The Role of Religious Congregations in the Mental Health Care System

by

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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

2011
ABSTRACT

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Abstract

This dissertation examines congregations’ sponsorship of social services for people living with mental disorders. Using data from a nationally representative sample of U.S. congregations, the 2000 US Census, and the 2006 General Social Survey, I address three research questions: What proportion of congregations sponsor services for people living with mental disorders?; How do congregational characteristics affect the likelihood that congregations sponsor these services?; How do neighborhood characteristics and community assessments affect the likelihood that congregations sponsor these services?; Does being a member of a congregation that sponsors these services affect their members’ support for government spending on mental health care?

The findings indicate that 8% of congregations sponsor services for people living with mental disorders and that religious ideology affects whether congregations sponsor these services. Congregations located in neighborhoods with disadvantaged populations are more likely to sponsor services if they conduct a needs assessment study of their communities while congregations in neighborhoods with advantaged populations are less likely to sponsor services for people living with mental disorders if they conduct a needs assessment study of their communities. Belonging to congregations that sponsor services for people living with mental disorders does not have a direct effect on their members’ support for government funding of mental health care. It does, however, have
indirect effects. People who belong to congregations that sponsor services for people living with mental disorders and who pray frequently are less likely to support increased government spending on mental health care.
Contents

Abstract ................................................................................................................................. iv

List of Tables .......................................................................................................................... x

Acknowledgements ............................................................................................................... xii

1. Beyond Medicalization: Congregations’ Sponsorship of Social Services for People Living with Mental Disorders ................................................................. 1

   1.1 Introduction .................................................................................................................. 1

   1.2 Theoretical and Empirical Background ...................................................................... 3

      1.2.1 Religion’s Role in Providing Care for People Living with Mental Disorders .... 3

      1.2.2 Congregations and Their Sponsorship of Social Services ............................. 5

      1.2.3 Current Study and Hypotheses ...................................................................... 6

         1.2.3.1 Religious Tradition .............................................................................. 7

         1.2.3.2 Resources ...................................................................................... 9

         1.2.3.3 Clergy’s Education .............................................................................. 9

   1.3 Methods ..................................................................................................................... 10

      1.3.1 Data .................................................................................................................. 10

      1.3.2 Variables .......................................................................................................... 11

         1.3.2.1 Groups ............................................................................................... 11

         1.3.2.2 Social Service Programs ...................................................................... 12

         1.3.2.3 Congregational Characteristics .............................................................. 13

   1.3.3 Statistical Analysis .................................................................................................. 15

      1.3.3.1 Proportions ............................................................................................ 15
2.4 Results................................................................................................................. 45
2.5 Discussion............................................................................................................. 55
2.5.1 Future Research............................................................................................... 59
2.6 Conclusion............................................................................................................ 60

3. Congregations’ Sponsorship of Social Services for People Living with Mental Disorders and Its Effect on Their Members’ Support for Increased Government Spending on Mental Health Care .................................................................................. 61

3.1 Introduction........................................................................................................... 61
3.2 Background and Hypotheses............................................................................... 64
3.2.1 Current Study.................................................................................................... 67
3.3 Methods................................................................................................................ 70
3.3.1 Data .................................................................................................................. 70
3.3.1.1 General Social Survey .................................................................................... 70
3.3.1.2 National Congregations Study ...................................................................... 71
3.3.2 Variables .......................................................................................................... 73
3.3.2.1 Dependent Variable ....................................................................................... 73
3.3.2.2 Congregational Sponsorship of Service ......................................................... 74
3.3.2.3 Congregations’ Religious Tradition ................................................................. 75
3.3.2.4 Individual Characteristics ............................................................................. 76
3.3.3 Statistical Analysis............................................................................................ 78
3.4 Results................................................................................................................... 79
3.5 Discussion............................................................................................................. 84
3.5.1 Future Research............................................................................................... 86
List of Tables

Table 1: Descriptive Statistics of Independent Variables Used in Analysis (N=1,499) ..... 14
Table 2: Proportion of Congregations with Services for People Living with Mental Disorders and 95% Confidence Intervals in Parentheses (N=1,499) ............................................. 17
Table 3: Having a Group or Service for People Living with Mental Disorders Regressed on Religious Affiliation, Congregational Resources, and Characteristics of Head Clergy (Odds Ratios, T-Scores (in Parentheses), and 95% Confidence Intervals (in Brackets) (N=1,450) .................................................................................................................................................. 20
Table 4: Descriptive Statistics of Variables in Analysis (N=1,499) .................................................................................................................. 43
Table 5: Congregations Sponsor Service for People Living with Mental Disorders Regressed on Census Variables (Adjusted Odds Ratios, T-Scores (in Parentheses), and 95% Confidence Intervals (in Brackets) (N=1,449).......................................................................................................................... 47
Table 6: Congregations Sponsor Service for People Living with Mental Disorders Regressed on Census Variables and Religious Tradition (Adjusted Odds Ratios, T-Scores (in Parentheses), and 95% Confidence Intervals (in Brackets) (N=1,449) ........................................................................................................................................ 49
Table 7: Congregations Sponsor Service for People Living with Mental Disorders Regressed on Census Variables, Religious Tradition, and Congregational Resources (Adjusted Odds Ratios, T-Scores (in Parentheses), and 95% Confidence Intervals (in Brackets) (N=1,449) ........................................................................................................................................ 51
Table 8: Congregations Sponsor Service for People Living with Mental Disorders Regressed on Census Variables, Religion Tradition, Congregational Resources, and Interactions between Census Variables and Assess (Adjusted Odds Ratios, T-Scores (in Parentheses), and 95% Confidence Intervals (in Brackets) (N=1,449) ........................................................................................................................................ 54
Table 9: Descriptive Statistics of Variables in Analysis from the Second Wave of the National Congregations Study and the 2006 General Social Survey (N=313) .................................. 77
Table 10: Support for Increased Government Spending on Mental Health Care Regressed on Independent Variables and Interactions, OLS Regression Coefficients, T-Scores (in Parentheses), and 95% Confidence Intervals (in Brackets) (N=313) ................................................. 82
Table 11: Constructs and Operational Definitions of Constructs from US Census Block Group Data
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1. Beyond Medicalization: Congregations’ Sponsorship of Social Services for People Living with Mental Disorders

1.1 Introduction

Mental disorders\(^1\) are an all too common occurrence in the United States. Nearly half of all Americans will meet the criteria for a mental disorder diagnosis in their lifetimes (Kessler et al. 2005). Mental disorders harm the health and well-being of those who suffer from them and their families, and they have detrimental effects on society (e.g. lower levels of work force participation and reduced work hours (Kessler and Frank 1997)). Despite their personal and social costs, less than forty-five percent of the mentally ill seek treatment for their disorder(s) (Wang et al. 2005). Thus, more than half of the people living with a mental disorder do not receive treatment that could allow them to lead more functional lives. In order to address this discrepancy, researchers must understand where and under what conditions people living with mental disorders receive care and support to see if these sources of care can be expanded to meet the needs of more people (U.S. Department of Health and Human Services 1999). This has led researchers to examine the professionals and organizations from which people living with mental disorders seek care (c.f. Wang et al. 2005).

\(^1\) The definition of mental disorders as well as the categorization of mental disorders discussed later in the chapter are based on the guidelines found in *The Diagnostic and Statistical Manual of Mental Disorders, IV-TR* (American Psychiatric Association 2000: xxxi, 27-30).
One surprising finding from these studies is the large amount of care provided by religious clergy (i.e. pastors, priests, rabbis, imams) (Ali, Milstein, and Marzuk 2005; Carroll 2006; Wang, Berglund, and Kessler 2003). Not only do people seek care from clergy, but the practice is viewed favorably by a majority of Americans (Ellison et al. 2006). These studies demonstrate that religious leaders continue to play a large role in the treatment of people living with mental disorders, a finding inconsistent with medicalization theory which posits that since the 19th century, religion’s role in the treatment of such people has declined (Conrad and Schneider 1992). Little research, however, has investigated the other ways that religion continues to play a role in the treatment of people living with mental disorders. This includes the role of religious congregations, which often sponsor social services that target people in need. Only a few studies have examined congregations’ sponsorship of services for people living with mental disorders. These studies are based on non-representative samples of congregations, which make it difficult to understand the role that US congregations play in providing care for people living with mental disorders. For example, we do not know the proportion of US congregations that sponsor services for people living with mental disorders and which congregations are more likely to sponsor them.

This study attempts to close this gap in the literature by estimating the proportion of congregations that sponsor services that target people living with mental disorders. The study also examines the associations between congregational
characteristics (e.g. religious tradition, resources, and head clergy) and sponsorship of these services. Along with previous research on clergy’s role as mental health care providers, this study provides a more holistic understanding of religious congregations as sites of care for people living with mental disorders. It also provides evidence for the continued role of religion in providing care for people living with mental disorders.

1.2 Theoretical and Empirical Background

1.2.1 Religion’s Role in Providing Care for People Living with Mental Disorders

Theoretically, religion is viewed as having no role in the care or treatment of people living with mental disorders. Medicalization theory posits that since the 19th century, health care professionals have come to have the power and authority over the diagnosis and treatment of numerous behaviors and conditions that were once under the jurisdiction of other professionals (such as clergy). Proponents of this theory, which focuses primarily on the United States, posit that circumstances in the 19th and early 20th century led to a rejection of non-medical institutions, particularly religious institutions as authorities that had the power to define and treat certain conditions including mental disorders (Conrad and Schneider 1992). An underlying assumption of this theory is that Americans prefer a pragmatic, rationalistic (i.e. secular) approach to solving problems. This leads them to reject religious authorities’ definitions and treatments of mental disorders in favor of those provided by secular health care professionals (Conrad 2007: 8; Conrad and Schneider 1992:263). Thus, it seems unlikely that people living with
mental disorders would seek out care from religious organizations or leaders. Yet, empirical research indicates that religious clergy remain a viable source of treatment for mental disorders. Data from a nationally representative epidemiological survey indicate that one quarter of the people who ever sought care for mental disorders sought it from clergy (Wang et al. 2003:653). In addition, American clergy report spending more hours per week engaging in counseling than engaging in evangelism or being involved in community affairs (Carroll 2006:107). Public opinion surveys indicate that Americans believe that clergy are appropriate providers of care for people with symptoms of mental disorders, except people who have severe symptoms associated with schizophrenia (Ellison et al. 2006). Despite the rise in a modern, medical understanding of mental disorders, people living with them continue to see clergy as a viable option for treatment. The acceptance of clergy as a source of care raises questions about how other aspects of religion, including religious organizations engage in activities to facilitate the treatment of people living with mental disorders.

One way to expand upon the previous empirical research on clergy is to examine the role that religious organizations, particularly religious congregations, play in caring for people living with mental disorders. Religious congregations are intergenerational organizations that have a relatively stable core of members; and more Americans belong to congregations than any other type of voluntary organization (Chaves 2004). Their
prominence in American society and also the extent to which they currently engage in 
sponsoring social services that target people in need makes them an ideal case to study.

1.2.2 Congregations and Their Sponsorship of Social Services

Congregations play an important role as sponsors of social services for people in 
need (Chaves and Tsistos 2001); a recent study estimates that 82% of congregations 
sponsor social services (Chaves and Anderson 2008:438). Many of these programs are 
aimed at meeting the short-time emergency needs of people such as food, clothing and 
shelter though some provide health-related programs, usually preventative care 
programs (Trinitapoli, Ellison, and Boardman 2009). Reviews of the effectiveness of 
faith-based and faith-placed health services find that they are effective in changing 
health behaviors and improving the health of congregational members (Campbell 2007; 
Dehaven et al. 2004). These studies, however, focus on preventative medical care 
programs (e.g. weight control, blood pressure checks), and thus do not thoroughly 
examine congregations’ role as sponsors of services that target people living with mental 
disorders.

A few studies have tried to assess congregations’ sponsorship of people living 
with mental disorders. Based on non-representative samples, these studies provide 
contrasting images of congregational sponsorship of these services. Some studies 
suggest that congregations are willing to sponsor groups and programs for people living 
with substance abuse disorders and those suffering from nervous breakdowns and
delusions (Blank et al. 2002; Koenig 2005). These studies suggest that congregations sponsor mental health services just as they would other types of social services (e.g. shelters, clothing drives). Others note, however, that these services are less likely to be sponsored by congregations than other services due to stigma associated with mental disorders (Eberly 1996).

An empirical investigation using data from a nationally representative sample of congregations is needed to clarify congregations’ roles as sponsors of services for people living with mental disorders (Blank et al. 2002; Taylor et al. 2000). It is also needed to identify the congregational and clergy characteristics associated with sponsoring these services.

1.2.3 Current Study and Hypotheses

The current study provides an assessment of congregations’ sponsorship of services that target people living with mental disorders. In the first part of the study, I estimate the proportion of congregations that sponsor services that target people living with mental disorders. This estimate is then compared to estimates of congregations’ sponsorship of other social services. This comparison allows us to see how common these services are compared to social services that target other populations in need of services.

The second part of the study identifies the congregational characteristics that are associated with sponsoring these services. These include congregations’ religious
traditions, their resources, and also the characteristics of their clergy. In previous studies, these characteristics have been associated with congregations’ sponsorship of social services (cf. Trinitapoli et al. 2009).

### 1.2.3.1 Religious Tradition

Congregations’ religious traditions may affect their understanding of mental disorders, appropriate treatments options, and in turn, their willingness to sponsor services for people living with mental disorders. Eisenstadt (2000) argues that variation exists in the extent to which organizations adhere to secular institutions and their definition of social problems. Some religious traditions support the modern, medical understanding of mental health and the potential importance of services, while others dispute it and define mental disorders (and legitimate treatments) in light of their own beliefs (often referred to as “pockets of resistance.” (see Conrad 2007:158)). This in turn, has consequences for what congregations within these religious traditions view as appropriate treatment options.

