michaela Schippers. 2007. "Work group diversity." *Annual Review of Psychology* 58:515-41.
- Wald, Kenneth D. and Allison Calhoun-Brown. 2007. *Religion and politics in the United States*. Lanham, MD: Rowman & Littlefield Publishers.
- Walker, Edward T. and John D. McCarthy. 2010. "Legitimacy, strategy, and resources in the survival of community-based organizations." *Social Problems* 57(3):315-40.
- Walker, Gordon, Bruce Kogut, and Weijian Shan. 1997. "Social capital, structural holes and the formation of an industry network." *Organization Science* 8(2):109-25.
- Warner, R. Stephen. 1988. *New wine in old wineskins: Evangelicals and liberals in a small-town church*. Berkeley: University of California Press.
- Warren, Mark R. 2001. *Dry bones rattling : community building to revitalize American democracy*. Princeton: Princeton University Press.
- Wasserman, Stanley and Katherine Faust. 2008. *Social network analysis: Methods and applications*. New York: Cambridge University Press.
- Weare, Christopher, Juliet Musso, and Kyu-Nahm Jun. 2009. "Cross-Talk: The Role of Homophily and Elite Bias in Civic Associations." *Social Forces* 88(1):147-73.

- Weatherford, Ronald and Carole Weatherford. 1999. *Somebody's knocking at your door: AIDS and the African-American church*. Binghamton, NY: Haworth Pastoral Press.
- Werber, Laura, Kathryn P. Derosé, Blanca X. Domínguez, and Michael A. Mata. 2012. "Religious congregations' collaborations: With whom do they work and what resources do they share in addressing HIV and other health issues?" *Health Education & Behavior* 39(6):777-88.
- White, Douglas R. and Karl P. Reitz. 1983. "Graph and semigroup homomorphisms on networks of relations." *Social Networks* 5(2):193-234.
- Will, Jeffry A. and John K. Cochran. 1995. "God helps those who help themselves?: The effects of religious affiliation, religiosity, and deservedness on generosity toward the poor." *Sociology of Religion* 56(3):327-38.
- Williams, Katherine Y. and Charles A. O'Reilly. 1998. "Demography and diversity in organizations: A review of 40 years of research." *Research in Organizational Behavior* 20:77-140.
- Wilmore, Gayraud S. 1998. *Black religion and Black radicalism: An interpretation of the religious history of African Americans*. Maryknoll, NY: Orbis Books.
- Wilson, John and Thomas Janoski. 1995. "The contribution of religion to volunteer work." *Sociology of Religion* 56(2):137-52.
- Wineburg, Robert J. 2001. *A limited partnership: The politics of religion, welfare, and social service*. New York: Columbia University Press.
- Winship, Christopher and Larry Radbill. 1994. "Sampling weights and regression-analysis." *Sociological Methods & Research* 23(2):230-57.
- Wood, Richard L. 1999. "Religious culture and political action." *Sociological Theory* 17(3):307-32.
- \_\_\_\_\_. 2002. *Faith in action: Religion, race, and democratic organizing in America*. Chicago: University of Chicago Press.
- Wuthnow, Robert. 1999. "Mobilizing civic engagement: The changing impact of religious involvement." Pp. 331-63 in *Civic engagement in American democracy*, edited by Theda Skocpol and Morris P. Fiorina. Washington, DC: Brookings Institution.
- \_\_\_\_\_. 2000. *Linkages between churches and faith-based nonprofits*. Aspen Institute, Nonprofit Sector Research Fund.
- \_\_\_\_\_. 2004. *Saving America?: Faith-based services and the future of civil society*. Princeton, NJ: Princeton University Press.
- Zahra, Shaker A. 2010. "Harvesting family firms' organizational social capital: A relational perspective." *Journal of Management Studies* 47(2):345-66.
- Zenger, Todd R. and Barbara S. Lawrence. 1989. "Organizational demography: The differential effects of age and tenure distributions on technical communication." *Academy of Management Journal* 32(2):353-76.

## Biography

Brad R. Fulton was born September 12<sup>th</sup>, 1972 in Warren, Ohio. He earned a B.S. in Industrial Engineering and Operations Research from the University of California at Berkeley (1994), an M.A. in Social Science from the University of Chicago (2002), an M.A. in Sociology from Duke University (2011) and a Ph.D. in Sociology from Duke University (2015). Fulton is the author/co-author of the following publications: “Black Churches and HIV/AIDS: Factors Influencing Congregations’ Responsiveness to Social Issues” (*Journal for the Scientific Study of Religion*); “Interfaith Community Organizing: Emerging Theological and Organizational Challenges” (*International Journal of Public Theology*); “Predictors of Congregational HIV Programs: Similarities and Differences Compared with Other Health Programs” (*American Journal of Health Promotion*); and “The Role of Bridging Cultural Practices in Racially and Socioeconomically Diverse Civic Organizations” (*American Sociological Review*). Fulton received fellowships from Interfaith Funders, Duke University’s Graduate School, and the Center for the Study of Philanthropy and Voluntarism at Duke University. His research has received awards and honors from the Society for the Study of Social Problems, the Society for the Scientific Study of Religion, the RGK Center for Philanthropy and Community Service, the Association for Research on Nonprofit Organizations and Voluntary Action, Organization Science, the Institute for Operations Research and Management Science, the American Sociological Association, the Academy of Management, and Duke University’s Department of Sociology.