Testing the *Love Thy Neighbor Hypothesis*: Religiosity's Association With Positive Attitudes Toward Ethnic/Racial and Value-Violating Out-Groups

Megan Johnson Shen Memorial Sloan-Kettering Cancer Center, New York, NY Megan C. Haggard, Daniel C. Strassburger, and Wade C. Rowatt Baylor University

Most religions teach individuals to "love thy neighbor" where "neighbor" extends to out-group members. To date, the *love thy neighbor hypothesis*, which posits that religiosity is associated with tolerance toward out-group members, has been tested indirectly by examining religiosity's association with negative (prejudiced) attitudes. The present study directly tested the love thy neighbor hypothesis by examining religiosity's association with positive attitudes toward out-groups once statistically controlling for right-wing authoritarianism (RWA), a measure of cognitive rigidity and a known mediator of the relationship between religiosity and prejudice. Two hundred forty-nine adult Americans completed measures of religiosity and allophilia, a measure of positive attitudes toward members of an out-group. Mediation path analyses revealed that RWA aggression, a subcomponent of RWA that measures a cognitively rigid ideology, fully mediated the relationship between religiosity and positive attitudes toward ethnic/racial out-groups (Arabs, African Americans, and Hispanics). This positive association between religiosity and positive attitudes toward ethnic/racial out-groups suggests that religiosity is associated with loving some neighbors. Both RWA aggression and RWA conventionalism (a subcomponent of RWA that measures traditional cognitive rigidity) fully mediated the relationship between religiosity and positive attitudes toward value-violating out-groups (lesbians, gay men, and atheists). Religiosity showed no association with attitudes toward value-violating out-groups once controlling for these rigid ideologies, providing partial support for the love thy neighbor hypothesis. Implications of the present results for understanding how religiosity can be associated with and even promote tolerance toward out-groups are discussed.

Keywords: religiosity, right-wing authoritarianism, positive attitudes, allophilia, structural equation modeling

Most world religions preach for individuals to "love thy neighbor" where "neighbor" extends to individuals outside of one's own in-group. A widely used example of "loving thy neighbor" is the Christian parable of the Good Samaritan in which Jesus tells the story of a Samaritan helping an injured Jew in need. Samaritans and Jews were known to dislike each other strongly, so this story illustrates the need to be charitable toward individuals even if they do not belong to one's in-group.

To date, research has only indirectly tested the *love thy neighbor hypothesis* by examining associations between multiple measures of religiosity (e.g., intrinsic religiosity, religious fundamentalism, and general religiosity) and prejudice—a negative evaluative reaction toward an individual or social group. Positive associations between religiosity and prejudice toward racial out-groups such as African Americans (Hall, Matz, & Wood, 2010) and value-

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Megan Johnson Shen, Department of Psychiatry and Behavioral Sciences, Memorial Sloan-Kettering Cancer Center, New York, NY; Megan C. Haggard, Daniel C. Strassburger, and Wade C. Rowatt, Department of Psychology and Neuroscience, Baylor University.

Correspondence concerning this article should be addressed to Megan Johnson Shen, PhD, Postdoctoral Research Fellow, Memorial Sloan-Kettering Cancer Center, 641 Lexington Ave., 7th floor, New York, NY 10022. E-mail: meganjohnsonshen@gmail.com

violating out-groups such as gay men and lesbian women (Whit-ley, 2009) and atheists (Gervais, Shariff, & Norenzayan, 2011) have led to conclusions that religiosity is inversely associated with love of neighbor. These associations have been found consistently across several meta-analyses (Hall et al., 2010; Whitley, 2009) as well as among college samples (Gervais et al., 2011). However, these studies have not directly tested the hypothesis that religiosity is associated with liking or loving out-group members. As such, the relationship between religiosity and attitudes toward out-group members is unclear.

A direct test of the *love thy neighbor hypothesis* would be to correlate measures of religiosity with measures of liking or positive attitudes, instead of measures of disliking or prejudice. Such a test seems necessary for two main reasons. First, positive and negative attitudes have been shown to be theoretically and functionally distinct constructs (Pittinsky, Rosenthal, & Montoya, 2011a, 2011b). Second, low levels of prejudice may not necessarily equate to liking or loving of "neighbors" or out-groups. As such, a fairer test of the *love thy neighbor hypothesis* is to examine the association between religiosity and positive attitudes toward out-group members. Testing this hypothesis could clarify a long-standing paradox within the psychology of religion literature that presents mixed results (i.e., both tolerance and prejudice) on religiosity's association with attitudes toward various out-groups (Allport & Ross, 1967). To test this hypothesis, we draw from Pittin-

sky's theory on allophilia, which claims that "liking" of an outgroup (allophilia) and prejudice are two distinct constructs (Pittinsky et al., 2011a, 2011b).

To clearly understand the link between religiosity as it pertains to the internalization of religious values (e.g., love your neighbor as yourself; do unto others as you would have them do unto you) and attitudes toward out-group members, it is necessary to control for any potential cognitively rigid ideological confounds. Rigid ideologies, such as right-wing authoritarianism (RWA) and religious fundamentalism (RF), are strong correlates of general religiosity (Johnson et al., 2011). Moreover, these rigid ideologies were strongly correlated with negative attitudes toward out-group members and fully mediated the relationship between religiosity and prejudice toward out-groups among both college samples (Johnson et al., 2011) and samples of American adults (Johnson, Labouff, Rowatt, Patock-Peckham, & Carlisle, 2012). As such, these rigid ideologies need to be included as potential mediators of the religiosity-allophilia relationship.