One example of this involves the two largest branches of Protestantism—mainline Protestants and white conservative Protestants. Mainline Protestants in the 19th and early 20th centuries accepted the secular understanding of mental health problems and courses of treatment (Meador 2003). Meanwhile, evangelical Protestants disputed this secular understanding of mental disorders and remained wedded to the idea that mental disorders arise from sin and that religious treatments, led by religious
professionals are the appropriate source of care (Adams 1970). These sentiments, acceptance and opposition to medical definitions of mental health care, may still be operating today. Thus, in congregations belonging to white evangelical Protestant denominations, congregational leaders and members may believe that treating mental illness, as defined by secular medical professionals, is not something in which the church should engage. Whereas congregations belonging to mainline Protestant traditions, which accept the modern medical view of mental disorders, may be more open to sponsoring groups and programs that target such groups. This is not to say that white, evangelical Protestant denominations will not treat the religious problems that the medical establishment would define as mental disorders. Instead, they would focus on understanding and treating the symptoms as religious in nature. This decision is further affected by the ties between congregations that sponsor these services and secular institutions. Most congregations serve as co-sponsors of groups and social services with secular institutions including hospitals and government agencies (Chaves and Tsitsos 2001). Due to the conflicting understanding of mental disorders, it is unlikely that evangelical Protestant congregations would be willing to partner with groups that hold an alternate view of mental disorders. This leads to the first hypothesis:

H1: White, evangelical Protestant congregations are less likely to sponsor services targeted at people living with mental disorders than mainline Protestant denominations.
1.2.3.2 Resources

A key ingredient to congregations’ ability to sponsor social services is having the resources to undertake such activities. For groups and programs, these include having the physical space in which the group or program can operate, the financial resources to fund them, and the human resources to administer these programs. Resources may be particularly pertinent due to the amount of time clinical guidelines stipulate for treating people with mental disorders (see Wang et al. 2005:630). Groups and programs that target these groups may need significant resources to maintain their program for long periods of time and to maximize their effectiveness. This leads to the second hypothesis:

H2: Congregations with higher levels of resources (i.e. physical space, financial resources, and human resources) are more likely to sponsor services for people living with mental disorders than congregations with fewer resources.

1.2.3.3 Clergy’s Education

In addition to providing counseling, clergy largely determine the directions of their congregation, and have control over decisions regarding sponsorship of social services (Hall 1997). Research on congregations’ provision of social services finds that clergy’s level of education has an important effect on congregations’ sponsorship of health-related programs (Trinitapoli et al. 2009). Higher levels of education are associated with increased awareness of the need for programs to serve the congregation and, perhaps, the broader community—and also the skills to form partnerships and
organize and manage projects. Higher levels of education may also lead to a better understanding of the importance of psychological care for people living with mental disorders. Typically, the higher educated are more aware of mental disorders and more likely to seek care than those with lower levels of education (Wang et al. 2005). This leads to the third and final hypothesis:

H3: Congregations with highly-educated head clergy are more likely to sponsor services targeting people living with mental disorders than congregations led by clergy with less education.

1.3 Methods

1.3.1 Data

Data for this analysis are drawn from the second wave of the National Congregations Study (NCS). The NCS is a survey of a nationally representative sample of U.S. congregations generated in association with the General Social Survey (GSS), a nationally representative sample of English and Spanish speaking non-institutionalized adults in the United States (Davis, Smith, and Marsden 2007). In 2006, interviewers asked GSS respondents who said they attend religious services at least once a year to report the names and locations of their religious congregations. The congregations named by these respondents constitute the sample. This sampling strategy exploits the insight that the organizational affiliations of a representative sample of people constitute a representative sample of organizations (McPherson 1982). Thus, one can develop a
nationally representative sample of U.S. congregations from a nationally representative sample of Americans.\(^2\)

Nominated congregations were contacted and one key informant per congregation, in most instances clergy (75%), participated in forty-five minute telephone interviews in which they answered questions about the activities, services, worship styles, and social composition of their congregations (Chaves and Anderson 2009). The technique of using key informants to provide information about objective features of their congregations (e.g. programs they provide) has been found to be reliable and valid (cf. Frenk et al. 2011; McPherson and Rotolo 1995). The protocols for conducting the second wave were approved by the University of Arizona’s institutional review board. Informed oral consent was obtained from all respondents. The response rate for the second wave of the NCS is 78% and analysis indicated no substantial non-response biases (Chaves and Anderson 2008).

1.3.2 Variables

1.3.2.1 Groups

NCS informants were asked, “Within the past 12 months, have there been any groups or meetings or classes or events specifically focused on the following purposes or activities?” and then read a list of eighteen programs.\(^3\) After responding to these

\(^2\) Drawing a nationally representative probability sample of congregations is not otherwise possible because there is no complete list of U.S. congregations (Chaves 2004).

\(^3\) None of these groups targeted people living with mental disorders.
questions, congregational informants were asked, “Does your congregation have any other groups, meetings, or classes besides those you’ve already mentioned?” If respondents responded in the affirmative, they were asked to describe the three best attended groups in an open-ended way. These responses allow us to examine groups that target people living with mental disorders.

1.3.2.2 Social Service Programs

After discussing groups, respondents were asked about their congregations’ social service programs. Due to concerns about capturing information about all of congregations’ formal social service participation, respondents were asked two questions about their congregations’ participation in social service programs: “Has your congregation participated in or supported social service, community development or neighborhood organizing projects of any sort within the past 12 months?” and “Within the past 12 months, has your congregation engaged in any human service projects, outreach ministries, or other activities intended to help people who are not members of your congregation?” If respondents answered in the affirmative to either question, they were asked to describe up to 11 programs in an open-ended way.

We used the verbatim group and program descriptions to code dummy variables indicating the target group of the services. The Diagnostic and Statistical Manual of Mental Disorders, IV-TR (American Psychiatric Association 2000) was used to identify services that targeted people living with mental disorders and classify disorders as falling on...
Axis I\textsuperscript{4} or Axis II.\textsuperscript{5} When it was not possible to tell which mental disorder was targeted (for example, when an informant said they had a support group for people with mental health issues) they were placed in a category titled, “Other emotional issues.” The end result of the coding was a set of variables coded for each group and program mentioned by NCS informants. The variables were then aggregated to create a set of indicators that equals 1 if congregations had any program or group with that characteristic and 0 if it has no programs with that characteristic. These are the variables of interest for the analysis.

1.3.2.3 Congregational Characteristics

Congregations were aggregated into three religious traditions: mainline Protestant, white conservative Protestant, and other\textsuperscript{6} (Steensland et al. 2000). In the regression models, white conservative Protestant serves as the reference category. A number of indicators of congregations’ resources are included in the regression models: size of congregation (logged), whether the congregation owns their own building (1=yes), the congregations’ budget for the last fiscal year (0=$0 to 5=$3,750,001+), and the

\textsuperscript{4} Axis I disorders are defined as “Clinical disorders” or “Other conditions that may be a focus of clinical attention” and include, but are not limited to, substance-related disorders, anxiety disorders, eating disorders, and mood disorders (American Psychiatric Association 2000:27-28).

\textsuperscript{5} Axis II disorders are defined as “Personal Disorders” or “Mental retardation” and include, but are not limited to mental retardation, antisocial personality disorders, and obsessive-compulsive personality disorders (American Psychiatric Association 2000:27, 29).

\textsuperscript{6} The focus on the Protestant traditions versus Catholics, black Protestant and non-Christian traditions is due to the focus on variation within the Protestant traditions between mainline and white conservative Protestants. Additional models with the following religious categories: (white, conservative Protestant, mainline Protestant, Roman Catholic, black Protestant, and other) did not vary significantly from those reported in this chapter.
number of non-clerical staff in the congregation (0=0 staff to 4=21+ staff). Three characteristics of the head clergy are included in the models: the clergy’s sex (1=female), age (continuous), and whether the head clergy graduated from seminary or theological school (1=yes). Table 1 presents the descriptive statistics for the variables used in the regression analysis.

Table 1: Descriptive Statistics of Independent Variables Used in Analysis (N=1,499)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Mean or Proportion(^1)</th>
<th>Standard Deviation</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religious Tradition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White, conservative Protestant</td>
<td>1=White, conservative Protestant; 0=No</td>
<td>0.48</td>
<td>0.50</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>White, mainline Protestant</td>
<td>1=White, mainline Protestant; 0=No</td>
<td>0.19</td>
<td>0.39</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Other(^2)</td>
<td>1=Other; 0=No</td>
<td>0.33</td>
<td>0.47</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Congregational resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td>Number of regularly participating adults (Logged)</td>
<td>4.07</td>
<td>1.13</td>
<td>1.61</td>
<td>9.55</td>
</tr>
<tr>
<td>Own building</td>
<td>1=Yes; 0=No</td>
<td>0.90</td>
<td>0.30</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Budget</td>
<td>Congregations’ budget (0=$0; 1=$1-$750,000; 2=$750,001-$1,500,000; 3=$1,500,001-$2,250,000; 4=$2,250,001-$3,750,000; 5=$3,750,001+)</td>
<td>0.99</td>
<td>0.62</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Number of full-time Staff</td>
<td>Number of full-time paid staff (0=0; 1=1; 2=2-10; 3=11-20; 4=21+)</td>
<td>0.99</td>
<td>0.89</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Head Clergy Characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clergy’s sex</td>
<td>1=Female; 0=Male</td>
<td>0.08</td>
<td>0.27</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Clergy’s age</td>
<td>In years (Continuous)</td>
<td>53.31</td>
<td>12.00</td>
<td>24</td>
<td>89</td>
</tr>
<tr>
<td>Clergy graduated from seminary or theology school</td>
<td>1=Yes; 0=No</td>
<td>0.62</td>
<td>0.48</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

\(^1\) The proportion gives the percentage of congregations with a given characteristic. The data here are weighted by W2.

\(^2\) Includes Black Protestant, Roman Catholic, and non-Christian religious traditions.
1.3.3 Statistical Analysis

1.3.3.1 Proportions

The probability that a congregation appears in the sample is proportional to its size, because congregations are nominated by people attached to them. Thus, larger congregations are more likely to be nominated by GSS respondents than smaller congregations. Because larger congregations are over-represented by a known degree, this bias can be overcome with a probability weight. The weight allows us to estimate the proportion of congregations that have groups or programs for people living with mental disorders. These proportions are produced by using the SVYSET commands in Stata 11 (StataCorp 2009).

1.3.3.2 Regression Analysis

Four multivariate regression models are used to determine the estimated log odds of sponsorship of programs that target people living with mental disorder. In each set of models, the variables are organized by the classes of factors (i.e. religious tradition, congregational resources, and clergy characteristics) hypothesized to affect sponsorship

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7 Chaves and Anderson (2009:6) provide an example to help explain this issue, “Suppose that the universe contains only two congregations, one with 1,000 regular attenders and the other with 100 regular attenders. Suppose further that the 1,000-person congregation supports a food pantry and the 100-person congregation does not. We can express this reality in one of two ways. We can say that 91 percent of the people are in a congregation that supports a food pantry (1,000/1,100), or we can say that 50 percent of the congregations support a food pantry (1/2). Both of these are meaningful numbers. Ignoring the over-representation of larger congregations, a percentage or mean from the NCS is analogous to the 91 percent in this example. Weighted inversely proportional to congregational size, a percentage or mean is analogous to the 50 percent in this example. The first number views congregations from the perspective of the average attender, which gives greater weight to congregations with more people in them; the second number views them from the perspective of the average congregation, ignoring size differences.”
of these groups and programs, as specified by our model. Classes of factors are introduced individually in each of the first three models, and the final model includes all three classes of models.

Missing values for independent variables are imputed using the multiple imputation commands in Stata 11 (StataCorp 2009) to produce thirty versions of the dataset. All empirical estimates are based on thirty versions of complete data sets. Diagnostic tests indicate no important misspecification related to the probability-proportional-to-size feature of the sample and thus a probability weight is not used in the regression models (Winship and Radbill 1994).

1.4 Results

1.4.1 Proportions

Table 2 presents the proportion of congregations that sponsor groups and programs that target people living with mental disorders. Due to the small proportion of congregations that sponsor groups and programs for Axis I disorders, only one disorder

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8 As with other social surveys, the National Congregations Study had missing data which could bias the results. Thus, for the independent variables, we decided to use a random multiple imputation technique that allows us to retain cases otherwise lost and which proves to provide more efficient statistical estimates. Multiple imputation involves imputing values for each missing value in a data set \( m \) times. In each of the \( m \) created data sets, the observed (non-missing) values are not transformed while the missing data are drawn randomly from the conditional joint distribution of the other variables in the data set. Each of the \( m \) data sets is analyzed separately. The results from these analyses are combined to account for within sample variation in the data and between sample variation, created by multiple imputation. The random imputation process retains the original variability found in the data and thus reflects the fundamental uncertainty of our estimates, thus making it preferable to other techniques such as imputing the mean or using linear regression models. We set the number of imputed datasets at thirty to generate more efficient coefficient estimates (Bodner 2008).
category contains enough cases to separate it from the other disorders—substance-related disorders (6%; 95% Confidence Interval [CI], 4% - 7%). Along with the other small number of groups and services that target people with other Axis I disorders, the proportion of congregations that sponsor groups and programs for people living with Axis I disorders remains around 6% (95% CI, 5% - 8%). Among Axis II disorders, less than one percent of congregations sponsor groups or programs for people living with mental retardation (1%; 95% CI, .3% - 1.4%). Combining Axis I and Axis II reveals that eight percent of congregations (95% CI, 6% - 10%) sponsor groups or programs for people living with mental disorders.

Table 2: Proportion of Congregations with Services for People Living with Mental Disorders and 95% Confidence Intervals in Parentheses (N=1,499)

<table>
<thead>
<tr>
<th>Disorders</th>
<th>Groups</th>
<th>Programs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Axis I: Clinical Disorders</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substance-related disorders</td>
<td>0.03</td>
<td>0.03</td>
<td>0.06</td>
</tr>
<tr>
<td>(0.02 – 0.04)</td>
<td>(0.02 – 0.04)</td>
<td>(0.04 – 0.07)</td>
<td></td>
</tr>
<tr>
<td>Other disorders</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>(0.001 – 0.01)</td>
<td>(0.001 – 0.01)</td>
<td>(0.004 – 0.02)</td>
<td></td>
</tr>
<tr>
<td>All Axis I disorders</td>
<td>0.03</td>
<td>0.04</td>
<td>0.06</td>
</tr>
<tr>
<td>(0.02 – 0.04)</td>
<td>(0.02 – 0.05)</td>
<td>(0.05 – 0.08)</td>
<td></td>
</tr>
<tr>
<td><strong>Axis II: Personality Disorders and Mental Retardation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Axis II disorders</td>
<td>0.001</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>(-0.0005 – 0.0033)</td>
<td>(0.002 – 0.012)</td>
<td>(0.003 – 0.014)</td>
<td></td>
</tr>
<tr>
<td>Other emotional issues (&quot;anger,&quot; &quot;mental health issues&quot;)</td>
<td>0.002</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>(0.0002 – 0.003)</td>
<td>(0.002 – 0.02)</td>
<td>(0.003 – 0.01)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>0.03</td>
<td>0.05</td>
<td>0.08</td>
</tr>
<tr>
<td>(0.02 – 0.04)</td>
<td>(0.03 – 0.06)</td>
<td>(0.06 – 0.10)</td>
<td></td>
</tr>
</tbody>
</table>

1 The proportion gives the percentage of congregations with groups or programs for people living with mental disorders. The data here are weighted by W2.

