

# Generating Trust in Congregations: Engagement, Exchange, and Social Networks

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*The relationship between religion and trust is complex and there is little consensus on why, in general, religious people appear to be more trusting than their unaffiliated peers. Most research on religion and trust focuses on differences between traditions and denominations, which offers rather limited insight into the genesis of trust for religious persons. In this study, we draw on recent theoretical developments in social psychology to explore how specific patterns of social interactions within congregations enhance within-congregation trust among members to the benefit of both churches and individuals. Using survey data from the Portraits of American Life Study, we find that the positive relationship between religiosity and trust is driven less by religious beliefs or practices and more by particular characteristics of micro-level processes that occur in churches (e.g., closeness of relationships to religious leaders, density of congregational ties, and both giving and receiving aid from other congregation members). In light of research on social learning and trust, we also discuss the potential benefits of this particularized trust for individuals' levels of generalized trust.*

**Keywords:** *trust, religion, congregations, networks, social exchange.*

## INTRODUCTION

The relationship between religion and trust is complex and there is little consensus on why, in general, religious people appear to be more trusting than their unaffiliated peers (Veenstra 2002). Most research on religion and trust focuses on differences between traditions and denominations (e.g., Daniels and von der Ruhr 2010; Welch et al. 2004), which offers rather limited insight into the foundation of trust for religious individuals. While research on individual-level factors, including personal religiosity and church attendance (e.g., Hempel, Matthews, and Bartkowski 2012; Welch, Sikkink, and Loveland 2007), has the potential to uncover more nuanced mechanisms about the process, findings are mixed and sometimes contradictory. In this article, we utilize social psychological research on trust (e.g., Molm, Schaefer, and Collett 2009; Molm, Takahashi, and Peterson 2000) to suggest a new approach, one that shifts the focus from individual differences in religious practice or beliefs to the micro-level processes that occur within congregations and promote trust between members.

In this article, we turn our attention toward questions of how trust may emerge among members of congregations. This is something that is important and requires examination because trust fostered within congregations has benefits for both congregation members and society. For example, the vitality and survival of congregations may ultimately depend on the trust congregants place in each other (Hooghe and Stolle 2003), which pastors can then transform

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into the bonding capital that they need to promote cooperation in achieving congregational goals. Congregational trust also promotes congregants' personal well-being and social capital, the latter of which may foster various forms of civic engagement (Putnam 2000). However, as Greenberg (2001) has noted, one's trust in fellow congregants is positively related largely to nongovernmental civic engagement such as participation in community recreation leagues, church and school activities, and activities or programs conducted by environmental organizations. We argue that although congregations may provide a conducive environment in which trust may grow and flourish, micro-level processes within congregations are the key to understanding these outcomes.

Social learning theory suggests that interactions in localized social spheres—communities, neighborhoods, families, and workplaces—play an important role in the genesis of trust (Glanville and Paxton 2007). Specifically, face-to-face interactions in social contexts can lead to particularized (ingroup) trust that, in turn, can enhance levels of generalized trust through social learning (Freitag and Traunmüller 2009; Newton and Zmerli 2011) and vice versa. To date, however, this research has given little attention to the specific qualities of contexts and embedded interactions that generate high levels of particularized trust.

We address this limitation by exploring the “specific cultures and social structures of [religious] communities” (Welch et al. 2004:335) that may facilitate trust both within and beyond congregations and partially account for religious persons' higher levels of generalized trust. We find that particular types and patterns of interactions within congregations (e.g., closeness to religious leaders, density of congregational ties, and both giving and receiving within-congregation aid) are related to high levels of individuals' within-congregation trust. More specifically, we draw on recent research in social psychology to examine the link between social context, group processes, and individual levels of trust and locate the mechanisms linking religious life to increased congregational trust. Although congregations may provide conducive environments in which trust can grow and flourish, we argue that it is the micro-level processes within congregations that are actually critical for facilitating these outcomes.

### SOCIAL PSYCHOLOGICAL RESEARCH ON TRUST

In both sociology and psychology, social learning theory (see Glanville and Paxton 2007) represents a key perspective for understanding the genesis of trust. This view sees trust, rather than being solely an expression of some invariant and underlying psychological trait, as something that is learned in interaction with others. Although many psychologists argued that the propensity to trust was inborn or acquired early in life (Couch and Jones 1997; Wrightsman 1992), research supporting social learning theory demonstrates that acquiring generalized trust is an ongoing process that occurs throughout the life course (Burns, Kinder, and Rahn 2000; Stack 1978). In addition to the family, trust is learned in localized settings such as neighborhoods, churches, and clubs (Glanville and Paxton 2007). However, to date, this line of research has yet to document precisely how trust is generated in interaction.

We argue that two social psychological theories are particularly relevant for explaining this process: the affect theory of social exchange (Lawler 2001) and the theory of reciprocity (Molm 2010). Both reflect a shift in social exchange theory from an emphasis on more objective outcomes of exchanges (e.g., the inequality of resources) to more subjective outcomes (e.g., emotion, commitment, and trust). The affect theory of social exchange (Lawler 2001) argues that repeated, productive social interactions produce positive emotions. Consistent with social learning theory, these emotions work as reinforcing stimuli that foster continued interaction (Emerson 1976; Homans 1974) and—through an attribution process on the sources of the positive emotions—enhance perceptions of network cohesion (Lawler, Thye, and Yoon 2008). Trust may be a by-product of this cohesion (Lawler and Yoon 1996).

If these propositions of the affect theory of social exchange hold true in congregations, ingroup trust may be related to involvement in one's congregation and perceptions of network cohesion. The longer one has been involved in a congregation, the more active one is likely to be outside of worship services. In addition, the closer a congregant is to congregational leaders, the more opportunities the person has to interact with other congregation members in fruitful or potentially satisfying ways and to generate positive feelings about the group. Furthermore, it is clear that we tend to trust people whom we know compared to others with whom we are more unfamiliar (Macy and Skvoretz 1998). Based on this research, we expect:

*H1: Controlling for attendance at worship services, the more an individual is engaged in a congregation, the more likely the individual is to trust other congregants.*

This hypothesis is consistent with Stolle's (2001) finding that members of groups who are more committed to group life also express higher levels of trust in fellow group members.