The primary purpose of the current study was to examine the association between religiosity and allophilia (i.e., positive attitudes toward members of an out-group). A secondary purpose was to test whether measures of cognitive rigidity (the three subcomponents of RWA) mediate the religiosity-allophilia relationship. We predict the relationship between religiosity and positive attitudes toward out-groups will be positive when statistically controlling for RWA.

Religiosity's Association With Prejudice

As noted, previous research has only examined whether religiosity is associated with "loving one's neighbor" by seeing whether it is inversely related to prejudice toward out-group members. Meta-analytic findings show a paradoxical relationship. Religiosity was associated with both prejudice and tolerance toward outgroups (Hall et al., 2010; Whitley, 2009). Most research examining the relationship between religiosity and racial prejudice has focused on the prejudice toward African Americans. Across multiple studies some measures of religiosity, such as identifying as religious and extrinsic religiosity, have been associated with prejudice toward African Americans (Hall et al., 2010). In contrast, other measures of religiosity, such as Christian orthodoxy and intrinsic religiosity, have been associated with racial tolerance (Hall et al., 2010). The relationship between religiosity and value-violating prejudice—prejudice toward groups who violate Judeo-Christian values—is less paradoxical. A meta-analysis showed that nearly all measures of religiosity were associated with prejudice against gay men and lesbian women (Whitley, 2009). Several measures of religiosity, including intrinsic religiosity and a general belief in God, have been negatively associated with attitudes toward atheists among college samples as well (Jackson & Hunsberger, 1999). Moreover, religiosity has been associated with implicit distrust and dislike of atheists (Gervais et al., 2011). Given these findings, it is apparent that the relationship between religiosity and prejudice is paradoxical at best and highly prejudiced at worst. Examination of the relationship between general religiosity and positive attitudes toward out-groups should clarify this relationship.

Testing the Love Thy Neighbor Hypothesis

Allophilia is a measure of positive attitudes toward out-group members which measures "liking" of or positive attitudes toward members of out-groups by tapping into several dimensions of positive attitudes, such as affection, engagement, enthusiasm, comfort, and kinship (Pittinsky et al., 2011b). Positive and negative attitudes have been shown to be distinct factors which are nonbipolar and nonreciprocally activated, meaning a change in one is not necessarily associated with a counterchange in the other (Pittinsky et al., 2011a, 2011b). For instance, allophilia toward African Americans has been associated with a more universal orientation toward African Americans as out-group members and a stronger endorsement of recategorization of the out-group members into the in-group (Pittinsky et al., 2011b). Perhaps the biggest difference between positive and negative attitudes is their ability to predict behaviors differentially. For instance, positive attitudes are better predictors of positive behaviors, such as allocating charity donations to a group of minority members, and negative attitudes are better predictors of negative behaviors, such as supporting policies to limit benefits of minority members (Pittinsky et al., 2011a).

Given that positive and negative attitudes are distinct factors, the sole focus on the relationship between religiosity and negative attitudes (prejudice) has been limited in scope. If positive attitudes are distinctly different from negative attitudes, the relationship between religiosity and positive attitudes should be different than the mere inverse of the relationship between religiosity and prejudice. As such, it is necessary to test competing predictions of the relationship between religiosity and positive attitudes. We tested two competing hypotheses, the love thy neighbor and religiositynonliking hypotheses, by examining the association between measures of religiosity and positive attitudes toward out-group members using the measure of allophilia (Pittinsky et al., 2011b). The relationship between religiosity and positive attitudes being distinctly different from the relationship between religiosity and negative attitudes would demonstrate support for the love thy neighbor hypothesis. However, if Pittinsky et al.'s (2011a) theory is not applicable to the relationship between religiosity and attitudes toward out-group members, then the relationship between religiosity and allophilia should have a similar (but inverse) relationship as that between religiosity and prejudice. This would support the religiosity-nonliking hypothesis. Alternatively, once controlling for rigid ideologies, there could be no relationship between religiosity and positive attitudes toward out-group members. This would indicate that rigid ideologies fully mediate the relationship between religiosity and positive attitudes toward outgroup members.

Examining a Model of Religiosity's Association With Positive Attitudes

Although religiosity itself may be associated with positive attitudes toward some racial and value-violating out-groups (Hall et al., 2010; Whitley, 2009), it is important to distinguish which components of religiosity are positively associated with positive attitudes toward these out-groups and which components are inversely related to positive attitudes toward out-groups. Internalizing general religious beliefs (e.g., "love thy