2 Other disorders include anxiety disorders; childhood disorders; delirium, dementia, and amnestic, and other cognitive disorders, eating disorders, and mood disorders.
The proportion of congregations that sponsor services for people living with mental disorders is smaller than the proportion of congregations that provide any type of health program (22%) (Chaves and Anderson 2009). The proportion is slightly more than those that sponsor programs and activities for people living with HIV/AIDS (5.6%), a chronic disease that is not as prevalent as mental disorders (CDC 2009; Frenk and Trinitapoli 2011). Based on a conservative estimate of the number of congregations in the United States (331,000), about 26,500 (95% CI, 19,900 – 33,100) congregations sponsor services that target people living with mental disorders.

1.4.2 Regression Analyses

Table 3 presents exponentiated logistic regression coefficients (odds-ratios) for sponsorship of groups and programs that target people living with mental disorders. Model 1 assesses the congregations’ religious tradition. As hypothesized, mainline Protestants are significantly more likely to sponsor such programs than white, conservative Protestant congregations. Model 2 assesses the congregations’ resources. Contrary to our hypothesis, congregational resources are not associated with sponsoring a group or program that targets people living with mental disorders. Model 3 assesses the characteristics of head clergy. As hypothesized, clergy who graduated from a seminary or theological school are significantly more likely to head congregations that

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9 This estimate comes from Hadaway and Marler (2005:310).
sponsor these programs than clergy without that level of education. In model 4, we combine all three classes. One of the previous significant findings remains—mainline Protestant congregations are more likely to sponsor these groups and programs than white, conservative Protestant congregations (Odds ratio [OR]=1.68; p<.05). Congregations with head clergy with a seminary or theology degree, however, are not more likely to sponsor them as well compared to congregations with clergy without a seminary or theology degree (OR=1.51; p>.05).
Table 3: Having a Group or Service for People Living with Mental Disorders Regressed on Religious Affiliation, Congregational Resources, and Characteristics of Head Clergy (Odds Ratios, T-Scores (in Parentheses), and 95% Confidence Intervals (in Brackets) (N=1,450)

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Religious Affiliation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White, mainline Protestant</td>
<td>1.86***</td>
<td>1.68*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(3.31)</td>
<td>(2.53)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[1.29 – 2.69]</td>
<td>[1.12 – 2.50]</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Congregational</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td>1.03</td>
<td>1.19</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.39)</td>
<td>(1.74)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.88 – 1.22]</td>
<td>[0.98 – 1.45]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Own building</td>
<td>2.05</td>
<td>1.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.52)</td>
<td>(1.28)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.81 – 5.17]</td>
<td>[0.72 – 4.71]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual budget</td>
<td>1.10</td>
<td>1.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.99)</td>
<td>(0.52)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.91 – 1.32]</td>
<td>[0.87 – 1.28]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of full-time staff</td>
<td>1.30*</td>
<td>1.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2.25)</td>
<td>(1.72)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[1.03 – 1.64]</td>
<td>[0.97 – 1.59]</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Head Clergy</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clergy’s sex</td>
<td>1.11</td>
<td>1.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.30)</td>
<td>(0.11)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.57 – 2.14]</td>
<td>[0.52 – 2.08]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clergy’s age</td>
<td>1.003</td>
<td>1.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.42)</td>
<td>(0.84)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.99 – 1.02]</td>
<td>[0.99 – 1.02]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clergy graduated from</td>
<td>2.44***</td>
<td>1.51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>seminary or theological</td>
<td>(3.36)</td>
<td>(1.44)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>school</td>
<td>[1.45 – 4.10]</td>
<td>[0.86 – 2.67]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-556.28</td>
<td>-553.02</td>
<td>-561.63</td>
<td>-532.66</td>
</tr>
</tbody>
</table>

*p<.05; **p<.01; ***p<.001

1 The “other” religious category contains congregations from a wide array of religious traditions (e.g, Jewish, Roman Catholic, etc.), which makes the coefficient uninterpretable. Thus, it is not reported in the table.

2 The reference category is “White, conservative Protestant.”

**1.5 Discussion**

This paper expands previous research examining religion’s role in the treatment of people living with mental disorders. In addition to care provided by clergy, religious
congregations as a whole are engaging in the care and treatment of people living with mental disorders. Despite claims about the demise of religion’s involvement in treating and caring for people living with mental disorders during the 19th and 20th century, evidence suggests that religious leaders and organizations are still actively involved. The role of clergy and congregations in the care and treatment of people living with mental disorders has been overlooked, and additional research is needed to understand the extent to which religious leaders and organizations are involved in the mental health care system. The services that congregations sponsor can assist people living with mental disorders with their recovery process and hopefully lead to them leading more functional lives (Doub, Morrison, and Goodson 2010). By enabling the recovery process, congregations are decreasing the government’s financial burden for caring for people living with mental disorder, which in 2005, spent $135 billion on treatment for mental health and substance abuse (Mark et al. 2011).

The proportion of congregations that are sponsoring services, however, is relatively small (8%; about 26,000 congregations). It is smaller than the proportion of congregations that provide health-related programs (22%), but more than the proportion that provide programs and activities for people living with HIV and AIDS (5.6%) (Frenk and Trinitapoli 2011). This supports anecdotal evidence that congregations, through their sponsorship of social services, provide limited assistance to people living with mental disorders (Eberly 1996) despite the fact that epidemiological studies indicate that
over half of Americans at one time experience a mental disorder (Kessler et al. 2005). By this measure, few congregations are responding to the needs of people living with mental disorders even though many congregations presumably include people living with mental disorders.

Coupled with previous epidemiological research indicating that clergy devote on average three hours per week to counseling (Carroll 2006:107), it appears that the bulk of congregations’ care for people living with mental disorders come from individual clergy rather than formal groups or social services. The reliance on clergy is problematic, because clergy can only provide counseling and care to a small number of people during their work day. Whereas a one hour support group has the potential to assist eight or ten people living with a mental disorder, clergy may only be able to counsel one person during that same period.

A key finding of this investigation is the large amount of attention that people living with substance abuse disorders receive from congregations. People living with substance abuse disorders’ are less likely to seek professional medical care than people diagnosed with other mental disorders (Wang et al. 2005:609). This is probably due to the unwillingness of health insurers to cover treatment for substance disorders and the fragmented nature of systems of care for people living with those disorders (McCarty and Rieckmann 2010:285). An inspection of NCS verbatim reports reveals that 60% of the substance abuse services were Alcoholics Anonymous (AA) or Narcotics Anonymous
(NA) chapters. AA and NA are widely studied support groups and research has found that these programs are often successful in helping people with substance abuse problems remain abstinent (Fiorentine 1999; Vaillant 2003). To the extent that congregations might play a more central role in the provision of groups and services that target people with substance abuse disorders, it is important to ask why these groups are so popular among congregations. One potential reason is that although these groups were not founded on a particular religious tradition, they do contain a spiritual component. One of the AA’s recovery steps requires people to recognize a power greater than themselves from which they can draw strength. This power is left undefined, and as noted in Step 3 of the 12 step process, the power is referred to as, “…God as we understood Him” (Alcoholics Anonymous 2001:59). Collaborations between congregations and health professionals are often successful when health behaviors are discussed in relation to the religious worldview of the congregation (Campbell et al. 2007). Congregations may be more willing to accept and sponsor services that acknowledge a religious or spiritual component for recovery. If this is true, congregations may be more likely to provide services that target people living with mental disorder if the group or program running the service incorporates some aspect of religiosity or spirituality into treatment or recovery. As with AA and NA, the groups and programs would not need to present a religious understanding of mental disorders,
but could acknowledge the religious worldview of people seeking care or the possibility of using religion and God as coping mechanisms.

The regression models assessed three hypotheses about the associations between congregational characteristics and sponsorship of services for people living with mental disorders. Religious tradition plays a significant role in the likelihood that congregations have services for people living with mental disorders. As hypothesized, mainline Protestant congregations were more likely to sponsor groups and services for people living with mental disorders than white, conservative Protestant congregations (H1). White, conservative Protestants, who are less accepting of secular definitions of and treatments for mental disorders are less likely to provide programs targeting people living with mental disorders.

Although this paper presents evidence that contradicts one of the key underlying assumptions of medicalization theory (the loss of religious leaders and organizations’ role as providers of care for people living with mental disorders) the regression results do support medicalization theory. The acceptance among mainline Protestants of the modern, medical definition of mental disorders indicates the extent to which medicalization of personal problems has advanced. Behaviors or symptoms once defined as personal problems, and thus falling under the jurisdiction of religious professionals, are now viewed as mental disorders, which do not require a strictly religious doctrine to achieve wellness (Abbott 1980).
The finding regarding white, conservative Protestants is also in line with medicalization theory. Recent research on medicalization theory, specifically on the idea of “pockets of resistance,” suggests that medicalization is incomplete within society. Small, sectarian groups such as Scientologists resist the medicalization of personal problems and are quite hostile to mental health professionals (Conrad 2007; Schaefer and Zellner 2008). This study suggests that white, conservative Protestants may be a pocket of resistance. Questions remain though about the degree to which groups such as Scientologists and white, conservative Protestants can be viewed as responding to mental disorders in a similar manner. For example, studies indicate that at least some evangelical Protestant clergy are interested in collaborating with secular mental health professionals (cf. McRay et al. 2001). Clergy interested in collaborating report that they want mental health professionals to have a basic understanding of their theological beliefs and concepts and want the collaboration to be a partnership between professionals—not a relationship dominated by mental health professionals. The clergy do not reject secular mental health professionals’ authority over mental disorders, but instead require recognition that clergy have a role to play in improving the well-being of parishioners. This willingness to collaborate suggests that a continuum exists in the extent to which religious groups’ beliefs about mental disorders are medicalized. Comparative work about these groups’ beliefs about mental disorders and acceptable
treatment options could help to clarify the relationship between religious tradition and mental disorders.

The second hypothesis was not supported by the data. There was no correlation between congregational resources and sponsorship of groups and programs that target people living with mental disorders. Although the resource measures in this study were unrelated to programs for people living with mental disorders, this hypothesis merits additional study before rejecting it. Congregational resources take many forms and it is possible that resources other than those included in this study are relevant to the decision to offer services for people living with mental disorders.

The third hypothesis was not supported by the data. Having highly educated head clergy (those that graduated from a seminary or theological school) did not increase the odds that a congregation sponsors groups and programs targeting people living with mental disorders. This runs counter to previous studies of congregations’ sponsorship of social services, including health programs which hypothesize that educated clergy have the knowledge to seek out collaborating partners to address health needs with their congregations and funding sources to maintain these groups and programs (cf. Trinitapoli et al. 2009). Unlike previous studies, the measure of clergy’s education focused on religious education (i.e. having a degree from a seminary or
theology school) rather than secular education. In addition, it does not provide information about whether clergy took pastoral counseling seminars, and thus may be more sensitive to the mental health needs of their parishioners and their neighbors.

Although the link between high levels of education and knowledge of mental disorders is well documented, future research needs to assess whether this knowledge translates to a willingness on the part of clergy to engage in services for people living with mental disorders. Research should also examine clergy’s involvement in pastoral counseling classes as another factor in their decision to offer these services.

The regression results bring to light the need to better understand the decision-making processes behind sponsoring groups and programs. Although this study is able to assess the correlations between congregational characteristics and having a program or group of interest, it is not possible to examine the processes by which congregations decide to sponsor services for this program of people. Additional research, building on qualitative research that has examined the mechanisms behind congregations’ decisions to provide social services (cf. Cnaan 2002).

1.5.1 Limitations

Although this study provides a clearer picture of the role of religious congregations in the treatment of people living with mental disorders, the study does

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10 In the first wave of the NCS, respondents were asked about their head clergy’s highest level of education. This question was not repeated in the second wave of the NCS.
not encompass all the other types of religious organizations that are engaged in care of
the mentally ill. Although other faith-based organizations, such as national
organizations that are associated with a religious group (e.g. Lutheran Social Services),
are involved in the care for people living with mental disorders, they are beyond the
scope of this study (Koenig 2005:171-172). The focus of the current study is on religious
congregations, the most visible and active voluntary organizations in the U.S.

Respondents were not directly asked if they had groups and programs that
targeted people living with mental disorders. Due to the numerous topics covered in the
survey instrument, key informants may have suffered interviewer fatigue and failed to
report all the programs offered by their congregations (because each report would lead
to additional probes for information about the group or program). Thus, our estimates
may undercount the proportion of congregations that sponsor these groups and
services. One way to circumnavigate this problem is to directly ask key informants
about the groups and programs they provide for people living with mental disorders.
This may, however, produce estimates that are biased in the opposite direction.
Respondents presented with a checklist may “over-claim” the number of groups and
programs they provide (Calsyn and Winter 1999). It is difficult to address concerns
about bias other than to say that the estimates presented in this paper are conservative.

The NCS did not ask questions about the mental health of congregational
members and whether people in the congregation openly discussed their status as a
person living with a mental disorder. As suggested by the contact hypothesis, in which people who know and engage in relationships with stigmatized people are less likely to discriminate against them, this may actually increase the likelihood that they sponsor social services that target them. For example, congregations that have openly HIV positive people are more likely to sponsor programs for people living with HIV/AIDS (Frenk and Trinitapoli 2010). People living with mental disorders may not be willing to discuss their diagnosis, because of stigmatization (Bruce et al. 1997). Even clergy, who are often sought out by people living with mental disorders, have stereotypical views about the dangers of people living with mental disorders (Leavey, Loewenthal, and King 2007). This creates environments where the only knowledge about people living with mental disorders comes from negative stereotypes, which decreases the likelihood that congregations will sponsor groups and programs that target them.

1.6 Conclusion

In addition to clergy providing counseling services, congregations engage in the care and treatment of people living with mental disorders by sponsoring services that assist them. In most instances, these services are substance abuse programs that have spiritual dimensions. Despite the assumptions underlying medicalization theory, this paper provides further evidence for religion’s continual role in the care and treatment of people living with mental disorders.
2 Neighborhood Characteristics, Community Assessments, and Congregations’ Sponsorship of Services for People Living with Mental Disorders

2.1 Introduction

During the last decade, interest has grown in congregations’ sponsorship of social services, particularly health-related services (i.e. health education, prevention screenings, services for the ill). Research has provided insight into the extent to which U.S. congregations sponsor these services (Chaves and Anderson 2008; Trinitapoli, Ellison, and Boardman 2009) and also the effectiveness of them (Campbell et al. 2007; DeHaven et al. 2004). At the same time, there are increasing calls for congregations to take a larger role in the provision of social services, including health-related services. This includes calls for the federal government to help unleash the “potential army of volunteers” by assisting congregations in the process of providing services (U.S. Congress 2008:44). One of the primary reasons for these calls is that congregations, particularly those in disadvantaged communities, are assumed to know the needs of their communities and can help provide services to alleviate those needs (cf. Voss 1996).