The structure of a congregant's network of social ties may also influence the sense of cohesion and related benefits—such as within-group trust—that an individual experiences as a congregation member (Lawler and Yoon 1996). Thus, both the quantity and quality of interaction influence cohesion (Lawler 2001). If an individual has a friendship network consisting of close friends who are also members of his or her congregation, the network is likely to have a substantial influence on outcomes that are related to religious life (Stroope 2012). As Coleman (1988) theorized, a closed network characterized by high levels of dense and overlapping sets of social ties is an important factor for creating trust in relationships. Therefore:

*H2a: The more close friends an individual has within his or her congregation, the more likely the individual is to trust other congregants.*

*H2b: The more frequently an individual interacts with congregation members in his or her friendship network, the more likely the individual is to trust other congregants.*

*H2c: The denser and more overlapping an individual's friendship networks are within his or her congregation, the more likely the individual is to trust other congregants to the highest degree.*

While the preceding arguments infer trust as a by-product of cohesion, the next hypothesis is derived from Molm's (2010) theory of reciprocity that focuses directly on the genesis of trust. This research suggests that particular patterns of exchange are beneficial for trust. Specifically, reciprocal exchanges (i.e., unilateral acts of giving, without promise of repayment) generate trust that is resilient and based on affect rather than cognitive judgments (Hardin 2002; Molm, Schaefer, and Collett 2009). Reciprocal exchange is particularly effective because of the potential risk of nonreciprocity and the expressive value of the exchanges (Molm 2010).

Molm (2010), Molm, Schaefer, and Collett (2009), and Molm, Takahashi, and Peterson (2000) argue that it is risk that facilitates trust. Interaction alone will not foster high levels of trust; some "risk must also be present so that there is a *test* of trust" (Kollock 1994:319, emphasis in the original). When one gives unilaterally, as occurs in reciprocal exchange, there is no guarantee of repayment. Therefore, when one gives or reciprocates, seemingly with no obligation to do so, such acts carry expressive value above and beyond any instrumental value (Molm, Schaefer, and Collett 2007). Such acts are interpreted as evidence of one's trustworthiness and respect for the relationship. Thus, intracongregational trust may be linked to a pattern of symmetrical interactions in which congregants give or receive assistance. Such exchanges foster expectations that one's fellow congregants will act supportively toward them in the future (Molm 2010).

Based on the preceding theory and research, we expect that any involvement in social exchange processes will foster within-group trust, but that the benefits will be most pronounced for those who have been both the giver and recipient.

*H3: Individuals who are embedded in reciprocal exchange relationships in their congregation will have higher levels of within-group trust than those who are not involved in such exchanges. Furthermore, individuals who have both given and received aid in their congregations will trust other congregants more than those who have only given or only received such aid.*

In sum, we argue that religious involvement is not enough to foster within-congregation trust. Other forms of interaction, enduring and embedded relationships, and unilateral exchange relationships (as giver, receiver, or both) are important for increasing the likelihood group members will trust each other.

## METHODS

### Data and Sampling

Data are from Wave 1 (2006) of the Portraits of American Life Study (PALS) (Emerson, Sikkink, and James 2010), a nationally representative face-to-face survey of the civilian, non-institutionalized household population, age 18 or older, residing in the continental United States. The PALS's response rate is 58 percent, resulting in 2,610 cases (Emerson, Sikkink, and James 2010).

We limit our analysis to respondents who claim affiliation or membership in a religious congregation or other place of worship at the time of interview. Respondents who affirm affiliation, involvement, or membership, but indicate that their religious tradition is "unaffiliated," are also excluded, as are those who have a missing value on the dependent variable. This results in a final subsample of 1,110 congregants. Compared to the entire PALS sample, respondents who express congregational affiliation are more likely to be female, married, evangelical, Republican, and less likely to be political independents. They also tend to be slightly older and white, and to report slightly higher levels of education and income. Finally, they indicate that they are much more inclined to attend worship services frequently, and are less likely to reside in the West. Religious affiliations reported in our subsample include evangelical Protestants (35.4 percent), mainline Protestants (18.4 percent), black Protestants (7.4 percent), other Protestants (2.2 percent), Catholics (29.3 percent), Jews (1.5 percent), and other religions (5.6 percent). See Table 1 for weighted mean values and standard deviations for all variables used in the analysis.

The PALS includes sampling weights to adjust for each respondent's probability of selection. Respondents' weights were poststratified with U.S. Census projections to compensate for known biases (e.g., nonresponse and noncoverage) (Emerson, Sikkink, and James 2010). Because of the complex sampling design and clustering of PSUs, sampling weights were utilized in statistical estimations to reduce the likelihood of incorrect standard errors and significance tests. The weighted PALS sample is highly representative of the U.S. population, and there are no significant differences on key demographic variables (e.g., race/ethnicity, income, median age, etc.) compared to the Census Bureau's American Community Surveys (2005–2007) (Emerson, Sikkink, and James 2010). Table 1 reports weighted mean values and standard deviations for all variables used in the analysis.