neighbor") may be associated with positive attitudes toward out-groups whereas the rigid ideologies associated with religiosity (such as RWA) may be associated with a lack of positive attitudes toward out-groups. Thus, it is important to consider the role cognitively rigid ideologies have played in mediating the relationship between religiosity and prejudice (Johnson et al., 2011). Prior meta-analyses have shown the relationship between religiosity and prejudice, particularly religiosity and prejudice toward gay men/lesbian women, to be quite strong across a number of studies (Whitley, 2009). Despite the strong relationship between religiosity and prejudice, religious fundamentalism (RF) and right-wing authoritarianism (RWA) combined have been shown to fully mediate the relationship between religiosity (measured as a latent variable composed of intrinsic religiosity, religious behaviors, and general religiosity) and prejudiced attitudes toward African Americans and gay men/lesbian women (Johnson et al., 2011). RWA has also been shown to mediate the relationship between RF and prejudicial attitudes toward African Americans and Arabs (Johnson et al., 2012). Before these mediational studies, most findings in the literature showed simply being more religious was associated with less tolerance toward out-groups. Findings from these mediational studies demonstrate that being closed-minded or cognitively rigid appears to be the component of religiosity accounting for the relationship between religiosity and prejudice. Thus, to understand more clearly the relationship between religiosity and positive attitudes, it is important to take these cognitively rigid ideologies into account as possible mediators of the relationship. By doing so, we can better detect which components of religiosity might be associated with positive attitudes toward out-groups.

As noted, previous studies have examined the role of both RF and RWA as potential mediators of the relationship between religiosity and prejudice among U.S. college and adult samples (Johnson et al., 2011, 2012). Both RWA and RF have been associated with rigid or inflexible cognition (Jost, Glaser, Kruglanski, & Sulloway, 2003; Pancer, Jackson, Hunsberger, Pratt, & Lea, 1995). RF is a religious cognitively rigid ideology about the inerrant truth of the divine (Altemeyer & Hunsberger, 1992) whereas RWA represents a rigid moralization of society (Mavor, Macleod, Boal, & Louis, 2009). RWA, as indicated by exploratory and confirmatory factor analyses (cf. Mayor, Louis, & Sibley, 2010), is composed of three facets: (1) RWA aggression, which involves engaging in punitive behaviors toward "evildoers," (2) RWA submission, the belief that all legitimate authorities should be obeyed, and (3) RWA conventionalism, a component most closely related to RF (Mavor et al., 2010, 2009). Each component of RWA is associated with specific types of prejudice. For instance, RWA aggression has been most strongly associated with racial prejudice and RWA conventionalism has been most strongly associated with valueviolating prejudice among both U.S. and Australian samples (cf. Johnson et al., 2011, 2012; Mayor et al., 2009). RWA submission has been most strongly associated with racial prejudice (Mavor et al., 2009) but shows no relationship to either racial or value-violating prejudice when examined within the context of mediating the relationship between general religiosity and prejudice. Other measures of rigid cognitive components-such as need for closure (Brandt & Reyna, 2010) and need for cognition (Hill, Cohen, Terrell, & Nagoshi, 2010)—have been shown to mediate the positive association between RF and prejudice among U.S. adult and college samples.

Although direct measures of cognitive rigidity (e.g., need for closure, need for cognition) mediate the relationship between religious rigid ideology (RF) and prejudice, it is rigid ideologies themselves (e.g., RWA and RF) that mediate the relationship between general religiosity and prejudice. In order to clearly understand the relationship between religiosity and positive attitudes, it is necessary to examine rigid ideologies as mediators of the positive relationship between general religiosity and prejudice. We examined RWA, a measure of cognitive rigidity, as a potential mediator. The reason past research examined RF in addition to RWA is because the component of RWA that is both statistically and theoretically similar to RF, RWA conventionalism (Mavor et al., 2010), has strong overlap in items with traditional measures of prejudice. For instance, both the RWA conventionalism subscale and the attitudes toward gay men and lesbian women scale (ATLG; Herek, 1988, 1994) ask items about the degree to which individuals disapprove of gay men and lesbian women. Because the present study examined the relationship between religiosity and positive attitudes toward out-groups, this overlap in items does not exist. As such, using the RWA measure provided a more comprehensive measure of the different components of cognitively rigid ideologies because it provides there facets of cognitive rigidity.

The Present Study

In the present study, we tested competing predictions that religiosity would either explain positive attitudes toward out-groups (love thy neighbor hypothesis) or promote a lack of "liking" of these groups (religiosity-nonliking hypothesis). We measured religiosity as a latent variable composed of intrinsic religiosity, religious behaviors (e.g., prayer, church attendance), and general religiosity. These measures were used because we were interested in how cognitive rigidity (RWA) mediated the relationship between identifying as a religious person (intrinsically and behaviorally) and prejudice. Much past research has examined how cognitive factors mediate the relationship between RF and prejudice (e.g., Hill et al., 2010). However, because RF represents its own set of rigid ideological beliefs, it becomes less clear what role general religiosity plays in explaining prejudice when utilizing RF as a measure of religiosity. RWA was used as our measure of cognitive rigidity because it taps into three domains of rigid ideology: aggression, submission, and conventionalism. Because RWA conventionalism and RF are statistically and conceptually similar (Mayor et al., 2009), we did not include a measure of RF in the present study.

We assessed attitudes toward two different types of out-groups: ethnic/racial and value-violating. The ethnic/racial out-group was composed of African Americans, Arabs, and Hispanics. These out-groups were chosen based on previous research demonstrating that religiosity is associated with prejudice toward these out-groups (Hall et al., 2010; Johnson et al., 2011, 2012). Previous research has demonstrated that RWA aggression mediated the relationship between religiosity and prejudice toward African Americans (Johnson et al., 2011). As such, we hypothesized RWA aggression would mediate the relationship between religiosity and

positive attitudes toward ethnic/racial out-groups. Specifically, we predicted RWA aggression would be associated with a lack of "liking" of these ethnic/racial groups such that when controlling for RWA, general religiosity would be associated with either positive attitudes (supporting the *love thy neighbor hypothesis*) or negative attitudes (supporting the *religiosity-nonliking hypothesis*) toward ethnic/racial out-groups.