Yet, empirical findings suggest that the assumption that congregations sponsor social services based on the needs within their communities is weak. Although congregations located in census tracts with higher proportions of people living below the poverty line sponsor more social services in general (Chaves and Tsitsos 2001), they are not more likely to sponsor health services. In fact, they are less likely to do so
(Trinitapoli et al. 2009). These findings suggest that congregations currently involved in such programs may not be responding to the full range of their communities’ needs. This study attempts to clarify the relationship between congregations’ geographic locations and their sponsorship of services. We focus on a single type of health-related service—those that target people living with mental disorders. Using block group data from the 2000 Census, this study examines the association between the geographic location of congregations and the sponsorship of services for people living with mental disorders. It moves research on this topic forward by exploring how congregations’ awareness of neighborhood needs affects the likelihood that they sponsor services, and also their moderating effects on sponsorship through interactions with neighborhood characteristics. By understanding how information about community needs flows to congregations, we might better understand why previous studies have found mixed findings regarding the relationship between geographic location and sponsorship of social services.

2.2 Background and Hypotheses

2.2.1 Mental Disorders

The decision to focus on services for people living with mental disorders is based on the unmet needs of this population. Despite their personal and social costs, less than 1 The definition of mental disorders is based on the guidelines found in The Diagnostic and Statistical Manual of Mental Disorders, IV-TR (American Psychiatric Association 2000: xxxi, 27-30).
forty-five percent of the mentally ill seek treatment for their disorder(s) (Wang et al. 2005). Thus, more than half of the people living with mental disorders do not receive treatment that could allow them to lead more functional lives. A primary reason for this low rate is the availability and accessibility of services that can assist them. Nearly 60% of people who did not receive treatment for their mental disorder said it was because they could not afford the cost of treatment or they did not know where to go for services (Doub, Morrison, and Goodson 2010:361). This corresponds with findings from epidemiological studies showing that people with low socioeconomic status, those with minimal education attainment, racial minorities, and those living in rural communities are less likely to seek care, despite their greater risk of having mental disorders (Doub, Morrison, and Goodson 2010; Kessler et al. 2005; Stockdale et al. 2007; Wang et al. 2005). Since previous research has identified the populations that are more likely to have mental disorders and also be unable to access care, this provides a good opportunity to determine whether congregations in disadvantaged communities are providing services to meet this need.

2.2.2 Organizational Theory

Organizational theory, particularly the “new institutionalism,” has played a critical role in making researchers aware of the effect that organizations’ environment (i.e. within organizational fields, social structure, or geographical location) has on their operations and functioning (Powell and DiMaggio 1991). One branch of this research has
been concerned with the relationship between organizations’ geographical locations and their functioning. Studies have shown that geographical location can affect organizational practices as well as their founding and mortality (Freeman and Audia 2006).

There have been attempts to better understand the relationship between congregations’ geographical locations and their provision of social services. Two strands of research suggest two rather incompatible expectations, which will be tested in this paper. One strand suggests that congregations respond to the needs of their communities by sponsoring services to alleviate them. This assumption has been supported by case studies (cf., Laird and Cadge 2010). These studies indicate that among disadvantaged populations, particularly racial and ethnic minorities including African Americans, the church has provided for them when services within their communities are not available (Blank 2002; Taylor 2000). People living in disadvantaged areas are also less likely to have access to mental health services despite the greater risk of having symptoms of mental disorders. This is due to budget cuts in state mental health agencies that lead to reductions in available services (Doub et al. 2010; Lutterman et al. 2010; Stockdale et al. 2007). Due to the greater risk of mental disorders and lack of services within disadvantaged communities, organizational theory would argue that congregations located in those communities are more likely to sponsor services to help alleviate these needs. We hypothesize:
H1: Congregations located in block groups with high percentages of occupants who are among disadvantaged populations (i.e. living below federal poverty line, are unemployed and actively looking for work, and who are black) are more likely to sponsor services for people living with mental disorders than other congregations.

Previous quantitative research on congregations’ sponsorship of health-related services has not examined the extent to which the level of health knowledge in their communities affects their decisions to sponsor services. Disadvantaged populations may not be able to articulate what services they need whereas congregations in communities with highly educated populations are better able to understand what health-related services are needed, even though they may already have access to mental health services.\(^2\) In addition, high levels of education, high socioeconomic status, and living in urban areas are associated with less likelihood of stigmatizing people living with mental disorders (Corrigan and Watson 2007; Hoyt et al. 1997). This may lead congregations to sponsor services for people living with mental disorders in communities where services and treatment are plentiful, and the population has the resources to access to them. We hypothesize:

H2: Congregations located in urban block groups, block groups with high percentages of people with at least one year of college education, and block groups with high median household incomes are more likely to sponsor services for people living with mental disorders.

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\(^2\) Studies of prevention services find that more educated people and those with higher socioeconomic status are more likely to utilize them (cf. Barrett and Legg 2005; Coughlin et al. 2008). Even in populations with equal access to medical care through Medicare, people with lower levels of health literacy are less likely to utilize prevention services (cf. Scott et al. 2002).
Despite findings from case studies, quantitative research on the relationship between congregations’ geographic location and sponsorship of social services is mixed. Most of the research examined the relationship between congregations located in census tracts with high proportions of the population being disadvantaged (i.e. high levels of poverty and unemployment). One factor that has not been examined previously, but may explain these mixed findings is congregations’ connections to their communities. Case studies indicate that ties between congregations and their neighborhoods can be very loose or non-existent—even among congregations in disadvantaged communities (McRoberts 2003). If no ties exist, the community and the congregation will not share information about needed services. We hypothesize:

H3: Congregations that have groups that plan or conduct assessments of community needs are more likely to sponsor services for people living with mental disorders than other congregations.

Community assessments may also have a moderating effect on the association between neighborhood characteristics and sponsorship of services for people living with mental disorders. Congregations in wealthy, high educated neighborhoods may plan to provide mental health services, but after conducting an assessment, realize that their communities have ample services and that most residents have the resources (i.e. private insurance, income) to pay for them. Thus, it would not be a wise use of congregational resources to sponsor these services. On the other hand, congregations in disadvantaged
areas that conduct an assessment might only think they need to sponsor services that satisfy the basic material needs of their community (i.e. food, clothing), yet after conducting the assessment come to realize the extent of mental health problems in the community and the need to address them. This leads to the final hypothesis:

**H4:** Congregations that have groups that plan or conduct assessments of community needs and are located in high need areas will be more likely to sponsor services for people living with mental disorders; whereas congregations that have these groups and that are located in high knowledge/low need areas are less likely to sponsor services for people living with mental disorders.

### 2.3 Methods

#### 2.3.1 Data

Data for this analysis are drawn from the second wave of the National Congregations Study (NCS). The NCS is a survey of a nationally representative sample of U.S. congregations generated in association with the General Social Survey (GSS), a nationally representative sample of English and Spanish speaking non-institutionalized adults in the United States (Davis, Smith, and Marsden 2007). In 2006, interviewers asked GSS respondents who said they attend religious services at least once a year to report the names and locations of their religious congregations. The congregations named by these respondents constitute the sampling frame. This sampling strategy exploits the insight that the organizational affiliations of a representative sample of people constitute a representative sample of organizations (McPherson 1982). Thus, one
can develop a nationally representative sample of U.S. congregations from a nationally representative sample of Americans.³

Nominated congregations were contacted and one key informant per congregation, in most instances clergy (75%), participated in forty-five minute telephone interviews in which they answered questions about the activities, services, worship styles, and social composition of their congregations (Chaves and Anderson 2009). The technique of using key informants to provide information about objective features of their congregations (e.g. services they provide) has been found to be reliable and valid (cf. Frenk et al. 2011; McPherson and Rotolo 1995). The protocols for conducting the second wave were approved by the University of Arizona’s institutional review board. Informed oral consent was obtained from all respondents. The response rate for the second wave of the NCS is 78% and analysis indicated no substantial non-response biases (Chaves and Anderson 2008).

2.3.2 Attaching US Census Data to the NCS

Key informants provided interviewers with the mailing addresses of their congregations (i.e. street name and number, city, state, zip code, and county). If respondents gave a post office (PO) box as the mailing address, respondents were prompted by the interviewer to give the physical address of the congregation. A

³ Drawing a nationally representative probability sample of congregations is not otherwise possible because there is no complete list of U.S. congregations (Chaves 2004).
member of the NCS research team geo-coded the addresses using ArcGIS and the 2005 “Streetmap North America,” a nation-wide street map file bundled with the ArcGIS software package (ESRI 2006), to generate the initial coordinates (i.e. latitudes and longitudes). Once coordinates were generated, the research team matched congregations to their block group and merged this information with block group data from the 2000 Census Summary File 3 (United States Department of Commerce 2006) downloaded from the Inter-University Consortium for Political and Social Research (ICPSR). The block group data were then merged with the NCS dataset.

2.3.3 Variables

2.3.3.1 Groups

NCS informants were asked, “Within the past 12 months, have there been any groups or meetings or classes or events specifically focused on the following purposes or activities?” and then read a list of eighteen programs. After responding to these questions, congregational informants were asked, “Does your congregation have any other groups, meetings, or classes besides those you’ve already mentioned?” If respondents responded in the affirmative, they were asked to describe the three best

---

4 Block groups were chosen as the level of analysis in line with previous research on the association between US Census data and public health data (Krieger 2002). According to the Bureau of the Census (1994:11-1), the census block group is, “…the smallest geographic area for which the Bureau of the Census collects and tabulates decennial census data, are formed by streets, roads, railroads, streams and other bodies of water, other visible physical and cultural features, and the legal boundaries shown on Census Bureau maps.” It is a subdivision of a census tract, which has, “Generally…between 2,500 and 8,000 residents and boundaries that follow visible features” and they are, “…as homogeneous as possible with respect to population characteristics, economic status, and living conditions” (Bureau of the Census 1994:10-1).

5 None of these groups targeted people living with mental disorders.
attended groups in an open-ended way. These responses allow us to examine groups that target people living with mental disorders.

2.3.3.2 Social Service Programs

After discussing groups, respondents were asked about their congregations’ social service programs. Due to concerns about capturing information about all of congregations’ formal social services, respondents were asked two questions about their congregations’ participation in social service programs: “Has your congregation participated in or supported social service, community development or neighborhood organizing projects of any sort within the past 12 months?” and “Within the past 12 months, has your congregation engaged in any human service projects, outreach ministries, or other activities intended to help people who are not members of your congregation?” If respondents answered in the affirmative to either question, they were asked to describe up to 11 programs in an open-ended way.

The verbatim group and program descriptions are used to code the dummy variables indicating the provision of at least one service targeted at people living with mental disorders (1=yes; 0=no). The Diagnostic and Statistical Manual of Mental Disorders,
IV-TR (American Psychiatric Association 2000) was used to identify services and groups that targeted people living with Axis I\(^6\) or Axis II\(^7\) mental disorders.\(^8\)

### 2.3.3.3 Neighborhood Characteristics

Four of the six neighborhood characteristics are based on the compositions of the block groups. The variables measure the percentage of people in a block group with a particular characteristic (i.e. race, highest level of education, employment status, if they live below the federally defined poverty line). The number of people who had a characteristic of interest was divided by the total number of people in the block group in order to calculate the percentage of people in the block group with the given characteristic.\(^9\) The percentages were then condensed into categories: percentage of people with at least one year of college (1=0-25%; 2=26-50%; 3=51-75%; 4=76-100%); percentage of people aged 16 years or older in the labor force who are unemployed and actively seeking work (1=0%; 2=1-5%; 3=6-10%; 4=11-100%); percent of people below the federally defined poverty line (1=0-5%; 2=6-15%; 3=16-25%; 4=26-40%; 5=41-100%);

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\(^6\) Axis I disorders are defined as “Clinical disorders” or “Other conditions that may be a focus of clinical attention” and include, but are not limited to, substance-related disorders, anxiety disorders, eating disorders, and mood disorders (American Psychiatric Association 2000:27-28).

\(^7\) Axis II disorders are defined as “Personal Disorders” or “Mental retardation” and include, but are not limited to mental retardation, antisocial personality disorders, and obsessive-compulsive personality disorders (American Psychiatric Association 2000:27, 29).

\(^8\) This does not include programs that target the friends or family members of people living with mental disorders.

\(^9\) This is true except for the unemployment variable where the denominator was the proportion of people in the block group 16 years and older.
percent of people who are black (1=0%; 2=1-5%; 3=6-10%; 4=11-25%; 5=26-50%; 6=51-
100%).

Households within the block groups are the unit of analysis for the median income variable. The variable is constructing by condensing the median household income for each block group into five categories (1=0-$25,000; 2=26,000-$50,000;
3=$51,000-$75,000; 4=$76,000-$100,000; 5=$100,000+). Based on the population density of
the block group as defined by the US Census, the block group was coded as being:
urban, suburban, or rural. These categorizations were then used to construct three
dummy variables (1=Urban; 1=Suburban; 1=Rural). Additional information about the
census variables used is available in Appendix A.

2.3.3.4 Congregational Characteristics

Decisions about how to categorize these variables are based on best practices
advocated by religion and congregational researchers. Congregations were aggregated
into three religious traditions: mainline Protestant, white conservative Protestant, and
other (Steensland et al. 2000). In the regression models, white conservative Protestant
serves as the reference category. A number of indicators of congregations’ resources are
included in the regression models: size of congregation (logged), whether the

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10 Rural is the reference category.
11 The focus on the Protestant traditions versus Catholics, black Protestant and non-Christian traditions is
due to the focus on variation within the Protestant traditions between mainline and white conservative
Protestants. Additional models with all the following religious categories: (white, conservative Protestant,
mainline Protestant, Roman Catholic, black Protestant, and other) found no significant variation in the final
results reports in the models.
congregation owns their own building (1=yes), the congregation’s budget for the last fiscal year (0=$0 to 5=$3,750,001+), and the number of non-clerical full-time staff in the congregation (0=0 staff to 4=21+ staff). A dummy variable was created to denote whether congregations had a group which planned to or had conducted an assessment of community needs (1=yes; 0=no). Table 4 presents the descriptive statistics for the variables used in the regression analysis.