### Dependent Variable: Within-Congregation Trust

Our measure of within-congregation trust is a binary measure based on the original item-wording used in the PALS survey and asks respondents if they "have been able to trust completely"

Table 1: Subpopulation weighted means and standard deviations

Variable	Mean	SD	Min	Max
Trust congregants	.275	.419	0	1
Age	47.931	16.458	18	80
Female	.602	.472	0	1
Married/live-in partner	.675	.498	0	1
White	.733	.499	0	1
Black	.122	.427	0	1
Hispanic	.091	.365	0	1
Asian	.050	.256	0	1
Income	8.811	4.507	0	18
Education	1.911	1.223	0	5
Employed	.642	.480	0	1
Democrat	.366	.497	0	1
Republican	.346	.452	0	1
Independent	.242	.422	0	1
Other party identification	.046	.194	0	1
Northeast	.198	.377	0	1
Midwest	.251	.404	0	1
South	.360	.483	0	1
West	.191	.435	0	1
Trust strangers	.022	.136	0	1
Black Protestant	.074	.358	0	1
Evangelical Protestant	.354	.462	0	1
Mainline Protestant	.184	.352	0	1
Catholic	.294	.460	0	1
Jewish	.015	.095	0	1
Other religion	.057	.243	0	1
Other Protestant	.022	.146	0	1
Religious salience	.418	.855	-1.754	1.637
Worship attendance	4.069	1.812	0	7
Frequency of prayer	5.096	2.175	0	8
Perception of God as loving and caring	3.622	.933	0	4
Tenure in congregation	15.736	15.254	0	57
Involvement in nonworship congregation activities	1.698	1.404	0	4
Closeness to pastor/religious leader	-.035	.999	-1.499	2.102
% of congregation members in friendship network	.261	.329	0	1
Frequency of interaction with congregants	1.977	1.021	0	3
No ties with congregants	.267	.451	0	1
Some ties with congregants	.206	.401	0	1
All ties with congregants	.527	.500	0	1
Close to no one	.026	.175	0	1
Neither given nor received help	.592	.480	0	1
Only given help	.110	.308	0	1
Only received help	.107	.292	0	1
Given and received help	.191	.367	0	1

Note: N = 1,110.

members of their congregation during the 12-month period prior to the interview (yes = 1, no = 0).<sup>1</sup>

Compared to some other research on the determinants of trust, our dependent measure differs somewhat in both the perceived target and expressed magnitude of trust. Given our focus on a type of trust that occurs within localized domains, standard questions used to measure generalized trust (e.g., “Generally speaking, would you say that most people can be trusted or that you can’t be too careful in dealing with people?”) are inappropriate. Instead, the PALS item that we use asks respondents explicitly whether they trust others within their particular congregations. The wording for this item differs from some other ordinal measures used to represent generalized or particularized trust, although it does follow Welzel (2010) and Wollebaek, Lundåsen, and Trägårdh (2012) in using “trust completely” as a response category to represent the highest rated level of trust. We believe that the wording of the dependent measure is not only acceptable for examining the trust that congregation members have for one another, but may have the advantage of being more focused and less likely to evoke ambiguous, indiscriminate, or unreflective responses from respondents. In future research, it would be useful to compare the specific item wording used in this measure of trust in congregants against other possible variations.

### **Predictor Variables**

To assess whether an individual’s likelihood of trusting fellow congregants is related to specific experiences within his or her congregation, we include measures of the following sets of factors.

#### ***Involvement in Congregation***

Because the likelihood that an individual will trust others might increase over time as evaluations of trustworthiness gravitate toward neutral or even positive values (Stolle 2001), we control for the number of years the congregant has attended his or her congregation. Since higher levels of civic and associational engagement are related to higher levels of particularized trust (see Freitag and Traunmüller 2009), we also include a measure of a respondent’s participation in congregational activities outside of regular attendance at religious services. Respondents were asked: “In the past 3 years, not including attending worship services, how often have you participated in activities, groups, or organizations of this congregation? Such as social gatherings, choir, small groups or prayer meetings, outreach or social service groups, etc.?” The range of recorded responses extends from “never” (0) to “more than once a day” (7).

Additionally, we utilized a principal components analysis to generate a score measuring the respondent’s relationship to the pastor or religious leader of the congregation. The measure is based on the following two items: (1) “How close do you feel to the primary religious leader at your congregation?” (coded “not at all close” = 0 to “extremely close” = 4; loading = .88) and (2) “How often do/did you talk with the religious leader at your congregation, not including just saying ‘hello’ after worship services?” (coded “never” = 0 to “every day” = 6; loading = .88). The resulting measure is standardized and has an acceptable level of internal consistency (alpha = .721).

<sup>1</sup>This item is the only measure of trust in congregation members that was available in the PALS data. Although the 12-month interval represents the original wording and could not be altered, the interval seems quite justifiable nonetheless. Because trust is not necessarily a given and can be earned (Glanville and Paxton 2007), it also seems likely that it can change over time, especially in situations when individuals interact with others who are not members of one’s immediate family. Thus, it seems advisable to utilize an item that reflects a relatively recent time frame for evaluating trust among congregants.

### *Congregant's Network of Social Ties*

We also consider how several qualities of respondents' friendship networks might influence within-congregation trust. These measures include the percentage of congregation members in the respondent's friendship network, the average frequency of interaction with nominated congregation members, and the extent of dense ties within the network of nominated congregants.

The PALS asks respondents to nominate up to four individuals outside of their home that they "feel closest to." The percentage of a respondent's friendship network identified as a congregation member (ranging from 0 to 100 percent, mean = 26.2 percent) is a measure of relative congregational influence within a friendship network. It should be noted that these nominations are based solely on each respondent's account of these friendships and we cannot be certain whether these relationships are reciprocated. It seems likely, however, that a congregant's perception of his or her network's composition is sufficient to influence many beliefs and attitudes, including the propensity to affirm trust.

The PALS also asks respondents affiliated with a congregation to nominate up to two additional congregants to supplement the friendship network information described above. These are congregation members to whom respondents feel closest, but who have not already been nominated and are not immediate family members. These additional nominations increase the total potential number of congregants in the friendship network to six. We use this complete set of nominated congregants to calculate a measure of frequency of interaction with fellow congregants. Relationships with nominated congregants are coded by the frequency of in-person interaction with the respondent: weekly interaction = 3, monthly interaction = 2, less frequent interaction = 1. These values were then summed and divided by the number of nominated congregants to create a measure of a respondent's average frequency of interaction with his or her nominated congregants.