The value-violating out-group variable in the present study was composed of attitudes toward gay men, lesbian women, and atheists. Similarly to the ethnic/racial out-groups, these outgroups were chosen based on previous research demonstrating a strong link between religiosity and prejudice toward these out-groups (Johnson et al., 2011, 2012; Whitley, 2009). Previous research has shown RF (a strong correlate of RWA conventionalism; Johnson et al., 2011; Mavor et al., 2009) mediated the relationship between religiosity and prejudice toward gay men/lesbian women (Johnson et al., 2011). We hypothesized RWA conventionalism, the RWA component most similar to RF, would mediate the relationship between religiosity and positive attitudes toward value-violating out-groups. Specifically, we predicted RWA conventionalism would be associated with a lack of "liking" of these value-violating groups such that when controlling for RWA, general religiosity would show either a positive association (supporting the love thy neighbor hypothesis) or a negative association (supporting the religiositynonliking hypothesis) or a lack of association with positive attitudes toward value-violating out-groups (full mediation).

Method

Participants

Three hundred eighty-nine adult Americans (164 males, 217 females, 8 missing; mean age = 33.86 years, SD = 12.98) completed an online survey. See Table 1 for descriptive statistics. We were interested in examining attitudes toward ethnic/racial and value-violating out-groups, so we filtered data from individuals who self-reported being a member of any of the out-groups we were examining. Thus, we filtered data from individuals who self-reported being African American (n = 29), Hispanic (n = 19), atheist (n = 59), or homosexual (n = 22) or bisexual (n = 21). The final sample resulted in 249 participants. See Table 1 for descriptive statistics of the final sample.

Procedure and Measures

All materials and methods were approved by the IRB at our institution. Participants completed an online survey through Amazon's Mechanical Turk (MTurk) which asked questions about their religiosity and attitudes toward others. MTurk has been shown to provide reliable and more diverse data than college samples (Behrend, Sharek, Meade, & Wiebe, 2011; Buhrmester, Kwang, & Gosling, 2011) and has been demonstrated to be a valuable, reliable data collection tool for researchers (Mason & Suri, 2012). MTurk participants were recruited through online posting of "hits" or jobs in which they were asked to complete online surveys in exchange for payment. Participants in the present sample were paid 25 cents

Table 1
Descriptive Statistics of Original and Final Samples

	Original sample $(n = 389)$	Analyzed sample $(n = 249)$		
	n/%	n/%		
Gender				
Male	164 (42.2%)	108 (43.4%)		
Female	217 (55.8%)	140 (56.2%)		
Unspecified	8 (2.1%)	1 (0.4%)		
Race	· · · ·	` '		
White	294 (75.6%)	224 (90.0%)		
African American	29 (7.5%)			
Asian/Pacific Islander	29 (7.5%)	19 (7.6%)		
Hispanic	19 (4.9%)			
"Other"	9 (2.3%)	5 (2.0%)		
Native American	2 (0.5%)	1 (0.4%)		
Unspecified	7 (1.8%)	0 (0.0%)		
Religious affiliation				
Protestant	106 (27.2%)	90 (36.1%)		
Catholic	61 (15.7%)	48 (19.3%)		
Agnostic	63 (16.2%)	41 (16.5%)		
Atheist	59 (15.2%)	_		
"No religion"	32 (8.2%)	25 (10.0%)		
"Other" religion	32 (8.2%)	27 (10.8%)		
Jewish	11 (2.8%)	9 (3.6%)		
Muslim	9 (2.3%)	4 (1.6%)		
Hindu	5 (1.3%)	1 (0.4%)		
Buddhist	4 (1.0%)	4 (1.6%)		
Unspecified	7 (1.8%)	0 (0.0%)		
Sexual orientation				
Heterosexual	339 (87.1%)	249 (100.0%)		
Homosexual	22 (5.7%)	_		
Bisexual	31 (5.4%)	_		

(\$0.25) in exchange for completing an approximately 200-question survey (\sim 10 minutes completion time). This is in line with the average hourly rate M-Turk workers have deemed necessary (Mason & Suri, 2012).

Religiosity. Religiosity was measured as a latent variable with three indicators: intrinsic religiosity, religious behaviors, and general religiosity (see Figure 1). Intrinsic religious orientation was measured by the nine-item Religious Orientation Scale (Allport & Ross, 1967), a scale designed to measure "ends" religion or religion inherently important to individuals (e.g., "My religious beliefs are what really lie behind my whole approach to life"). Items were rated on a 1 (strongly disagree) to 7 (strongly agree) scale. Religious behaviors were measured by standardizing, aggregating, and averaging responses to questions about three indicators of religious behaviors: (1) religious service attendance, (2) reading of sacred texts, and (3) prayer/meditation (cf. Rowatt, LaBouff, Johnson, Froese, & Tsang, 2009). Finally, a single-item measure was used to assess general religiosity (i.e., "To what extent do you consider yourself a religious person?"). This item was rated on a 1 (not at all) to 7 (very much) scale. The loadings for all three indicators of religiosity can be found in Figure 2. All of these measures of religiosity have been used among a variety of religious individuals, including Protestants, Catholics, nonreligious

¹ Because some individuals belonged to more than one filtered category (e.g., atheist and African American), the final sample (n=249) is greater than the sum total of all participants in excluded categories (n=150) subtracted from the previous sample size (n=389).