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12 The question wording is, "Within the past 12 months, have there been any groups or meetings or classes or events specifically focused on the following purposes or activities? To plan or conduct an assessment of community needs?"
Table 4: Descriptive Statistics of Variables in Analysis (N=1,499)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Mean or Proportion</th>
<th>Standard Deviation</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent Variable</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental health program</td>
<td>Congregation sponsors a service that targets people living with mental disorders (1=Yes; 0=No)</td>
<td>0.078</td>
<td>0.268</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Independent Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Religious Tradition</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White, conservative Protestant</td>
<td>1=White, conservative Protestant; 0=No</td>
<td>0.488</td>
<td>0.500</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>White, mainline Protestant</td>
<td>1=White, mainline Protestant; 0=No</td>
<td>0.188</td>
<td>0.391</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>1=Other; 0=No</td>
<td>0.324</td>
<td>0.468</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Congregational resources</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td>Number of regularly participating adults (Logged)</td>
<td>4.056</td>
<td>1.119</td>
<td>1.609</td>
<td>9.547</td>
</tr>
<tr>
<td>Budget</td>
<td>Congregations’ budget (0=$0; 1=$1-$750,000; 2=$750,001-$1,500,000; 3=$1,500,001-$2,250,000; 4=$2,250,001-$3,750,000; 5=$3,750,001+)</td>
<td>0.923</td>
<td>0.687</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Owns building</td>
<td>Congregations owns the building where it conducts its services (1=Yes; 0=No)</td>
<td>0.899</td>
<td>0.302</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Number of full-time Staff</td>
<td>Number of full-time paid staff (0=0; 1=1; 2=2-10; 3=11-20; 4=21+)</td>
<td>0.972</td>
<td>0.878</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Community assessment</td>
<td></td>
<td>0.481</td>
<td>0.500</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Neighborhood characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>Congregation located in urban block group (1=Yes; 0=No)</td>
<td>0.441</td>
<td>0.497</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Suburban</td>
<td>Congregation located in suburban block group (1=Yes; 0=No)</td>
<td>0.219</td>
<td>0.414</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Rural</td>
<td>Congregation located in rural block group (1=Yes; 0=No)</td>
<td>0.340</td>
<td>0.474</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>At least some education</td>
<td>Percentage of people in block group with at least one year of college (1=0-25%; 2=26-50%; 3=51-75%; 4=76-100%)</td>
<td>1.866</td>
<td>0.810</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Median household income</td>
<td>Median household income in 1999 (In dollars) (1=$0-$25,000; 2=$26,000-$50,000; 3=$51,000-$75,000; 4=$76,000-$100,000; 5=$100,000+)</td>
<td>2.245</td>
<td>0.849</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Unemployed</td>
<td>Percentage of persons aged 16</td>
<td>2.279</td>
<td>0.633</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>
years or older in the labor force who are unemployed (and actively seeking work) (1=0%; 2=1-5%; 3=5-10%; 4=10-100%)

<table>
<thead>
<tr>
<th>Poverty</th>
<th>Percentage of persons below the federally defined poverty line (1=0-5%; 2=5-15%; 3=15-25%; 4=25-40%; 5=40-100%)</th>
<th>2.634</th>
<th>1.166</th>
<th>1</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>Percentage of people in block group who are black (1=0%; 2=1-5%; 3=5-10%; 4=10-25%; 5=25-50%; 6=50-100%)</td>
<td>3.057</td>
<td>1.802</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

1 The proportion gives the percentage of congregations with a given characteristic. The data here are weighted by W2.
2 Includes Black Protestant, Roman Catholic, and non-Christian religious traditions.

### 2.3.4 Statistical Analysis

Four series of multivariate logistic regression models are estimated to test the hypotheses. In the first series, the neighborhood characteristic variables are regressed on whether congregations have services for people living with mental disorders. In the second series, religious tradition is added to the regression models. In the third series, congregational resources and the variable indicating that congregations have groups that plan or conduct community assessments are added to the models. In the final series, the interactions between community assessment and the census variables are included in the models.13

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13 Neighborhood characteristics are treated as level-one independent variables, because the congregations are not nested in the same block groups. There is no variation within clusters that needs to be explained with hierarchical linear models (Raudenbush and Bryk 2002). The analytical plan used in this paper is similar to those used in previous studies examining the influence of neighborhood characteristics on congregations’ sponsorship of social services (cf. Trinitapoli et al. 2009).
Missing values for independent variables\textsuperscript{14} are imputed using the multiple
imputation commands in Stata 11 (StataCorp 2009) to produce thirty versions of the
dataset.\textsuperscript{15} All empirical estimates are based on thirty versions of complete data sets.
Diagnostic tests indicate no important misspecification related to the probability-
proportional-to-size feature of the sample and thus a probability weight is not used in
the regression models (Winship and Radbill 1994).

\textbf{2.4 Results}

Table 5 presents exponentiated logistic regression coefficients (odds-ratios) for
the neighborhood characteristics regressed on sponsorship of services that target people
living with mental disorders. In this model, our first hypothesis is not supported. None
of the variables indicating disadvantaged populations are statistically associated with
sponsorship of services for people living with mental disorders. The findings from this
series support our alternative hypothesis. Congregations in urban block groups, those
located in block groups with a large proportion of people with at least one year of

\textsuperscript{14} There are no missing data for the census variables.
\textsuperscript{15} As with other social surveys, the National Congregations Study had missing data which could bias the
results. Thus, for the independent variables, we decided to use a random multiple imputation technique
that allows us to retain cases otherwise lost and which proves to provide more efficient statistical estimates.
Multiple imputation involves imputing values for each missing value in a data set \(m\) times. In each of the \(m\)
created data sets, the observed (non-missing) values are not transformed while the missing data are drawn
randomly from the conditional joint distribution of the other variables in the data set. Each of the \(m\) data
sets is analyzed separately. The results from these analyses are combined to account for within sample
variation in the data and between sample variation, created by multiple imputation. The random
imputation process retains the original variability found in the data and thus reflects the fundamental
uncertainty of our estimates, thus making it preferable to other techniques such as imputing the mean or
using linear regression models. We set the number of imputed datasets at thirty to generate more efficient
coefficient estimates (Bodner 2008).
college education, and those in block groups with high median household income were significantly more likely to sponsor a service for people living with mental disorders.
Table 5: Congregations Sponsor Service for People Living with Mental Disorders Regressed on Census Variables (Adjusted Odds Ratios, T-Scores (in Parentheses), and 95% Confidence Intervals (in Brackets) (N=1,449)

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban¹</td>
<td>1.829**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2.66)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>[1.171 – 2.857]</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Suburban</td>
<td>1.100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.31)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>[0.603 - 2.008]</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>1.245**</td>
<td></td>
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<tr>
<td></td>
<td>(2.62)</td>
<td></td>
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<tr>
<td></td>
<td>[1.057 - 1.468]</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median Household</td>
<td></td>
<td>1.197*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td></td>
<td>(2.35)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>[1.030 - 1.392]</td>
<td></td>
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<tr>
<td>Unemployment</td>
<td></td>
<td></td>
<td>1.076</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>(0.61)</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>[0.850 - 1.363]</td>
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<td></td>
</tr>
<tr>
<td>Poverty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.926</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(-1.13)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[0.810 - 1.058]</td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.950</td>
</tr>
<tr>
<td></td>
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<td></td>
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<td></td>
<td>(-1.08)</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>[0.865 - 1.043]</td>
</tr>
<tr>
<td>Constant</td>
<td>0.098***</td>
<td>0.093***</td>
<td>0.096***</td>
<td>0.129***</td>
<td>0.181***</td>
<td>0.175***</td>
</tr>
<tr>
<td></td>
<td>(-11.08)</td>
<td>(-11.36)</td>
<td>(-10.84)</td>
<td>(-7.22)</td>
<td>(-10.02)</td>
<td>(-11.67)</td>
</tr>
<tr>
<td></td>
<td>[0.065 - 0.148]</td>
<td>[0.062 - 0.140]</td>
<td>[0.063-0.146]</td>
<td>[0.074- 0.225]</td>
<td>[0.130-0.253]</td>
<td>[0.131-0.235]</td>
</tr>
</tbody>
</table>

*p<.05; **p<.01; ***p<.001
¹ Rural is the reference category
Table 6 presents the same models with the addition of religious preference in each model. This variable was added because of the strong association between congregations’ religious traditions and their likelihood of sponsoring services for people living with mental disorders (Frenk 2011). As in previous studies, white, mainline Protestant congregations were more likely to sponsor services for people living with mental disorders than white, conservative Protestant congregations. The associations between neighborhood characteristics and sponsorship remain the same as those in Table 2: the disadvantaged variables are not significant, while the knowledge variables are significant.
Table 6: Congregations Sponsor Service for People Living with Mental Disorders Regressed on Census Variables and Religious Tradition (Adjusted Odds Ratios, T-Scores (in Parentheses), and 95% Confidence Intervals (in Brackets) (N=1,449)

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
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<td>Urban</td>
<td>2.100**</td>
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</tr>
<tr>
<td></td>
<td>(3.19)</td>
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<tr>
<td></td>
<td>[1.331 - 3.314]</td>
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<tr>
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<td></td>
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<tr>
<td></td>
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</tr>
<tr>
<td></td>
<td>[0.617 - 2.081]</td>
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<tr>
<td>Education</td>
<td></td>
<td>1.200*</td>
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<tr>
<td></td>
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<td>(2.13)</td>
<td></td>
<td></td>
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<tr>
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<td>[1.015 - 1.419]</td>
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</tr>
<tr>
<td>Median Household Income</td>
<td></td>
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<td>1.191*</td>
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</tr>
<tr>
<td></td>
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<td></td>
<td>(2.22)</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>[1.020 - 1.390]</td>
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</tr>
<tr>
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<td></td>
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<tr>
<td></td>
<td></td>
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<td>(1.25)</td>
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<td></td>
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<td>[0.916 - 1.487]</td>
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<tr>
<td>Poverty</td>
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<td>0.956</td>
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<td></td>
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<td></td>
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<td></td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>[0.834 - 1.096]</td>
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</tr>
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<td>0.997</td>
</tr>
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<td></td>
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<td></td>
<td></td>
<td>(-0.06)</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>[0.903 - 1.101]</td>
</tr>
<tr>
<td>White, mainline Protestant</td>
<td>1.845**</td>
<td>1.840**</td>
<td>1.890***</td>
<td>1.932***</td>
<td>1.911***</td>
<td>1.908***</td>
</tr>
<tr>
<td></td>
<td>(3.28)</td>
<td>(3.28)</td>
<td>(3.44)</td>
<td>(3.56)</td>
<td>(3.50)</td>
<td>(3.49)</td>
</tr>
<tr>
<td></td>
<td>[1.280 - 2.659]</td>
<td>[1.278 - 2.648]</td>
<td>[1.315 - 2.717]</td>
<td>[1.344 - 2.777]</td>
<td>[1.330 - 2.745]</td>
<td>[1.328 - 2.743]</td>
</tr>
<tr>
<td>Constant</td>
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<td>0.096***</td>
<td>0.092***</td>
<td>0.102***</td>
<td>0.159***</td>
<td>0.145***</td>
</tr>
<tr>
<td></td>
<td>(-10.79)</td>
<td>(-10.17)</td>
<td>(-9.89)</td>
<td>(-7.48)</td>
<td>(-9.45)</td>
<td>(-10.78)</td>
</tr>
<tr>
<td></td>
<td>[0.057 - 0.138]</td>
<td>[0.061 - 0.151]</td>
<td>[0.057 - 0.148]</td>
<td>[0.056 - 0.185]</td>
<td>[0.108 - 0.232]</td>
<td>[0.102 - 0.206]</td>
</tr>
</tbody>
</table>

*p<.05; **p<.01; ***p<.001

1 Rural is the reference category.
In Table 7, congregational resource variables are added to the model as well as the dummy variable indicating whether congregations have a group that plans or conducts an assessment of community needs. In support of our third hypothesis, congregations with groups that plan or conduct an assessment of community needs are significantly more likely to sponsor services for people living with mental disorders in all six models. One previously nonsignificant neighborhood characteristic became significant in this model—percent of people in the block group sixteen years and older who are unemployed. Congregations in block groups with higher percentages of those people are more likely to sponsor services for people living with mental disorders. None of the variables indicating advantaged neighborhoods are statistically significant in this model. In further analyses available upon request, there was not a single suppressor variable that caused these variables to lose their significance. Many of the resource variables act together to suppress neighborhood characteristics. Only one congregational resource variable is significant: congregations with more full-time staff are significantly more likely to sponsor services for people living with mental disorders.
Table 7: Congregations Sponsor Service for People Living with Mental Disorders Regressed on Census Variables, Religious Tradition, and Congregational Resources (Adjusted Odds Ratios, T-Scores (in Parentheses), and 95% Confidence Intervals (in Brackets) (N=1,449)