We also consider the extent that a respondent identifies dense ties within this network of nominated congregants. The overlap of ties is estimated by asking the respondent which nominated congregants know the others well. Based on these reported relationships, we create a simple ratio that expresses the number of actual ties within the respondent's nominated network of congregants over the number of potential ties among congregants.<sup>2</sup> This measure ranges from 0 to 100 percent, with 26.3 percent of our sample responding that none of their nominated friends in the congregation know any other nominated congregants well.

Approximately 53 percent of congregants have closed networks, with all nominated congregants knowing each other well. Because of this variation, we transform the density scores into three mutually exclusive categories: (1) no ties among nominated congregants (density = 0 percent), (2) some (but not all possible) ties among nominated congregants (0 percent < density < 100 percent), and (3) all possible ties among nominated congregants (density = 100 percent). The dummy variable representing respondents who have no ties among nominated congregants serves as our excluded reference category in our analysis. Finally, we include an additional dichotomous measure to represent the small percentage of respondents who report not being close to anyone whatsoever.

### *Patterns of Social Exchange*

Respondents were asked whether they have helped fellow congregants (those who are not friends or family members) during the past 12 months "directly by giving their time" and whether they have received help from other congregants. We used these two items to create the following four mutually exclusive categories that represent the exchange of aid between congregants that occurred within the past year: (1) congregants who have neither received nor given help, (2) congregants who have not received help but have given help, (3) congregants who have received

<sup>2</sup>We follow the convention used by Degenne and Forsé (1999) and exclude the respondent from our density calculations.

help but not given help, and (4) congregants who have received and given help. We treat these categories as dummy variables, with those who have neither received nor given help as the reference category. Although the wording of the survey items does limit our knowledge of the particular content, frequency, and sequencing of these events, these measures do at least reflect a basic level of respondents' involvement in social exchanges within their congregations.

### Control Variables

We control for standard demographic measures that might influence the propensity to trust other congregants, several measures of religious orientation and behavior, and a respondent's level of generalized trust (i.e., trust in strangers). Our standard demographic controls include measures of age (18 to 80), sex, marital status (married or live-in partner = 1, else = 0), race/ethnicity (dummy variables for black, Hispanic, and Asian, with white as the reference category),<sup>3</sup> pretax 2005 household income (coded 0 to 18, with households earning less than \$5,000 = 0 and households earning \$200,000 or more = 18), education level (less than high school = 0; high school diploma or GED = 1; vocational/technical/associates/two-year religious degree = 2; bachelor's degree = 3; M.A./M.Div. = 4; and doctorate/professional degree = 5), employment status (part-time or full-time employment = 1, else = 0), political party identification (dummy variables for Democrat, independent, and "other" identification, with Republican as the reference category), and geographical region (dummy variables for South, Northeast, and West, with Midwest as the reference category).<sup>4</sup>

For religious tradition, we use the PALS's interpretation of Steensland and colleagues' (2000) classification scheme and include dummy variables to represent religious affiliation: evangelical Protestants, black Protestants, mainline Protestants, other Protestants, Catholics, Jews, and a blanket "other" category. Mainline Protestants serve as the reference category in our statistical models.<sup>5</sup>

We used principal component analysis to create a five-item component score of religious salience that measures how much a respondent incorporates his or her religious faith into daily life. Three items ask how often the respondent has "tried to understand and deal with major problems" in the past three years by: (1) looking to God or a larger spiritual force for strength, support, and guidance; (2) considering passages in his or her religious text; and (3) considering congregational teachings or talking to religious leaders. Recoded responses for these three items range from "not at all" (0) to "a great deal" (3). The other two scale items ask: "How important is religion or religious faith to you personally?" and "How important is God or spirituality in your life?" Recoded responses to these two items range from "not at all important" (0) to "by far the most important part of your life" (4). The resulting weighted component score is standardized and displays high internal consistency ( $\alpha = .869$ ).

Religious service attendance is measured by asking how frequently respondents attend worship services at their primary congregation. Recoded responses range from "never" (0) to "two or more times a week" (6). Frequency of prayer is measured using an item that asks respondents

<sup>3</sup>Insufficient numbers of Native American respondents eliminate them from this analysis.

<sup>4</sup>The Midwest region was selected as the reference category because the region is still often regarded as reflecting typical American lifestyles and values. Beginning with the classic Middletown studies of the Lynds, this region has come to represent a comparative reference point for understanding sociohistorical changes America has undergone.

<sup>5</sup>For our purposes, mainline Protestants represent an understandable reference point and are often used when researchers are more interested in focusing on evangelical or other denominational affiliations. Our data selection procedure eliminated all respondents who professed no affiliation and prevented us from using religious "nones" as a reference category. In alternative analyses, we tried each of the other respective affiliations as the reference category and compared results, even though it may be inadvisable to do this when the reference category contains only a relatively small percentage (8 percent or below) of the sample. The results of these analyses did not change substantially across the models.



how often, aside from before meals or during religious services, they have typically prayed in the past 12 months. Recoded responses range from “never” (0) to “more than three times a day” (8).

Additionally, because previous research indicates that among religious individuals a perception of God as forgiving/loving is positively related to a variety of trusting attitudes (Mencken, Bader, and Embry 2009), we asked respondents whether they believe “that God loves and cares about me.” Recoded responses range from “strongly disagree” (0) to “strongly agree” (4).

Finally, we control for those individuals who might have a predisposition to trust others in general, including those one does not know (Uslaner 2002). Respondents who report having complete trust in strangers during the past 12 months were coded 1 (0 = otherwise).