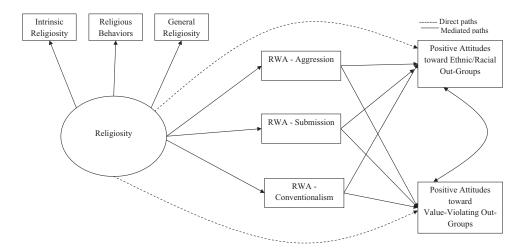


Figure 1. Base model tested examining the role of RWA subscales as mediators of the relationship between religiosity and positive attitudes toward ethnic/racial and value-violating out-groups. Although not shown here for ease of interpreting the graph, residuals of the mediating variables were also allowed to correlate.

individuals, and those reporting as "other" religion (Johnson et al., 2011). All three of these scales have shown to be reliable and valid measures among college samples with varying religious affiliations and ethnicities/races (Johnson et al., 2011).

Right-wing authoritarianism (RWA). RWA was measured with a 10-item scale (Mavor et al., 2009; Smith & Winter, 2002) composed of three subscales: (1) authoritarian aggression, (2) authoritarian submission, and (3) conventionalism (Altemeyer & Hunsberger, 1992; Mavor et al., 2010, 2009). Three items measured RWA aggression (e.g., "There are many radical, immoral people in our country today, who are trying to ruin it for their godless purposes, whom the authorities should put out of action"). Three items measured RWA submission (e.g., "What our country really needs most is discipline, with every-

one following our leader in unity"), and three items measured RWA conventionalism (e.g., "Everyone should have their own lifestyle, religious beliefs, and sexual preferences, even if it makes them different from everyone else"; reverse scored). All items were rated on a 1 (*strongly disagree*) to 7 (*strongly agree*) scale. This 10-item measure of RWA has been used and shown to be reliable and valid among college samples with varying religious and racial/ethnic backgrounds (Johnson et al., 2012).

Positive attitudes toward ethnic/racial out-groups. Positive attitudes toward ethnic/racial out-groups were measured using the 17-item version of the Allophilia Scale (Pittinsky et al., 2011b). The scale was adapted by using the same items used to measure allophilia toward African Americans but replacing "African American" with the names of the various out-groups

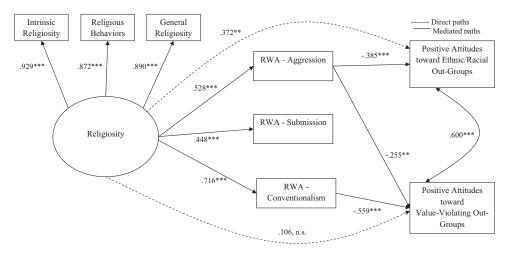


Figure 2. Model depicting mediation effects of RWA subscales on religiosity and positive attitudes toward ethnic/racial and value-violating out-groups. Standardized coefficients are shown. Please note: Selected Fit Indexes: $\chi^2(10, n=249)=16.876$ p=.08 (CFI = 0.994, TLI/NNFI = .984, RMSEA = .053) with a 90% confidence interval of .000 – .095. Although not shown here for ease of interpreting the graph, residuals of the mediating variables were also allowed to correlate. *p < .05, *** p < .01, **** p < .001.

we measured attitudes toward. Attitudes were assessed toward the following ethnic and racial groups separately: African Americans, Hispanics, and Arabs. The Allophilia Scale measures positive attitudes toward out-groups with items that assess the degree to which an individual has positive feelings or attitudes toward a specific out-group (e.g., "I respect Hispanics"; "I would like to be more like African Americans"). Items were rated on a 1 (*strongly disagree*) to 6 (*strongly agree*) scale. Individual Allophilia scales measuring positive attitudes toward African Americans, Hispanics, and Arabs were aggregated to create a single measure of positive attitudes toward ethnic/racial out-groups. The Allophilia Scale measuring positive attitudes toward African Americans has been used and shown to be reliable and valid among college samples which are diverse in terms of race, age, and sex (Pittinsky et al., 2011b).

Positive attitudes toward value-violating out-groups. Positive attitudes toward value-violating groups were measured using an adaptation of the same 17-item version of the Allophilia Scale (Pittinsky et al., 2011b) used to measure positive attitudes toward ethnic/racial out-groups. Attitudes were assessed toward the following value-violating groups separately: atheists, gay men, and lesbian women. To create a single measure of positive attitudes toward value-violating out-groups, individual Allophilia Scales measuring positive attitudes toward atheists, gay men, and lesbians were aggregated.

Analytic Procedure

A base model was fit using MPlus (v. 5.20); (Muthén & Muthén, 2012) testing the proposed structural equation model (see Figure 1). The residuals of the mediators were allowed to correlate with each other. Full information maximum likelihood (FIML) estimation was used to handle missing data. All other analyses were performed using SPSS (v. 19.0). Model fit was evaluated by examining the following four estimates: (1) the chi-square (χ^2) goodness-of-fit, (2) the root mean square error of approximation (RMSEA; Browne & Cudeck, 1993), (3) the Tucker Lewis Index (TLI), also known as the Non-Normed Fit Index (NNFI), and (4) the Comparative Fit Index (CFI; Bentler, 1990).