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>1.291 (1.01) [0.788-2.116]</td>
<td>1.017 (0.05) [0.547-1.892]</td>
<td>1.035 (0.40) [0.825-1.189]</td>
<td>1.306* (2.11) [1.020-1.673]</td>
<td>1.037 (0.51) [0.901-1.194]</td>
<td>1.021 (0.39) [0.920-1.134]</td>
</tr>
<tr>
<td>Suburban</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>0.990 (-0.10) [0.825-1.189]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td></td>
<td></td>
<td>1.035 (0.40) [0.825-1.189]</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Household</td>
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<tr>
<td>Income</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Unemployment</td>
<td></td>
<td></td>
<td></td>
<td>1.306* (2.11) [1.020-1.673]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poverty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.037 (0.51) [0.901-1.194]</td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protestant²</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td>1.135 (1.29) [0.936-1.375]</td>
<td>1.159 (1.52) [0.958-1.403]</td>
<td>1.153 (1.47) [0.953-1.395]</td>
<td>1.154 (1.49) [0.956-1.394]</td>
<td>1.163 (1.56) [0.962-1.407]</td>
<td>1.164 (1.56) [0.961-1.409]</td>
</tr>
<tr>
<td></td>
<td>1.044 (0.44)</td>
<td>1.045 (0.46)</td>
<td>1.041 (0.41)</td>
<td>1.058 (0.57)</td>
<td>1.048 (0.48)</td>
<td>1.043 (0.43)</td>
</tr>
<tr>
<td>----------------</td>
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</tr>
<tr>
<td></td>
<td>[0.862 - 1.265]</td>
<td>[0.864 - 1.266]</td>
<td>[0.859 - 1.262]</td>
<td>[0.873 - 1.281]</td>
<td>[0.866 - 1.269]</td>
<td>[0.862 - 1.263]</td>
</tr>
<tr>
<td>Own Building</td>
<td>1.867 (1.31)</td>
<td>1.866 (1.31)</td>
<td>1.876 (1.32)</td>
<td>1.867 (1.30)</td>
<td>1.863 (1.31)</td>
<td>1.878 (1.32)</td>
</tr>
<tr>
<td></td>
<td>[0.733 - 4.756]</td>
<td>[0.732 - 4.755]</td>
<td>[0.737 - 4.777]</td>
<td>[0.730 - 4.774]</td>
<td>[0.732 - 4.741]</td>
<td>[0.738 - 4.784]</td>
</tr>
<tr>
<td>Full-Time Staff</td>
<td>1.267 (1.91)</td>
<td>1.290* (2.06)</td>
<td>1.285* (2.04)</td>
<td>1.311* (2.19)</td>
<td>1.288* (2.06)</td>
<td>1.287* (2.05)</td>
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<tr>
<td></td>
<td>[0.994 - 1.613]</td>
<td>[1.012 - 1.644]</td>
<td>[1.010 - 1.636]</td>
<td>[1.029 - 1.670]</td>
<td>[1.012 - 1.639]</td>
<td>[1.011 - 1.638]</td>
</tr>
<tr>
<td>Assess</td>
<td>1.718** (3.13)</td>
<td>1.736** (3.19)</td>
<td>1.746** (3.22)</td>
<td>1.720** (3.14)</td>
<td>1.729** (3.17)</td>
<td>1.726** (3.15)</td>
</tr>
<tr>
<td></td>
<td>[1.224 - 2.410]</td>
<td>[1.237 - 2.435]</td>
<td>[1.244 - 2.451]</td>
<td>[1.226 - 2.413]</td>
<td>[1.233 - 2.426]</td>
<td>[1.229 - 2.424]</td>
</tr>
<tr>
<td>Constant</td>
<td>0.015*** (-6.91)</td>
<td>0.015*** (-6.82)</td>
<td>0.014*** (-6.90)</td>
<td>0.008*** (-7.18)</td>
<td>0.014*** (-6.82)</td>
<td>0.014*** (-6.77)</td>
</tr>
<tr>
<td></td>
<td>[0.005 - 0.049]</td>
<td>[0.005 - 0.051]</td>
<td>[0.004 - 0.048]</td>
<td>[0.002 - 0.030]</td>
<td>[0.004 - 0.047]</td>
<td>[0.004 - 0.048]</td>
</tr>
</tbody>
</table>

*p<.05; **p<.01; ***p<.001

1. Rural is the reference category.
2. The “other” religious category contains congregations from a wide array of religious traditions (e.g. Jewish, Roman Catholic, etc.), which makes the coefficient uninterpretable. Thus, it is not reported in the table. The reference category is “White, conservative Protestant.”
Table 8 presents the findings of the models in which interactions with assessment and neighborhood characteristics were estimated. Three interactions are significant. Congregations located in block groups with inhabitants who have high educational attainment and that have a group that plans or conducts community assessments are less likely to sponsor services for people living with mental disorders. Congregations located in block groups with inhabitants who have high median household incomes and that have a group that plans or conducts community assessments are also less likely to sponsor services for people living with mental disorders. The final significant interaction involves one of the disadvantaged neighborhoods’ measures. Congregations located in block groups in which a high proportion of inhabitants live below the federal poverty line and that have a group that plans or conducts an assessment are more likely to sponsor services for people living with mental disorders.

Although the other three interactions between neighborhood characteristics (population density, unemployment, and race) and the assessment variable are not significant at the standard statistical significance level (p<.05), the directions of the coefficients are as predicted (lower likelihood in urban block groups, higher likelihood in block groups with higher percentages of unemployed people and blacks).
Table 8: Congregations Sponsor Service for People Living with Mental Disorders Regressed on Census Variables, Religion Tradition, Congregational Resources, and Interactions between Census Variables and Assess (Adjusted Odds Ratios, T-Scores (in Parentheses), and 95% Confidence Intervals (in Brackets) (N=1,449)

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban X Assess</td>
<td>0.628&lt;sup&gt;1&lt;/sup&gt;</td>
<td>0.802</td>
<td>0.572**</td>
<td>0.708*</td>
<td>1.193</td>
<td>1.377*</td>
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<td>(-0.95)</td>
<td>(-0.34)</td>
<td>(-2.96)</td>
<td>(-2.05)</td>
<td>(0.65)</td>
<td>(2.00)</td>
</tr>
<tr>
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<td>[0.396 - 0.828]</td>
<td>[0.510 - 0.984]</td>
<td>[0.700 - 2.034]</td>
<td>[1.007 - 1.883]</td>
</tr>
<tr>
<td>Suburban X Assess</td>
<td></td>
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<td></td>
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<tr>
<td>Education X Assess</td>
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<td></td>
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</tr>
<tr>
<td>Median Household Income X Assess</td>
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<tr>
<td>Unemployment X Assess</td>
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<tr>
<td>Poverty X Assess</td>
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<tr>
<td>Black X Assess</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>0.012***</td>
<td>0.006***</td>
<td>0.008***</td>
<td>0.011***</td>
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<td>(-7.05)</td>
<td>(-5.73)</td>
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<td>(-6.14)</td>
</tr>
<tr>
<td></td>
<td>[0.003 - 0.044]</td>
<td>[0.002 - 0.024]</td>
<td>[0.002 - 0.031]</td>
<td>[0.002 - 0.051]</td>
<td>[0.006 - 0.085]</td>
<td>[0.005 - 0.063]</td>
</tr>
</tbody>
</table>

*<p<.05; **<p<.01; ***<p<.001
1 Coefficients for all variables except the interactions are not shown in order to provide a more comprehensible table. Results not shown are available upon request.
2 Rural is the reference category.
2.5 Discussion

This study is the first to conduct a thorough analysis of the association between geographic location and congregational sponsorship of services for people living with mental disorders. It improves upon previous research examining the relationship between geographical location and congregations’ sponsorship of services by examining one method of information transfer between communities and congregations. Interestingly, neighborhood characteristics were sometimes important as main effects and other times as part of statistical interactions.

Our first hypothesis was not supported in the bivariate analysis (Table 5) or when other independent variables were added to the models (Tables 6 and 7). Congregations in block groups with high percentages of people below the poverty line, high unemployment rates, and people who self-identified as black, were not more likely to sponsor services for people living with mental disorders than other congregations. This finding corresponds to previous research about the tenuous relationship between congregations and the disadvantaged communities in which they inhabit (McRoberts 2003). Congregations in these areas may have loose ties with their communities and may not be aware of their needs.

Our second hypothesis was initially supported by the regression models. Congregations located in urban block groups, in block groups with high proportions of
inhabitants with at least one year of college education, and block groups with high proportions of inhabitants with high median household incomes were significantly more likely to sponsor services for people living with mental disorders. These associations were observed in the bivariate analysis and also when the religious tradition dummy variables, a factor that was strongly associated with sponsorship of services for people living with mental disorders (Frenk 2011), were added to the models. These significant findings, however, were mediated when congregational resource variables were added to the models. Additional models revealed that several resource variables mediated the effects of these characteristics. The findings suggest that congregations in communities where people have factual knowledge of mental disorders and low levels of stigma may be more likely to sponsor services for people living with mental disorders. Yet these results were mediated by the financial resources of congregations, which as shown in other studies, are strongly associated with whether congregations sponsor services (cf. Chaves and Tsitos 2001).

Hypothesis three is supported by the regression models. Congregations with groups that plan or conduct assessments of community needs are significantly more likely to provide services for people living with mental disorders. This suggests that researchers need to take into account the flow of information between congregations and their communities to better understand why congregations sponsor services.
Congregations cannot effectively provide or sponsor services to meet the needs of their communities if they do not know what services are needed. Before enacting policies that provide congregations with the resources to provide services, it may be prudent to provide them with the skills and resources to conduct community assessments, so that they have a clear idea of what services their communities need. The variable used in the analysis does not provide a definition of community, so we must be cautious when claiming that census block groups represent neighborhood communities. It is important to follow this research with more focused accounts of how congregations conduct their assessments and whether the assessments are directed at understanding the needs of the neighborhoods in which the congregations are located, their cities or towns, or even the communities in which their members live.

Our fourth hypothesis is partially supported by the analysis. Congregations with groups that plan or conduct assessments of community needs in a high knowledge area are less likely to sponsor services for people living for mental disorders. In addition, congregations that conduct a community assessment in a disadvantaged area are more likely to sponsor services for people living with mental disorders. Although the urban, unemployment, and black interaction coefficients were not statistically significant (p<.05), the coefficients were in the hypothesized direction—less likelihood of sponsorship for congregations located in urban block groups and a greater likelihood in
areas with high populations of the unemployed and blacks. These findings have implications for the first two hypotheses, which focus on the direct effects of neighborhood characteristics on the sponsorship of services for people living with mental disorders. In both instances, they identify conditions under which congregations in advantaged neighborhoods are less likely to sponsor services and also conditions under which congregations in disadvantaged block groups are more likely to sponsor services.

Building on the third hypothesis, congregations’ assessments can affect their decision to sponsor services in two ways. First, the community assessment discloses needs within the community that can be alleviated with services provided by the congregation. This appears to be true in the case of congregations in disadvantaged communities that are more likely to sponsor services for people living with mental disorders. The other option is that the assessment reveals that there is no need for services in the community, that the community has ample services and that most people in the community can access them. As was found in this study, congregations in communities with populations with high rates of education and higher median incomes are significantly less likely to sponsor services for people living with mental disorders if they conduct assessments of community needs. It is crucial then, for congregational researchers to account for the social ties between the community and the congregation
when they attempt to understand how congregations’ geographical locations affect their decisions to sponsor services. Not accounting for the social ties between congregations and their community needlessly lumps together congregations eager to understand the needs of their community and work to address them with other congregations that are less enthusiastic about interacting with their surrounding communities.

2.5.1 Future Research

Due to data limitations, it is not possible to know where the services that congregations sponsor are located. Congregations may be providing space in their building for services or they could be involved in a city-wide effort that does not require them to directly provide services. Due to the transportation limitations of disadvantaged populations, services for people living with mental disorders need to be located in close proximity to them or transportation to and from the service needs to be provided. In addition, services also need to provide child care services, so parents can have a trusted adult watch their children while they engage in services (Allard, Tolman, and Rosen 2003). Thus, a next step would be to understand if congregations are assisting with these indirect concerns that arise when trying to provide disadvantaged populations with access to services.

Another line of research worth pursuing is how well congregations provide culturally competent care to diverse cultural groups and minorities. Studies of mental
health services find that culturally competent counseling centers are able to attract diverse cultural groups and minorities (Rosen et al. 2010). Beyond providing services and making sure that disadvantaged populations can access them, there is a need to make sure that the tone and content is one that signals to these populations that they are welcome. Studies of prevention health programs in congregations find that programs that are sensitive to the religious beliefs and values of religious adults are successful (Campbell et al. 2007).

Finally, this study only examined one path through which congregations come to understand the needs of their communities. In addition to needs assessments, congregations may be seeking information or advice from public agencies, local media, or from their members. It is prudent to consider the formal and informal ways that congregations learn about the needs of their communities and in turn how that affects their decision to sponsor particular services.

2.6 Conclusion

This study provides a framework for future research on the relationship between congregations’ geographic location and their decision to sponsor social services. Future studies need to take into account the extent to which congregations are connected to their communities and aware of their needs to more fully understand this relationship.
3. Congregations’ Sponsorship of Social Services for People Living with Mental Disorders and Its Effect on Their Members’ Support for Increased Government Spending on Mental Health Care

3.1 Introduction

There is growing interest in congregations’ role as sponsors and providers of social services, including health-related services. Research indicates that congregation-sponsored health services are successful at improving the health and well-being of people who participate in them (Campbell et al. 2007; DeHaven et al. 2004). This in turn has led to increased calls for the government to provide funds for congregations and make it easier for them to participate in the social service arena (e.g. U.S. Congress 2008). Recent federal legislation makes it easier for congregations to apply for funding for social services and the establishment of the Office of Faith-Based and Community Initiatives in the White House and 11 federal agencies provides institutional support for achieving this goal (Chaves 2003; Chaves and Wineburg 2010).

What has not been examined by scholars or discussed in policy circles is the extent to which these health services may have non-health related consequences for congregations, their members, and the people who receive their services. Possible non-

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1 At this time there is no evidence that this legislation has significantly increased congregational sponsorship of these services, but the potential for increasing congregations’ role does exist (Chaves and Wineburg 2010).
health outcomes include changes in levels of religiosity, public opinion about social services and government spending, and the relationship between congregations and their communities. Although some attempts have been made, such as Chambré’s (2001) study of secularization within faith-based organizations in New York City that provide services for people living with HIV and AIDS, additional research is needed to understand the unintended consequences these services may have.

This study focuses on one potential non-health related outcome: congregational members’ support for government spending. It examines the effect of belonging to congregations that sponsor services for people living with mental disorders on their opinions about whether the government should increase the amount of money it spends on mental health care. At first this seems like an unusual outcome to examine. First, many religious institutions, including religious congregations, receive government funding to sponsor and provide social services (Chaves 2003). One would assume that congregational members would not want the funding streams for the services they provide cut. In addition, collaborations between religious institutions and government agencies are becoming more common. For example, recent developments in children’s mental health care and state policy encourage families to invite people who they rely on for social support (including clergy) to participate in team meetings to help families set goals and then achieve them so their Child Protective Services case is closed (Suter and
Bruns 2009). Again, one would assume that collaborations with and dependence on the state would make congregational members more likely to support government spending since it is having a positive effect on their congregations.

Within political economy literature, however, there is a spirited debate about the relationship between the state and religion regarding their role as providers of aid for those in need. This literature suggests that religion in general, and congregations’ sponsorship of services in particular, may affect how people view the government’s role in providing services and care. In most instances, it is seen as being associated with decreased support for government spending. Although views about government spending (and public opinion in general) is often overlooked in the sociological literature, they play a crucial role for setting public policy, which in turn affects political party platforms and legislation (Burstein 1998). Thus, it is prudent to understand what effect congregational sponsorship of social services has on peoples’ views on government spending.

Our analysis entails linking two datasets, the 2006 General Social Survey, which contains detailed information about respondents’ socioeconomic status and their views on government spending on mental health care and the second wave of the National  

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Families are also encouraged to hold these team meetings, which include social workers and other state employees, in churches if the family views it as a comfortable and safe setting (cf. North Carolina Department of Health and Human Services 2009).
Congregations Study, a nationally representative survey of congregations. The results suggest that being a member of a congregation that sponsors mental health services does not have a direct effect on people’s support for government spending on mental health care. Statistically significant indirect pathways, however, do exist. People who belong to congregations that sponsor mental health services and pray frequently are less likely to support increased government spending on mental health care. In addition, people who belong to congregations that sponsor these services and who know someone who received treatment for a mental health situation are also less likely to support government spending.