## RESULTS

Because of the binary character of the dependent variable, logistic regression is used to estimate the relationships between our predictor variables and a congregant’s odds of expressing complete trust in his or her fellow congregants. Diagnostic screening for multicollinearity did not reveal any problems. VIFs for all predictors were below 4 and only one bivariate correlation among the predictor variables exceeded .70.<sup>6</sup>

Missing data on various indicators were addressed through employing multiple imputation by chained equation procedures (Stata 11.2), estimating missing values with 20 imputed data sets. We utilize an *F*-adjusted mean residual goodness-of-fit test (Archer and Lemeshow 2006) to assess model fit for complex survey data with a dichotomous outcome variable. Because postestimation procedures including goodness-of-fit tests are not directly applicable within Stata’s multiple imputation framework (StataCorp 2013:12), we estimate the *F*-adjusted mean residual goodness-of-fit test independently for each imputed dataset. None of the 20 logistic regression models suggest a lack of fit, with all *F*-adjusted test statistics falling between .784 and 1.565 and all reported *p*-values falling above .05. Odds ratios (OR) predicting trust among congregants are presented in Table 2.

Model 1 includes the set of control variables, along with the measures of congregational involvement, and presents partial support for H1 on the net relationship between involvement and within-congregation trust. The level of participation in nonworship congregation activities is positively related to odds of trusting (OR = 1.442, *p* < .001), as is the closeness of a congregant’s relationship to his religious leaders (OR = 1.467, *p* < .01). Among the control variables, increases in age (OR = 1.023, *p* < .05) and income (OR = 1.101, *p* < .01) are related to higher odds of trusting fellow congregants, as is the belief that strangers can be trusted (OR = 11.001, *p* < .01). Compared to respondents living in the Midwest, respondents residing in both the South and Northeast have higher odds of trusting fellow congregants (OR = 2.171, *p* < .05 and OR = 3.342, *p* < .001, respectively). Respondents who claim an “other” political identification have higher odds of trusting fellow congregants when compared to respondents who identify with the Republican Party (4.655, *p* < .001). Additionally, each one unit increase in religious salience is associated with a 55.9 percent increase in the odds of trusting congregants (OR = 1.520, *p* < .01). Compared to mainline Protestants, however, Jews (OR = .096, *p* < .05) and black Protestants (OR = .319, *p* < .05) both display lower odds of trusting fellow congregants. Other religious measures, such as worship attendance, frequency of prayer, and image of God, are unrelated to within-congregation trust.

Model 2 adds the measures of a congregant’s social ties to the set of variables included in Model 1. Results from Model 2 support H2c. Individuals involved in congregational friendship

<sup>6</sup>That association was between the measures representing black respondents and black Protestants, so it was certainly not unexpected. We could not omit these measures, however, without misspecifying the models.

Table 2: Odds ratios for logistic regression models predicting trust in fellow congregants

	Model 1	Model 2	Model 3
Age	1.023* (.009)	1.025** (.009)	1.036*** (.009)
Female	1.324 (.285)	1.231 (.275)	1.367 (.310)
Married/live-in partner	.836 (.179)	.806 (.171)	.692 (.157)
Black <sup>a</sup>	.549 (.206)	.648 (.240)	.656 (.273)
Hispanic <sup>a</sup>	.534* (.167)	.520 (.177)	.634 (.218)
Asian <sup>a</sup>	.463 (.188)	.476 (.201)	.674 (.268)
Income	1.101** (.035)	1.106** (.037)	1.119** (.039)
Education	1.053 (.120)	1.051 (.123)	1.005 (.130)
Employed	.805 (.239)	.753 (.228)	.783 (.238)
Democrat <sup>b</sup>	1.105 (.303)	1.086 (.309)	1.107 (.283)
Independent <sup>b</sup>	1.437 (.393)	1.385 (.380)	1.320 (.404)
Other political identification <sup>b</sup>	4.655*** (1.974)	5.217*** (2.486)	5.929*** (2.992)
Northeast <sup>c</sup>	3.342*** (1.076)	3.488*** (1.217)	3.638** (1.408)
South <sup>c</sup>	2.171* (.691)	1.962* (.653)	1.901* (.585)
West <sup>c</sup>	1.857 (.583)	1.758 (.575)	1.706 (.530)
Trust strangers	11.001*** (5.228)	9.331*** (4.864)	7.893*** (4.670)
Black Protestant <sup>d</sup>	.319* (.180)	.298* (.166)	.401 (.264)
Evangelical Protestant <sup>d</sup>	.837 (.236)	.773 (.224)	.956 (.322)
Catholic <sup>d</sup>	.553 (.170)	.566 (.185)	.715 (.246)
Jewish <sup>d</sup>	.096* (.088)	.091* (.083)	.053* (.062)
Other religion <sup>d</sup>	.782 (.355)	.776 (.379)	.755 (.395)
Other Protestant <sup>d</sup>	1.240 (.794)	1.329 (.778)	1.537 (1.007)
Religious salience	1.559** (.260)	1.484* (.268)	1.240 (.222)
Worship attendance	1.046 (.085)	.992 (.078)	.976 (.080)

(Continued)

Table 2: (Continued)

	Model 1	Model 2	Model 3
Frequency of prayer	.974 (.062)	.979 (.062)	.938 (.061)
Perception of God as loving and caring	.943 (.100)	.932 (.103)	.918 (.090)
Tenure in congregation	1.004 (.007)	1.000 (.007)	.996 (.008)
Involvement in nonworship congregation activities	1.442*** (.112)	1.379*** (.116)	1.218* (.116)
Closeness to pastor/religious leader	1.467** (.188)	1.383* (.184)	1.394** (.170)
% of congregation members in friendship network		1.110 (.408)	1.151 (.519)
Frequency of interaction with congregants		1.403* (.220)	1.240 (.208)
Some ties with congregants <sup>c</sup>		2.767** (.907)	2.470* (.971)
All ties with congregants <sup>c</sup>		1.738 (.643)	1.569 (.594)
Close to no one		2.074 (2.042)	1.635 (1.917)
Only given help <sup>f</sup>			2.223* (.800)
Only received help <sup>f</sup>			3.050** (1.124)
Given and received help <sup>f</sup>			9.171*** (2.790)

Notes: Standard errors in parentheses. Survey weights used. Congregant subpopulation from PALS, 2006.  $N = 1,110$ .