Several techniques are available to test for statistical mediation (Baron & Kenny, 1986; James & Brett, 1984). In the present analysis, MacKinnon, Lockwood, and Williams's (2004) method was used. This method has been found to produce unbiased mediation estimates (Cheung & Lau, 2008; Hathcoat & Barnes, 2010). Additionally, this technique allows confidence intervals to be constructed around the estimated indirect effects.

Results

See Table 2 for Cronbach's alpha, descriptive statistics, and correlations between all allophilia subscales. All individual allophilia subscales were internally consistent (Cronbach's \alpha s from .96-.97). Moreover, the ethnic/racial subscales were strongly correlated (rs from .65 to .85) and the value-violating subscales were strongly correlated (rs from .66 to .92). Our decision to cluster the allophilia attitudes into two distinct categories (ethnic/racial and value-violating) was supported by the data. See Table 3 for Cronbach's alpha, descriptive statistics, and correlations between all

variables. The path model is reported in Figure 2 with all significant paths present in the base model tested.²

Overall Model Fit

The hypothesized model fit the data well. The model chi-square was nonsignificant, $\chi^2(10) = 16.876$, p = .08, indicating the model fit the data. The RMSEA value, compensating for the effects of model complexity, was .053 (CI₉₀: .000, .095). This value indicates an acceptable fit of the model as being less than .08 (Browne & Cudeck, 1993). The value of the TLI or NNFI was .984 and the value of the CFI was .994, which both meet the standards of good fit (i.e., .95 or higher; (Hu & Bentler, 1999). Figure 2 shows the beta weights of the tested model. All paths drawn are significant at the p < .05 level.

Mediation Effects

In the present model, we tested two-path mediation. Each lower and upper bound value for the 95% confidence intervals (CIs) around each indirect effect failing to contain zero indicates support for the mediation hypothesis because the null hypothesis is that the indirect effect value is zero. Thus, CIs *not* containing zero indicate a variable (e.g., RWA aggression) was a statistically significant mediator between religiosity and positive attitudes toward ethnic/racial or value-violating out-groups.

Religiosity and positive attitudes toward ethnic/racial out-groups. RWA aggression was the sole mediator of the effect of religiosity on positive attitudes toward ethnic/racial out-groups (mediated effect = -.203; Confidence Interval [CI]: -.314, -.092) in the present model. Once controlling for all three components of RWA (RWA aggression, RWA submission, and RWA conventionalism), religiosity (whose indicators previously had negative relationships with positive attitudes toward ethnic/racial out-groups; rs = -.38 to -.42) showed a positive association b = +.37) with positive attitudes toward ethnic/racial out-groups as predicted. The relationship between general religiosity and positive attitudes toward ethnic/racial out-groups becomes significant once controlling for RWA aggression (suppressor); thus, RWA aggression fully mediates the relationship between religiosity and positive attitudes toward ethnic/racial out-groups.

Religiosity and positive attitudes toward value-violating out-groups. Both RWA aggression (mediated effect = -.134; confidence interval [CI]: -.216, -.053) and RWA conventionalism (mediated effect = -.400; confidence interval [CI]: -.532, -.268) mediated the effect of religiosity on positive attitudes toward value-violating out-groups, showing a similar structure to the mediation patterns seen for positive attitudes toward ethnic/racial out-groups. These components of RWA demonstrated full mediation with the relationship between re-

² Please note that gender and race had no significant effects on allophilia attitudes toward the out-groups.

Table 2
Bi-Variate Correlations, Descriptives, and Reliabilities for All Allophilia Subscales

	1	2	3	4	5	6	M (SDs)	α
1. Allophilia African American	_						71.06 (18.55)	.96
2. Allophilia Hispanic	.85**	_					70.96 (18.18)	.96
3. Allophilia Arab	.65**	.68**	_				62.91 (20.85)	.97
4. Allophilia atheist	.25**	.34**	.50**	_			63.56 (22.29)	.97
5. Allophilia gay man	.45**	.53**	.59**	.66**	_		65.36 (20.67)	.97
6. Allophilia lesbian	.40**	.55**	.57**	.69**	.92**		64.49 (20.58)	.96

Note. These scales range from 17–102. n = 269.

ligiosity and positive attitudes toward value-violating outgroups becoming nonsignificant once controlling for RWA.³

Discussion

The present study showed partial support for the hypothesis that religiosity promotes "loving thy neighbor." The most important finding in this study is that, once statistically controlling for RWA, religiosity is associated with positive attitudes toward or "liking" of ethnic/racial out-groups. Namely, the negative relationship between measures of religiosity and positive attitudes toward ethnic/ racial out-groups (rs = -.38 to -.42) were positive when examining the latent construct of religiosity and positive attitudes toward ethnic/racial out-groups, once controlling for RWA (b = +.37). Because past research has consistently found that multiple measures of religiosity are associated with prejudice toward racial out-groups (Hall et al., 2010), this finding sheds new and important light on the relationship between religiosity and attitudes toward ethnic/racial out-groups. Namely, cognitively rigid ideologies (i.e., RWA aggression) seemingly serve as suppressor variables and thus fully mediate the relationship between religiosity and positive attitudes toward ethnic/racial out-groups. Thus, internalizing religiosity (e.g., "love thy neighbor") is positively associated with positive attitudes or "liking" of ethnic/racial out-groups whereas aggressive, rigid cognitions associated with religiosity are negatively associated with positive attitudes toward these out-group members. This fits in line with previous research demonstrating RWA aggression is the strongest RWA mediator of the relationship between religiosity and prejudice (Johnson et al., 2011, 2012).