3.2 Background and Hypotheses

The relationship between religion and the state has been examined and reassessed by social scientists from many theoretical traditions (cf. Marx 1844 [1978]; Smith 2003; Weber 1904-05 [1998]). Apart from the assumption that there is a relationship between religion and the state, the specific direction and effect of the relationship is open to debate. For example, some traditions argue that religion is the driving force behind changes in the state (Weber) while other traditions suggest that religion is an outcome of the arrangement of the state (Marx). This study focuses on recent developments within political economy that have tried to understand the relationship between a specific part of the state, the welfare system, and religion. In this
line of research, religion has been treated as both the outcome variable and also as an independent variable.

In the religion as an outcome literature, scholars view religion as an outcome of government spending. Cross-national studies have examined this relationship with correlational analyses between government spending on welfare and individual-level measures of religiosity. These studies indicate that there is a strong negative association between high levels of welfare spending and individual religiosity—greater welfare spending is associated with decreases in individual-level religiosity (Gill and Lundsgaarde 2004; Norris and Inglehart 2004).³

The other research strand, and the one in which this paper is theoretically based, examines how religiosity affects public opinion toward government spending on social insurance (i.e. welfare, social services for those in need). Cross-national and historical studies have examined individual-level dimensions of religion to assess their effects on support for government spending on social insurance (Scheve and Stasavage 2006a; Scheve and Stasavage 2006b). Within this strand, two competing hypotheses have been put forward using empirical research as an explanation of the relationship. The first one is known as the “substitute hypothesis.” Supporters argue that when religious

³ The one exception is the United States, though this discrepancy is often explained due to the extremely high levels of income inequality within the country (Norris and Inglehart 2004).
congregations supply social services for those in need, people come to view them as a substitute for government services (Hungerman 2005). They cite evidence indicating that people turn to their congregations for material support in times of need. They speculate that as a result of this, people come to devalue government funded social insurance (Dehejia, DeLeire, and Luttmer. 2007). This line of research has been criticized for their inability to measure the social services that congregations provide, in fact, congregational support is often simply measured as membership in religious congregations. This creates measurement problems with establishing a clear relationship between what services are received and their effect on support for government funded services. In addition, congregations provide a host of different types of services, some that cater to immediate needs such as bereavement or natural disaster, while others focus on chronic conditions (Chaves 2004; Scheve and Stasavage 2006b). For this hypothesis to be tested, detailed data about the social services that congregations’ sponsor is required.

Due to a lack of information about congregational sponsorship of social services, other scholars focus on individual-level dimensions of religion and their effect on support for government spending. These scholars put forward the “psychic benefit hypothesis,” which is based on growing empirical evidence that individual-level dimensions of religion can help people positively cope with problems they experience in
their lives and in turn improve their well-being (Pargament 1997). Studies testing this hypothesis find a strong correlation between individual-level dimensions of religion and decreasing support for government funded social insurance (Scheve and Stasavage 2006). In addition to cross-national studies, this research has examined historical case studies – e.g., religious institutions’ lack of involvement in the enactment of Social Security Insurance in the early part of the Twentieth Century (Scheve and Stasavage 2006b). One concern with these findings is that they do not include information about the organizational component of religion, including the services that congregations’ sponsor, which based on the substitute hypothesis, could mediate the associations. Thus, the relationship between religion and support for government funding of social insurance programs may be more complex than what these studies suggest and warrant research that examines both hypotheses as well as interactions between them.

3.2.1 Current Study

This study tests both the substitute effect hypothesis and the psychic benefits hypothesis using methodological techniques that allow us to overcome the limitations of previous studies. It combines individual-level data on respondents’ sociodemographic characteristics, religious behaviors, and beliefs about government funding with a dataset that contains information about the social services that respondents’ congregations sponsor. This allows for a more valid test of whether attending congregations that
sponsor services for people in need affects people’s beliefs about government spending. By focusing exclusively on one type of health-related social service (services for people living with mental disorders) and support for government funding of mental health care, the study tests the association between a specific type of service and support for government spending on that service.

The study focuses on services for people living with mental disorders for several reasons. First, the U.S. lifetime prevalence of mental disorders is quite high. Nearly half of all Americans will meet the criteria for a mental disorder diagnosis in their lifetimes (Kessler et al. 2005). In addition, a high proportion of people with mental disorders report a lack of services available to assist them in their communities (Doub, Morrison, and Goodson 2010). Related to this is the fact that state-level mental health care systems currently face budget shortfalls (Doub et al. 2010). Attempts to increase service availability or improve state-level mental health care systems may require tax increases in order to generate the revenue needed to run them.

This study tests four hypotheses. The first hypothesis is based on the substitute effect hypothesis. It states:

H1: People who attend congregations that sponsor services for people living with mental disorders will be less likely to support increased government funding for mental health care.

68
The second hypothesis tests the “psychic benefit hypothesis,” which argues that people will turn to religious coping in their times of need and thus have no need for government funded programs to assist them. The hypothesis states:

H2: People who frequently pray will be less likely to support increased government funding for mental health care.

In addition to testing for direct effects, it is also important to consider the indirect effects that religion may have on people’s beliefs about government spending. These different aspects of religion may have interrelated effects in which being involved in congregations that sponsor services and having greater frequency of religious behavior, leads to material and psychic support which then lowers people’s support for government sponsored care. The third hypothesis states:

H3: People who attend congregations that sponsor services for people living with mental disorders and who frequently pray are less likely to support increased government funding for mental health care.

The final hypothesis is drawn from research on clergy’s role as providers of care for people living with mental disorders. Studies of people who seek care from clergy for mental disorders report that those suffering mental illness are likely to have sought care from medical and mental health professionals before contacting clergy (Wang et al.}

69
2003). This may mean that people who turn to religious congregations for services also attempted to receive support from other professionals first. In turn, these people would have less support for services not linked to religious institutions. The experience of knowing someone who has received care, particularly if that care came through religious congregations may compel people to be even more supportive of congregations as the source of care for people living with mental disorders because they have seen positive results. Thus, congregational members may be less likely to support services not directly linked to congregations. The final hypothesis states:

H4: People who attend congregations that sponsor services for people living with mental disorders and who personally know someone who has received treatment for a mental health situation will be less likely to support increased government funding for mental health care.

3.3 Methods

3.3.1 Data

Data for this analysis are drawn from two sources: the 2006 General Social Survey (GSS) and the second wave of the National Congregations Study (NCS).

3.3.1.1 General Social Survey

Individual-level data come from the 2006 GSS, a nationally representative cross-sectional survey of non-institutionalized U.S. adults conducted by the National Opinion
Data from the 2006 GSS are used because in that year the survey included a module of items on mental illness and mental health care, including questions about support for government funding of mental health care. (Pescosolido et al. 2000; Pescosolido et al. 2010). Only a randomly selected proportion of the 2006 GSS respondents were asked questions from the modules, so the base N is smaller than that of the overall 2006 GSS. The overall 2006 GSS response rate was 71 percent.

3.3.1.2 National Congregations Study

Congregational-level data come from the second wave of the National Congregations Study (NCS). The NCS is a survey of a nationally representative sample of U.S. congregations generated in association with the 2006 GSS. In 2006, interviewers asked GSS respondents who said they attend religious services at least once a year to report the names and locations of their religious congregations. The congregations named by these respondents constitute the sample. This sampling strategy exploits the insight that the organizational affiliations of a representative sample of people constitute a representative sample of organizations (McPherson 1982). Thus, one can develop a
nationally representative sample of U.S. congregations from a nationally representative sample of Americans (Chaves 2007).4

Nominated congregations were contacted and one key informant per congregation, in most instances clergy (75%), participated in forty-five minute telephone interviews in which they answered questions about the activities, services, worship styles, and social composition of their congregations (Chaves and Anderson 2009). The technique of using key informants to provide information about objective features of their congregations (e.g., services they provide) has been found to be reliable and valid (cf. Frenk et al. 2011; McPherson and Rotolo 1995). The protocols for conducting the second wave were approved by the University of Arizona’s institutional review board. Informed oral consent was obtained from all respondents. The response rate for the second wave of the NCS is 78% and analysis indicated no substantial non-response biases (Chaves and Anderson 2008).

Because each NCS congregation was nominated by GSS respondents, information about respondents’ congregations can be merged to the 2006 GSS allowing us to create a dataset that contains respondents’ responses to the 2006 GSS survey instrument and their congregations’ responses to the NCS survey instrument. Our

4 Drawing a nationally representative probability sample of congregations is not otherwise possible because there is no complete list of U.S. congregations (Chaves 2004).
analysis is limited to the subsample of GSS respondents whose congregations agreed to participate in the NCS (N=313).

### 3.3.2 Variables

#### 3.3.2.1 Dependent Variable

GSS respondents were asked about their opinion about government spending on mental health care. They were asked, “Since we’ve been talking about the mental health area, please indicate whether you would like to see more or less government spending in the area of mental health care.” Respondents then chose from one of five potential responses, “spend much more,” “spend more,” “spend the same as now,” “spend less,” or “spend much less.” The response categories were recoded, so that a higher score indicates support for increased government spending on mental health care.

As a check on whether the statistically significant associations we find in our analysis are spurious, we perform the same analysis with two other dependent variables. These variables measure support for government funding on services that are in no way connected to mental health care: government spending on parks and recreation and on scientific research. For both variables, the response categories are, “too much,” “about right,” or “too little.” Responses were recoded so that higher scores indicate that the government is spending too little on these categories.
3.3.2.2 Congregational Sponsorship of Service

NCS informants were asked, “Within the past 12 months, have there been any groups or meetings or classes or events specifically focused on the following purposes or activities?” and then read a list of eighteen programs. After responding to these questions, congregational informants were asked, “Does your congregation have any other groups, meetings, or classes besides those you’ve already mentioned?” If respondents responded in the affirmative, they were asked to describe the three best attended groups in an open-ended way. These responses allow us to examine groups that target people living with mental disorders.

After discussing groups, respondents were asked about their congregations’ social service programs. Due to concerns about capturing information about all of congregations’ formal social service participation, respondents were asked two questions about their congregations’ participation in social service programs: “Has your congregation participated in or supported social service, community development or neighborhood organizing projects of any sort within the past 12 months?” and “Within the past 12 months, has your congregation engaged in any human service projects, outreach ministries, or other activities intended to help people who are not members of

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5 None of these groups targeted people living with mental disorders.
your congregation?” If respondents answered in the affirmative to either question, they were asked to describe up to 11 programs in an open-ended way.

The verbatim group and program descriptions are used to code the dummy variable indicating that the service targeted people living with mental disorders (1=yes; 0=no). The Diagnostic and Statistical Manual of Mental Disorders, IV-TR (American Psychiatric Association 2000) was used to identify services and groups that targeted people living with Axis I\(^6\) or Axis II\(^7\) mental disorders.\(^8,9\)

3.3.2.3 Congregations’ Religious Tradition

Congregations that participated in the NCS were aggregated into three dummy variables that measure their religious traditions: mainline Protestant, white conservative Protestant, and other (Steensland et al. 2000). In the regression models, white conservative Protestant serves as the reference category.

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\(^6\) Axis I disorders are defined as “Clinical disorders” or “Other conditions that may be a focus of clinical attention” and include, but are not limited to, substance-related disorders, anxiety disorders, eating disorders, and mood disorders (American Psychiatric Association 2000:27-28).
\(^7\) Axis II disorders are defined as “Personal Disorders” or “Mental retardation” and include, but are not limited to mental retardation, antisocial personality disorders, and obsessive-compulsive personality disorders (American Psychiatric Association 2000:27, 29).
\(^8\) This does not include programs that target the friends or family members of people living with mental disorders.
\(^9\) This categorization scheme was also used by Frenk (2011) who found that eight percent of US congregations sponsor services for people living with mental disorders, with most of the services targeting people living with substance abuse disorders.
3.3.2.4 Individual Characteristics

Respondents’ data from the 2006 GSS are used to test Hypotheses 3 and 4 and also to control for other individual-level characteristics that may affect respondents’ views on government funding for mental health care. Religious engagement is measured with a five category variable that measures the frequency that respondents pray ("Never" to "Several times a day). A dummy variable measures whether respondents have personally known someone who received treatment for a mental health situation (1=yes).

A number of other sociodemographic characteristics are included in the model including respondents’ age (continuous), years of education (continuous), race (1=black), sex (1=female), and family income. A seven category variable measures respondents’ political orientation (1=extremely conservative to 7=extremely liberal). Table 9 presents the descriptive statistics for the variables used in the regression analysis.
Table 9: Descriptive Statistics of Variables in Analysis from the Second Wave of the National Congregations Study and the 2006 General Social Survey (N=313)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Mean or Proportion</th>
<th>Standard Deviation</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent Variable</strong></td>
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<tr>
<td>Federal spending on mental health care</td>
<td>Respondent’s support for more or less government spending in the area of mental health care (1=Spend much less; 2=Spend less; 3=Spend the same as now; 4=Spend more; 5=Spend much more)</td>
<td>3.399</td>
<td>0.886</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td><strong>Independent Variables</strong></td>
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<tr>
<td><strong>NCS Variables</strong></td>
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<tr>
<td>Congregation with service</td>
<td>Congregation sponsors a service that targets people living with mental disorders (1=Yes)</td>
<td>0.068</td>
<td>0.252</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Mainline Protestant congregation</td>
<td>Respondent belongs to a mainline Protestant congregation (1=yes)</td>
<td>0.151</td>
<td>0.359</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Other religious congregation</td>
<td>Respondent belongs to an “other” religious tradition (1=yes)</td>
<td>0.485</td>
<td>0.500</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>White, conservative Protestant congregation</td>
<td>Respondent belongs to a white, conservative Protestant congregation (1=yes)</td>
<td>0.364</td>
<td>0.481</td>
<td>0</td>
<td>1</td>
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<tr>
<td><strong>GSS Variables</strong></td>
<td></td>
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<tr>
<td>Pray</td>
<td>Frequency that respondent prays (1=Never; 2=Less than once a week; 3=Once a week; 4=Several times a week; 5=Once a day; 6=Several times a day)</td>
<td>4.814</td>
<td>1.364</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Know mental health client</td>
<td>Respondent knows someone who has received treatment for a mental health situation (1=yes)</td>
<td>0.678</td>
<td>0.468</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Age</td>
<td>Respondent’s age (Continuous)</td>
<td>46.22</td>
<td>16.749</td>
<td>18</td>
<td>89</td>
</tr>
<tr>
<td>Female</td>
<td>Respondent’s sex (1=female)</td>
<td>0.618</td>
<td>0.487</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Black</td>
<td>Respondent’s race (1=black; 0=other)</td>
<td>0.128</td>
<td>0.335</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Family Income</td>
<td>Respondent’s family income (1=Under $1,000 - $24,999; 2=$25,000 - $49,999; 3=$50,000 - $74,999; 4=$75,000 - $109,999; 5=$110,000+)</td>
<td>2.927</td>
<td>1.432</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Education</td>
<td>Respondent’s years of education (Continuous)</td>
<td>14.154</td>
<td>2.566</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>Political ideology</td>
<td>Respondent’s political orientation (1=Extremely conservative; 2=Conservative; 3=Slightly conservative; 4=Moderate; 5=Slightly liberal; 6=Liberal; 7=Extremely liberal)</td>
<td>3.649</td>
<td>1.413</td>
<td>1</td>
<td>7</td>
</tr>
</tbody>
</table>

1 For variables from the second wave of the National Congregations Study the proportion gives the percentage of congregations with a given characteristic.
2 For variables from the 2006 GSS, the weight WTSALL is used to allow for comparisons to the U.S. non-institutionalized adult population.
3.3.3 Statistical Analysis

Seven regression models are estimated to test the hypotheses. In the first model, the NCS variable measuring whether respondents’ congregations sponsor services for people living with mental disorders is regressed on the dependent variable. The bivariate relationship between prayer and the dependent variable is assessed in model two, the relationship between knowing someone who sought treatment for a mental health situation and the dependent variable is examined in model three, and the association between the religious tradition of respondents’ congregations and the dependent variable is examined in model four. In model five the sociodemographic variables are added to the model. In model six, all of the variables in the previous models are placed in the same model. In model seven, the interaction between pray and the NCS congregation sponsorship variable is included as well as the interaction between knowing someone who sought treatment for a mental health situation and the NCS congregation sponsorship variable.