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

<sup>a</sup>Reference category is white.

<sup>b</sup>Reference category is Republican.

<sup>c</sup>Reference category is Midwest.

<sup>d</sup>Reference category is mainline Protestant.

<sup>e</sup>Reference category is no congregant ties.

<sup>f</sup>Reference category is neither given nor received help.

networks that display at least some overlap ( $OR = 2.767, p < .01$ ) are associated with higher odds of trusting fellow congregants compared to respondents who are involved in a network where no overlapping ties exist. However, a statistically significant relationship is not found between individuals who report having all possible overlapping ties among network members and completely trusting congregants. Additionally, the results fail to support H2a, while H2b is only temporarily supported, which we discuss below in examining Model 3.

Model 3 provides clear support for H3. Respondents who indicate that they have only received help from other members of their congregation but not provided any help have approximately three times higher odds ( $OR = 3.050, p < .01$ ) of trusting other congregants compared to those who have neither given nor received help. Those who have acted altruistically, and those who have only given help but not received it, also display greater odds of trusting other congregants ( $OR = 2.223, p < .05$ ) compared to the reference category. Respondents who indicate that they have

helped other members of their congregation and also received such help show over eight times greater odds ( $OR = 9.171, p < .001$ ) of trusting fellow congregants compared to those who have neither given nor received help. When these measures of social exchange are added to Model 3, it is notable that several measures of religious orientation and congregational involvement are rendered statistically nonsignificant: black Protestant, religious salience, and frequency of interaction with other congregants. Because this latter measure is reduced to nonsignificance, H2b ultimately fails to gain support. Although no other net relationships display any major changes in direction or magnitude in comparison to the results presented in Model 2, some significance levels were altered slightly (e.g., the  $p$ -value for age became  $< .001$ ).

To provide additional insight, we calculated predicted probabilities and compared the effects of the social exchange measures with those displayed by some of the other most powerful predictors included in Model 3. Holding all other variables at their average levels, there is a clear increase in the predicted probability of trusting other congregants completely that relates to an individual's position in the congregational exchange network. For those who neither give nor receive help, the predicted probability is .110; for those who only give help, it is .215; for those who only receive help, the probability is .273; and for those who both give and receive help, the probability is .570. All of these predicted probabilities are highly statistically significant ( $p < .001$ ).

The measures of closeness to one's pastor/religious leader and involvement in congregational activities other than worship also show a similarly increasing monotonic pattern of trust in congregants, as does the general measure of one's willingness to trust strangers. Probabilities for the closeness measure range from .143 (respondents one standard deviation below the mean), through .188 (mean level), to .242 (respondents one standard deviation above the mean). Probabilities for the measure of involvement extend from .142 (those who report no involvement), through .168 (those involved a few times) and .197 (those who are involved once a month), to .230 (involved more than once a month) and .267 (those involved once a week or more). Finally, those who indicate that they trust strangers show a much higher probability of also trusting other members of their congregation completely ( $p = .636$ ) compared to those who don't trust strangers ( $p = .181$ ). Again, all of these predicted probabilities are highly statistically significant ( $p < .001$ ).

It is noteworthy that only those who are willing to trust strangers completely and those who have given and received help from other members of their congregation show the highest probabilities ( $> .50$ ) of trusting other congregants completely. However, within the framework of our comparisons, it is also clear that congregants who have only received aid have the third highest probability (.273) of trusting their fellow congregation members completely.

## DISCUSSION AND CONCLUSION

Our results suggest that the positive relationship between religiosity and trust may be driven less by an inherent benefit of religious beliefs or practices and more by micro-level processes that occur within congregations. Specifically, we find that within-congregation trust is related to particular types of church involvement and interaction. Individuals who are engaged in church life, and who have social support and ample opportunities for trust-building interaction, are most likely to trust their fellow congregants. Accounting for specific types of interactions makes other measures of personal religiosity (e.g., religious salience and service attendance) insignificant for intracongregational trust in any important way. This demonstrates the importance of microinteractions within groups for learning trust, which is then generalized to group members. Furthermore, based on the social learning perspective, we expect that the particularized trust built in congregations can enhance one's generalized trust, just as it does in other social contexts.

We find that in addition to involvement in nonworship activities, respondents' relationships with religious leaders are positively related to within-congregation trust. It may be that an

individual's closeness to his or her pastor is a loose proxy for congregation size (a measure not available to us in the PALS data), but it could also be something more. Pastors may promote positive relationships between congregants that serve to build solidarity and a sense of inclusiveness (Ammerman 1997; Becker 1999). The important role of leaders is supported by research outside congregational contexts that demonstrates how a credible, consistent, and trusted leader can foster a climate of trust within organizations and between employees (Seppälä, Lipponen, and Pirttilä-Backman 2012).

Recent research shows that the composition of an individual's congregational network is likely to influence a variety of outcomes related to religious values, behaviors, and beliefs (Stroope 2012). Additionally, the quality of dense religious networks seems to be especially important for reinforcing norms and expectations within religious life, so it is not surprising that network ties are related to trust in other congregation members.

We tend to trust those whom we know well, even if this trust is more about predictability than benevolence (Molm, Schaefer, and Collett 2009). Our results support this. We find this to be particularly true for individuals who have at least some ties to relatively dense friendship networks. Such networks may enhance the sense of cohesion and foster trust. Of course, frequent encounters with friends may provide more opportunities to gauge other congregants' trustworthiness than would be available to someone without similar network ties, but we cannot address that with the data at hand.