The RWA subscales also fully mediated the relationship between religiosity and positive attitudes toward value-violating outgroups such that the relationship between religiosity and positive attitudes value-violating out-groups is no longer significant. Although religiosity is not associated with "liking" of or positive attitudes toward value-violating out-groups, it also does not have a negative relationship with positive attitudes toward these outgroups. Internalizing one's religious values is not the component of religiosity that is inversely associated with a "liking" of valueviolating out-groups. Rather, rigid cognitions associated with religiosity are inversely associated with positive attitudes toward value-violating out-group members. In line with our predictions, RWA conventionalism was the strongest mediator of the relationship between religiosity and positive attitudes toward valueviolating out-groups. This result extends previous research demonstrating that RF, conceptually and statistically similar to RWA conventionalism, is the strongest mediator of the relationship between religiosity and prejudice toward gay men/lesbian women (Johnson et al., 2011). Once controlling for RWA, religiosity showed no association with positive attitudes toward value-violating out-groups, also demonstrating full mediation.

Combined, these results demonstrate that religiosity is associated with positive attitudes toward ethnic/racial out-groups, thus providing partial support for the *love thy neighbor hypothesis*. This finding, until now, was purely speculative and only examined by studying the relationship between religiosity and tolerance or lack of prejudice toward out-groups. However, because the bivariate correlations between religiosity, rigid cognitions, and positive attitudes toward out-groups are essentially the inverse of the relationships between religiosity, rigid cognitions, and negative attitudes toward out-groups (Johnson et al., 2011), full support does not exist for the *love thy neighbor hypothesis* or for Pittinsky et al.'s (2011b) claim that positive and negative attitudes are distinctly different. Future research would need to examine simultaneously positive and negative (prejudiced) attitudes to see whether these two measures possess distinct relationships with religiosity.

Positive Attitudes as a Mode to Promoting Prosocial Behaviors

Because positive attitudes are better predictors of prosocial behaviors (Pittinsky et al., 2011a), one benefit of understanding the relationship between religiosity and positive attitudes toward outgroups is that we might also be able to understand better how to promote prosocial behaviors among religious individuals. Focusing on increasing positive attitudes toward out-group members could increase prosocial behaviors toward these groups (Pittinsky & Montoya, 2009). Past research has shown that religiosity is associated with a number of prosocial behaviors (Batson, Schoenrade, & Ventis, 1993; Norenzayan & Shariff, 2008); however, little research has been devoted to religiosity's association with

^{*} p < .05. ** p < .01.

 $^{^3}$ Please note: We ran the same model examining only Protestants and Catholics in the present sample (n=138). The model had good fit [$\chi^2=13.75,\,p=.18;$ RMSEA =.05 (CI $_{90}=.00,\,.11$); CFI =.99; TLI/NNFI =.98]. The same, general patterns held with a few exceptions: (1) RWA submission was not significantly associated with religiosity; (2) both RWA aggression and RWA conventionalism (instead of just RWA aggression) mediated the relationship between religiosity and positive attitudes toward ethnic/racial out-groups; both RWA subscales were negatively associated with positive attitudes toward ethnic/racial out-groups. Identical to the present results, both RWA aggression and RWA submission were significant mediators of the relationship between religiosity and positive attitudes toward value-violating out-groups.

Table 3
Bi-Variate Correlations, Descriptives, and Reliabilities for All Constructs

	1	2	3	4	5	6	7	8	M (SDs)	α
1. Intrinsic religiosity	_								3.81 (1.74)	.94
2. Religious behaviors	.81**	_							.10 (.88)	.85
3. Religiosity ^a	.83**	.78**	_						3.75 (2.08)	_
4. RWA aggression	.50**	.43**	.49**						3.49 (1.73)	.85
5. RWA submission	.42**	.40**	.42**	.69**					3.16 (1.59)	.77
6. RWA conventionalism	.68**	.65**	.60**	.47**	.48**				2.90 (1.66)	.86
7. Positive attitudes toward ethnic/racial										
out-groups ^b	.04	.11	.10	27**	17*	08	_		204.98 (51.19) ^b	.88
8. Positive attitudes toward value-violating out-groups ^b	42**	39**	38**	47**	40**	62**	.51**	_	194.17 (57.57) ^b	.90

Note. RWA = right-wing authoritarianism. n = 269.

prosociality toward out-group members. The first step to examining prosocial behaviors toward out-group members lies in understanding the relationship between religiosity and positive attitudes toward these out-groups. Given the results of the present study, future research could examine whether the positive attitudes toward ethnic/racial out-groups associated with religiosity predict more prosocial behaviors toward these groups as well.