Missing values for independent variables from the GSS are imputed using the multiple imputation commands in Stata 11 (StataCorp 2009) to produce thirty versions

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10 Congregational characteristics are treated as level-one independent variables, because GSS respondents are not nested in the same congregations. There is no variation within clusters that needs to be explained with hierarchical linear models (Raudenbush and Bryk 2002). The analytical plan used in this paper is similar to those used in previous studies examining the influence of congregational characteristics on individual outcome variables (cf. Ellison et al. 2009).
All empirical estimates are based on thirty versions of complete data sets. A probability weight is utilized to adjust for the 2006 GSS’s two-stage sub-sampling design for nonresponse.

3.4 Results

Table 10 presents ordinary least squares (OLS) regression coefficients for NCS and GSS variables regressed on support for government spending on mental health care. In model one, hypothesis one is not supported. Attending congregations that sponsor services for people living with mental health services does not significantly affect respondents’ support for government spending on mental health care. We find no support for hypothesis two in the second model. Greater frequency of prayer is not statistically associated with support for increased government funding of mental health care. In the third model, having personal contact with a person who has received mental health treatment is significantly associated with support for mental health care.

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11 As with other social surveys, the GSS had missing data which could bias the results. Thus, for the independent variables, we decided to use a random multiple imputation technique that allows us to retain cases otherwise lost and which provides more efficient statistical estimates. Multiple imputation involves imputing values for each missing value in a data set $m$ times. In each of the $m$ created data sets, the observed (non-missing) values are not transformed while the missing data are drawn randomly from the conditional joint distribution of the other variables in the data set. Each of the $m$ data sets is analyzed separately. The results from these analyses are combined to account for within sample variation in the data and between sample variation, created by multiple imputation. The random imputation process retains the original variability found in the data and thus reflects the fundamental uncertainty of our estimates, thus making it preferable to other techniques such as imputing the mean or using linear regression models. We set the number of imputed datasets at thirty to generate more efficient coefficient estimates (Bodner 2008).

12 None of the NCS variables are imputed.
Respondents who know such a person are 30% more likely to support increased government spending on mental health care. Model four contains all the sociodemographic variables regressed on the dependent variable. Only race and political ideology are significant. Black respondents are 51% more likely to support increased government spending on mental health care than non-blacks. Greater self-described liberalism is associated with increased support for government spending on mental health care.

Model six contains all the variables from the previous models. With all the controls added, membership in congregations that sponsor services for people living with mental disorders and frequency of prayer are not statistically associated with support for increased government funding for mental health care. The associations involving race and political ideology remain statistically significant, while knowing someone who received treatment for a mental health situation becomes only marginally significant (p=.052). In model seven, the interactions are added and both are significantly associated with the dependent variable. Respondents who attend congregations that sponsor these services and frequently pray are less likely to support increased government spending on mental health care. Respondents who know someone who received mental health treatment and attend congregations that sponsor services for
people living with mental disorders are less likely to support increased government funding for mental health care.

To determine if these results are spurious, the same models are run on measures of support for two other government funded services. The dependent variables are support for government funding of parks and recreation and support for scientific research. In these models, there was no direct association between the variables of interest (congregations sponsoring services for people living with mental disorders and frequency of prayer) and the dependent variables. In addition, the two interactions were not significantly associated with the dependent variables.
<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
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<th>Model 7</th>
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<tbody>
<tr>
<td>Congregation with service &amp; 0.107 (0.61) &amp; 0.015 (0.29) &amp; 0.307* (2.46) &amp; 0.091 (0.70) &amp; 0.0003 (-0.08) &amp; 0.0003 (-0.10) &amp; 0.126 (0.96)</td>
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<td>[-0.236 – 0.449]</td>
<td>[-0.087 – 0.116]</td>
<td>[0.061 – 0.553]</td>
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<td>[-0.007 – 0.007]</td>
<td>[-0.007 – 0.006]</td>
<td>[-0.132 – 0.384]</td>
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<td>Pray</td>
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<td>Know mental health client &amp; 0.081 (0.48) &amp; 0.018 (0.40) &amp; 0.248 (1.96) &amp; 0.077 (0.58) &amp; 0.0011 (0.05) &amp; 0.0001 (0.05) &amp; 0.126 (0.96)</td>
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<tr>
<td>Mainline Protestant congregation</td>
<td>1.831*** (3.48) &amp; 0.073 (1.43) &amp; 0.348** (2.69) &amp; 0.126 (0.96) &amp;</td>
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<td>Education</td>
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</tr>
<tr>
<td>Political ideology</td>
<td>0.157*** (4.49) &amp; 0.15*** (4.14) &amp; 0.137*** (3.80)</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.088 – 0.226</td>
<td>0.079 - 0.221</td>
<td>0.066 – 0.208</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Congregation with service X Know mental health client |   |   |   |   | -0.725*  
|                                                    |   |   |   |   | (-2.05)  
|                                                    |   |   |   |   | [-1.423 - -0.028]  
| Congregation with service X Pray                  |   |   |   |   | -0.251*  
|                                                    |   |   |   |   | (-2.57)  
|                                                    |   |   |   |   | [-0.443 - -0.059]  
| Constant                                          | 3.381***  
|                                                    | (50.67)  
|                                                    | [3.25 – 3.513]  
|                                                    |   | 3.328***  
|                                                    | (13.01)  
|                                                    | [2.824 – 3.831]  
|                                                    |   | 3.190***  
|                                                    | (32.35)  
|                                                    | [2.996 – 3.384]  
|                                                    |   | 3.317***  
|                                                    | (37.23)  
|                                                    | [3.142 – 3.493]  
|                                                    |   | 2.546***  
|                                                    | (5.69)  
|                                                    | [1.666 – 3.425]  
|                                                    |   | 2.449***  
|                                                    | (4.51)  
|                                                    | [1.380 – 3.517]  
|                                                    |   | 2.18***  
|                                                    | (3.83)  
|                                                    | [1.059 – 3.300]  

*p<.05; **p<.01; ***p<.001

1 The “other” religious category contains congregations from a wide array of religious traditions (e.g. Jewish, Roman Catholic, etc.), which makes the coefficient uninterpretable. Thus, it is not reported in the table. The reference category is “White, conservative Protestant.”
3.5 Discussion

This study breaks new ground in the study of the association between religiosity and government spending. It examines how religious organizations, individual-level dimensions of religion, and interactions between the two affect beliefs about government spending. It does this by linking two datasets that provide valid and reliable information about respondents and the activities of their congregations. It also tests the two dominant hypotheses within this field and also interactions between them. The study is also unique in that it focuses on a specific type of service provided (services for people living with mental disorders) and its accompanying focus on a public opinion outcome directly related to that service (government spending on mental health care).

The regression analysis indicates that Hypothesis 1 and 2 are not supported by our analysis. Attending congregations that sponsor services for people living with mental disorders does not directly affect people’s support for increased government spending on mental health care. In addition, frequency of prayer is not associated with people’s support for government spending on mental health care. This is surprising given significant findings in previous studies, however, a main difference between this and those studies is the focus on a specific aspect of government funding rather than general support for social insurance, and in the case of the U.S., Social Security Insurance.
Despite the non-statistically significant direct effects, the interactions provide a nuanced understanding of the association between religion and government spending. In support of Hypothesis 3, the results indicate that people who attend congregations that sponsor services for people living with mental disorders and who prayed frequently were less likely to support increased government spending on mental health care. These results indicate that the key to understanding the relationship between religion and government support for social insurance involves taking into account organizational dimensions of religion (i.e. characteristics of respondents’ congregations) as well as respondents’ individual dimensions of religion. People receiving psychic benefits from religious behaviors still have material needs that must be addressed. When they are also in congregations that sponsor these services they may come to believe that congregations are places where psychic and material needs can be met.

The regression models also support hypothesis 4. People who attend congregations that sponsor services for people living with mental disorders and who know someone who received treatment for a mental health situation are less likely to support increased government spending on mental health care. It is not possible to know exactly where the respondents’ contact sought care, but it is possible that they received it from the respondents’ congregations. People who received care from clergy often try to seek care from medical and mental health professionals before seeking care.
from clergy. This suggests that the people who do seek care from congregational services have a negative attitude towards secular professionals and view their experiences with the religiously based service in a positive light. Thus, people who know them and are in congregations that provide these services come to negatively view government intervention—in this case funding mental health care.

These results appear to be non-spurious. When other variables measuring support of government spending on non-mental health care were substituted for government spending on mental health care, there was no support for any of the hypotheses we tested. Although it is not possible to say that all potential mediators have been accounted for, these additional models appear to support our findings.

3.5.1 Future Research

This study focused on a particular type of social services that only about eight percent of congregations sponsor (Frenk 2011). Additional research needs to be conducted to examine whether these findings can be replicated with other types of services. It is also worth examining how the total sum of services that congregations sponsor affects government support. This would require a more broad definition of support for government spending on social and human services, but it would be useful to understand how congregations that sponsor a wide range of services affects people’s views about government spending. Although it is difficult to collect data from
congregations and their members, this study demonstrates that there are now datasets available to test these hypotheses.

Although not examined in this study, it is important to understand the impact of these services on the people who utilize them. This study assumes that congregational members are aware of these programs, and if needed, would be willing to use them for their mental health needs. One potential avenue for better understanding this issue is for researchers to examine clients’ views of government spending before and after they received services. Asking just a few standard close-ended questions would provide valuable data on this topic.

As noted in the introduction, congregations often secure government funding to initiate and sponsor services. The irony is that congregational sponsorship of services seems to lead to a decrease in support for government funding of services, even though the funding may be used by congregations. Based on this study’s findings, it would be useful to know how congregational members, and the people who use the services, understand the web of social services and streams of funding that allow them to operate. Are people aware that the government is providing funds for the program? If so, does it affect their view of government spending?

Public opinion does not exist in a vacuum. In addition to mental health care, the government funds regulatory, defense, and other agencies. Opinion about government
spending is often “bundled” with other services and this view of government spending in turn is bundled with opinions about other issues. It is important to know how views about spending on mental health care affect people’s voting behavior and also their other views on other aspects of mental health care policy.

3.6 Conclusion

This study finds that congregational sponsorship of health services has significant effects on non-health related outcomes. Future research should examine other ways that congregational sponsorship of health services affects non-health related outcomes for congregations, their members, and the people who use the services.
# Appendix A

Table 11: Constructs and Operational Definitions of Constructs from US Census Block Group Data

<table>
<thead>
<tr>
<th>Construct</th>
<th>Operational Definition</th>
<th>Census Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population Density</td>
<td>Population density of block group in which congregation is located.</td>
<td>P5</td>
</tr>
<tr>
<td>(Rural, Suburban, Urban)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>At Least Some College</td>
<td>Percentage of people in block group with at least one year of college education.</td>
<td>P37</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median Household Income</td>
<td>Median household income in the year prior to the decennial census (in Dollars).</td>
<td>P77</td>
</tr>
<tr>
<td>Unemployment</td>
<td>Percentage of persons aged 16 years or older in the labor force who are unemployed (and actively seeking work).</td>
<td>43</td>
</tr>
<tr>
<td>Below US Poverty Line</td>
<td>Percentage of persons below the federally defined poverty line.</td>
<td>P87</td>
</tr>
<tr>
<td>Race</td>
<td>Percentage of people in block group who are black.</td>
<td>P6</td>
</tr>
</tbody>
</table>

*Notes: Data from 2000 U.S. Census, Summary File 3*
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Biography

Steven Michael Frenk was born on November 5, 1982, in Woodstock Illinois. In May 2005, Steven graduated summa cum laude from Carthage College and earned the degree of Bachelor of Arts in Sociology (with Departmental Honors) and minored in creative writing and religion. In December 2007, Steven earned the degree of Master of Arts in the Department of Sociology in the Graduate School of Duke University by passing preliminary exams in Medical Sociology and the Sociology of Religion. In May 2011, Steven earned the degree of Doctor of Philosophy in the Department of Sociology in the Graduate School of Duke University.

Steven has coauthored five peer-review journal articles and served as first author on four of them. They include, “Assessing the Validity of Key Informant Reports about Congregations’ Social Composition” (Sociology of Religion); “Proportion of US Congregations that have People Living with HIV” (Journal of Religion and Health); “‘It’s Medically Proven!’: Assessing the Dissemination of Religion and Health Research” (Journal of Religion and Health); “The Clergy Occupational Distress Index (CODI): Background and Findings from Two Samples of Clergy” (Journal of Religion and Health); and “The Shifting and Diverging White Working Class in U.S. Presidential Elections, 1972-2004” (Social Science and Research).

While attending Duke University, Steven received a Duke University Summer Research Fellowship (Summer 2009, $5,000); a Hearst Fellowship from the Terry Sanford Institute of Public Policy, Duke University (Fall 2008, $10,000); a Graduate Student Research Grant from the Department of Sociology, Duke University (Spring 2008, $2,000); and four Conference Travel Fellowships from the Graduate School, Duke University (2008, 2009, 2010, $500 each).