Without question, the most important factor for within-group trust was involvement in indirect exchange processes. Consistent with research in social psychology, it seems that the character of exchanges between members is a key factor for understanding within-congregation trust. In Table 2, Model 3, for example, the dummy measures representing the outcomes of these exchanges display three of the four highest statistically significant net odds ratios, giving clear evidence of their predictive power. This is also clearly supported by the predicted probabilities we presented in the preceding section. Those engaged in these exchanges realize the risk of nonreciprocity and enjoy the expressive value of such exchanges beyond the instrumental value of help received (Molm 2010), which is reflected in the predicted probabilities indicating that they will trust other congregation members fully. Positive norms of reciprocity operating within organizations likely shape members' expectations that the assistance they extend to others will also be extended toward them when they need it (Kramer 1999). Perhaps it is this sense of reciprocity that undermines "free-ridership," contributes to cohesion and commitment, and is ultimately reflected in the congregational dynamics that make strict churches strong (Iannaccone 1994).

Although all of the measures of social exchange patterns are significant predictors of intracongregational trust, symmetry appears to be most beneficial for within-congregation trust, as was again evident in the comparisons of predicted probabilities reported earlier. That said, having only given or received aid is both positively and significantly related to within-group trust. Because the survey question asks about involvement in exchanges over the last 12 months, it could be that item only captures one side of a dynamic—and asymmetrical—exchange history. Even those who report having only given help could have received it at some time in the past, or perhaps see themselves doing so when the opportunity presents itself. And, those who report only having received, might have given previously or imagine themselves doing so when they are able.

However, there could be other benefits of exchange driving these positive relationships. For members who receive aid from other congregants but do not give any themselves, simple gratitude and the basic reward the member gains may generate positive general impressions about other congregants that can lead to the formation of intracongregational trust. Giving aid or support to other members but not receiving any probably reflects normative influences within a congregation that emphasize altruistic or self-sacrificing behavior (Maton 1987). In that instance, an individual could model such behavior and be rewarded for doing so. This reinforcement would most likely

be perceived as a positive outcome and favorable impressions drawn from these interactions would probably be associated with the exchange partners themselves. Eventually, the resulting sense of trust would likely be generalized to include other members of the congregation.

Although the findings about the importance of exchange processes are clear, the cross-sectional data that we use obviously limit our ability to make causal inferences about how various factors influence trust. Lack of information on the size and homogeneity of respondents' congregations also prevents us from examining questions about whether compositional effects and homophily impact trust between congregation members. Perhaps when data from later waves of the PALS survey become available, these issues can be addressed in future research.

Overall, however, it seems the most important conclusion we can draw from our findings is that congregation members may discover more about how much they can trust other members by experiencing at least some form of social exchange (symmetrical or asymmetrical) with other congregants rather than none (neither symmetrical nor asymmetrical). These interactions may provide an opportunity for learning about the actual behavior of other congregants and the consequences associated with the interactions, as well as for gaining reinforcement that can lead to the generalization of trust (Glanville and Paxton 2007; Molm, Takahashi, and Peterson 2000). Our research not only draws on important insights from social learning theory (Rotter 1971; Stack 1978), but also contributes to the literature by incorporating contemporary work in social psychology to outline the specific process that generates trust in relationships and local spheres. In other words, through experiences with specific persons in a group (e.g., instances of exchange), we build trust that we then extrapolate to others in the group (e.g., trust in one's congregation). These microinteractions not only provide an opportunity for learning about the actual behavior of other congregants and the consequences associated with the interactions, they also reinforce trust in a way that can lead to its generalization (Glanville and Paxton 2007; Molm, Takahashi, and Peterson 2000). If we wish to gain important insights about how trust can grow and flourish among congregation members, and how such trust can eventually affect congregational life and levels of generalized trust, it would be wise to focus more on the micro-level processes within congregations that are actually critical for facilitating these developments.

## REFERENCES

- Ammerman, Nancy T. 1997. Organized religion in a voluntaristic society. *Sociology of Religion* 58(3):203–15.
- Archer, Kellie J. and Stanley Lemeshow. 2006. Goodness-of-fit test for a logistic regression model fitted using survey sample data. *Stata Journal* 6(1):97–105.
- Becker, Penny Edgell. 1999. *Congregations in conflict: Cultural models of local religious life*. New York: Cambridge University Press.
- Burns, Nancy, Donald Kinder, and Wendy Rahn. 2000. Social trust and democratic politics. Report to the National Election Studies Board based on the 2000 NES Special Topic Pilot.
- Coleman, James. 1988. Social capital in the creation of human capital. *American Journal of Sociology* 94(Suppl.):S95–S120.
- Couch, Laurie L. and Warren H. Jones. 1997. Measuring levels of trust. *Journal of Research in Personality* 31(3):319–36.
- Daniels, Joseph P. and Marc von der Ruhr. 2010. Trust in others: Does religion matter? *Review of Social Economy* 68(2):163–86.
- Degenne, Alain and Michel Forsé. 1999. *Introducing social networks*. Thousand Oaks, CA: Sage.
- Emerson, Michael O., David Sikkink, and Adele D. James. 2010. The panel study on American religion and ethnicity: Background, methods, and selected results. *Journal for the Scientific Study of Religion* 49(1):162–71.
- Emerson, Richard M. 1976. Social exchange theory. *Annual Review of Sociology* 2(1):335–62.
- Freitag, Markus and Richard Traunmüller. 2009. Spheres of trust: An empirical analysis of the foundations of particularised and generalised trust. *European Journal of Political Research* 48(6):782–803.
- Glanville, Jennifer and Pamela Paxton. 2007. How do we learn to trust? A confirmatory tetrad analysis of the sources of generalized trust. *Social Psychological Quarterly* 70(3):230–42.
- Greenberg, Michael R. 2001. Elements and test of a theory of neighborhood civic participation. *Research in Human Ecology* 8(2):40–51.
- Hardin, Russell. 2002. *Trust and trustworthiness*. New York: Russell Sage Foundation.