As noted by Pittinsky (2009), it is not simply enough to understand how to promote tolerance and acceptance among individuals from different groups. Rather "we must strive to find and create occasions to feel affection, engagement, kinship, comfort, and enthusiasm for groups other than our own" (Pittinsky, 2009, p. 363). By understanding which components of religiosity are associated with these components, we can better promote positive attitudes toward various out-groups. The results from the present study provide evidence that viewing religion as important and engaging in religious behaviors might be associated with a liking of ethnic/racial out-groups. Being closed-minded and cognitively rigid, however, is inversely associated with positive attitudes toward a variety of out-groups. As such, researchers should attempt to find ways to increase the internalization of religious values (e.g., "love thy neighbor") and reduce cognitive rigidity among religious individuals to promote positive behaviors and ultimately prosocial behaviors toward out-group members.

Limitations and Directions for Future Research

The present study is very informative as the first to test directly the hypothesis that religiosity is associated with "loving thy neighbor." However, some limitations exist in the present research that provides opportunities for future research in this area. First, the sampling procedure used in the present study may have limited the variability in our sample. Because we recruited via an online survey method, our study may have excluded individuals without access to the Internet (e.g., lower income and minority individuals). As such, future research should examine whether these results replicate in more diverse samples. Second, although the present study demonstrates religiosity is associated with positive attitudes toward ethnic/racial out-groups once controlling for RWA, it does not provide causal proof of this relationship. Previous studies have used priming religion as a mode to assess the causal influence of

religiosity on various attitudes and behaviors such as prejudice (Johnson, Rowatt, & LaBouff, 2010) and prosociality (Pichon, Boccato, & Saroglou, 2007). Using this same methodology, future studies could prime religious concepts to examine their effects on positive attitudes toward various out-groups. However, these studies need to take into account the religious primes' potential interaction with RWA given RWA's role in mediating the relationship between religiosity and positive attitudes toward out-groups.

Third, this study does not fully test Pittinsky et al.'s (2011b) theory that positive attitudes are distinct from negative attitudes toward out-groups. As noted, the results seemingly indicate that they are not distinct structures given that religiosity has negative associations with positive attitudes that are very similar to religiosity's positive associations with negative attitudes toward outgroups. However, whereas religiosity previously showed no relationship with negative attitudes toward racial out-groups (African Americans) once controlling for rigid ideologies as mediators (Johnson et al., 2011), the present study showed a positive association between religiosity and positive attitudes toward ethnic/ racial out-groups. This could indicate that religiosity has a distinct relationship with positive attitudes toward ethnic/racial out-group members. Nevertheless, future research could more rigorously test the claim that positive and negative attitudes are distinct constructs within the context of their relationship with religiosity by measuring both positive attitudes (allophilia scale) and negative attitudes (prejudice) and examine the following: (1) whether they are orthogonal to one another and (2) whether they have distinct relationships with religiosity.

Fourth, as noted, demonstrating that certain components of religiosity are associated with "liking" of ethnic/racial out-groups does not necessarily mean that these attitudes predict prosocial behaviors toward these groups. Past research demonstrates that positive attitudes predict prosocial behaviors better than negative attitudes toward racial out-groups (Pittinsky et al., 2011a). Thus, we would expect this relationship to exist among religious individuals as well. Future research could examine whether positive attitudes toward ethnic/racial out-groups mediate the relationship between religiosity and prosocial behaviors toward these same out-groups.

^a Single-item measure.

^b These scales range from 51–306.

^{*} p < .05. ** p < .01.

Fifth, although the present study demonstrates that a rigid ideology, RWA, mediates the relationship between religiosity and positive attitudes toward ethnic/racial and value-violating outgroups, it is unclear whether general closed-mindedness is what accounts for this variance. RWA has been associated with less cognitive complexity (Jost et al., 2003); it is possible that cognitive complexity or need for cognitive closure further mediates the relationship between religiosity, RWA, and positive attitudes toward out-groups. Future studies could examine these measures of cognition as potential mediators of these relationships.

Finally, the present study looked at a variety of religious affiliations (Protestant, Catholic, nonreligious, etc.). In future studies, it would be beneficial to examine this model among specific religions such as Christianity, Islam, and Buddhism to see whether these relationships differ among different religious groups. This would provide a more rigorous test of the *love thy neighbor hypothesis* by examining whether this relationship is only found among certain religious groups.

Conclusions

Our aim in the present research was to test the competing love thy neighbor and religiosity-nonliking hypotheses. In this study, we found that once controlling for the rigid ideology RWA, religiosity's relationship with positive attitudes toward ethnic/ racial out-groups was fully mediated such that religiosity was positively associated with positive attitudes toward ethnic/racial out-group members. Moreover, religiosity's negative association with positive attitudes toward value-violating out-groups was fully mediated by RWA. Given that positive attitudes are better predictors of prosocial behaviors than negative attitudes (Pittinsky et al., 2011a), these results could help illuminate the relationship between religiosity and prosociality found in previous research (Batson et al., 1993; Norenzayan & Shariff, 2008). Furthermore, these results could help researchers determine which components of religiosity to target to increase positive attitudes and, ultimately, prosocial behaviors toward out-group members. Although the present study only provides partial support for the hypothesis that religiosity does promote "loving thy neighbor," it is the first study to test this hypothesis directly. Moreover, it illuminates a longstanding relationship between religiosity and prejudice. Much remains to be learned, however, about the relationship between religiosity, positive and negative attitudes toward out-groups, and prosocial behaviors toward these out-groups.

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