- Hempel, Lynn M., Todd Matthews, and John Bartkowski. 2012. Trust in a "fallen world": The case of Protestant theological conservatism. *Journal for the Scientific Study of Religion* 51(3):522–41.
- Homans, George. 1974. *Social behavior: Its elementary forms*, rev. ed. New York: Harcourt, Brace, Jovanovich.
- Hooghe, Marc and Dietlind Stolle. 2003. Introduction: Generating social capital. In *Generating social capital: Civil society and institutions*, edited by M. Hooghe and D. Stolle, pp. 1–18. New York: Palgrave/St. Martin Press.
- Iannaccone, Laurence R. 1994. Why strict churches are strong. *American Journal of Sociology* 99(5):1180–1211.
- Kollock, Peter. 1994. The emergence of exchange structures: An experimental study of uncertainty, commitment, and trust. *American Journal of Sociology* 100(2):313–45.
- Kramer, Roderick M. 1999. Trust and distrust in organizations: Emerging perspectives, enduring questions. *Annual Review of Psychology* 50(1):569–98.
- Lawler, Edward J. 2001. An affect theory of social exchange. *American Journal of Sociology* 107(2):321–52.
- Lawler, Edward J., Shane R. Thye, and Jeongkoo Yoon. 2008. Social exchange and micro social order. *American Sociological Review* 73(4):519–42.
- Lawler, Edward J. and Jeongkoo Yoon. 1996. Commitment in exchange relations: Test of a theory of relational cohesion. *American Sociological Review* 61(1):89–108.
- Macy, Michael W. and John Skvoretz. 1998. The evolution of trust and cooperation between strangers: A computational model. *American Sociological Review* 63(5):638–60.
- Maton, Kenneth I. 1987. Patterns and psychological correlates of material support within a religious setting: The bidirectional support hypothesis. *American Journal of Community Psychology* 15(2):185–207.
- Mencken, F. Carson, Christopher Bader, and Elizabeth Embry. 2009. In God we trust: Images of God and trust in the United States among the highly religious. *Sociological Perspectives* 52(1):23–38.
- Molm, Linda D. 2010. The structure of reciprocity. *Social Psychology Quarterly* 73(2):119–31.
- Molm, Linda D., David R. Schaefer, and Jessica L. Collett. 2007. The value of reciprocity. *Social Psychology Quarterly* 70(2):199–217.
- . 2009. Fragile and resilient trust: Risk and uncertainty in negotiated and reciprocal exchange. *Sociological Theory* 27(1):1–32.
- Molm, Linda D., Nobuyuki Takahashi, and Gretchen Peterson. 2000. Risk and trust in social exchange: An experimental test of a classical proposition. *American Journal of Sociology* 105(5):1396–1427.
- Newton, Ken and Sonja Zmerli. 2011. Three forms of trust and their association. *European Political Science Review* 3(2):169–200.
- Putnam, Robert D. 2000. *Bowling alone: The collapse and revival of American community*. New York: Simon & Schuster.
- Rotter, Julian B. 1971. Generalized expectancies for interpersonal trust. *American Psychologist* 26(5):443–50.
- Seppälä, Tuija, Jukka Lipponen, and Anna-Maija Pirttilä-Backman. 2012. Leader fairness and employees' trust in coworkers: The moderating role of leader group prototypicality. *Group Dynamics: Theory, Research, and Practice* 16(1):35–49.
- Stack, Lois C. 1978. Trust. In *Dimensions of personality*, edited by H. London and J. E. Exner, Jr., pp. 561–99. New York: John Wiley and Sons.
- StataCorp. 2013. *Stata multiple-imputation reference manual: Release 13. Statistical software*. College Station, TX: StataCorp LP.
- Stensland, Brian, Jerry Z. Park, Mark D. Regnerus, Lynn D. Robinson, W. Bradford Wilcox, and Robert D. Woodberry. 2000. The measure of American religion: Toward improving the state of the art. *Social Forces* 79(1):291–318.
- Stolle, Dietlind. 2001. Clubs and congregations: The benefits of joining an association. In *Trust in society, vol. 2: The Russell Sage Foundation series on trust*, edited by K. S. Cook, pp. 202–44. New York: Russell Sage Foundation.
- Stroope, Samuel. 2012. Social networks and religion: The role of congregational social embeddedness in religious belief and practice. *Sociology of Religion* 73(3):273–98.
- Uslaner, Eric M. 2002. *The moral foundations of trust*. New York: Cambridge University Press.
- Veenstra, Gerry. 2002. Explicating social capital: Trust and participation in the civil space. *Canadian Journal of Sociology* 27(4):547–72.
- Welch, Michael R., David Sikkink, and Matthew T. Loveland. 2007. The radius of trust: Religion, social embeddedness, and trust in strangers. *Social Forces* 86(1):23–46.
- Welch, Michael R., David Sikkink, Eric Sartain, and Carolyn Bond. 2004. Trust in God and trust in man: The ambivalent role of religion in shaping dimensions of social trust. *Journal for the Scientific Study of Religion* 43(3):317–43.
- Welzel, Christian. 2010. How selfish are self-expression values? A civiness test. *Journal of Cross-Cultural Psychology* 41(2):152–74.
- Wollebaek, Dag, Susan Wallman Lundåsen, and Lars Trägårdh. 2012. Three forms of interpersonal trust: Evidence from Swedish municipalities. *Scandinavian Political Studies* 35(4):319–46.
- Wrightsmen, Lawrence S. 1992. *Assumptions about human nature: Implication for researchers and practitioners*. Newbury Park, CA: Sage.