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Religiosity and Altruism: Exploring Religiosity's Impact on the Altruistic Motivations behind Prosocial Behaviors

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Abstract

This study examines the relationship between religiosity and altruistic actions and intentions, and further distinguishes prosocial behavior from genuine altruism (the motivation behind prosocial behaviors). It uses data from the 2014 General Social Survey, which collected information from 2,538 individuals from the United States. This research suggests that an increase in religiosity correlates to an increase in altruistic intentions and altruistic behaviors. These two relationships were not largely affected when controlling for demographics (race and sex), though sex displayed statistically significant relationships. Religion is subsequently shown to promote selfless altruistic behaviors that are not restricted to religious in-group members. These findings are in direct contrast to large portions of previous research suggesting that religion encourages selfish or in-group prosocial behavior purely among specific religious in-groups.

keywords: Religion, Altruism, Prosocial Behavior, Strangers

Religion (or lack thereof) plays a central role in defining a person's unique identity. The morals we adopt, the actions and behaviors we consider acceptable, and the ways we structure our social lives are all influenced by religious or even anti-religious beliefs (Ammerman, 2014). However, the significance of studying religion is not just embedded in learning how it affects individuals or how it influences the structure of societal institutions. Rather, the significance of studying religion is embedded in how fully understanding other sociological studies requires religious knowledge (Martí, 2014, p. 505). More specifically, religion is known for its tremendous influence on the behaviors of its followers and, most prominently, these behaviors are often depicted as generous or selfless (Bennett & Einolf, 2017; Galen, Sharp, & McNulty, 2015; Saroglou, 2006). However, researchers have debated to whom those behaviors are applied, especially in regards to religious adherents and their interactions with people of alternative beliefs or religious affiliations. The following research will address if adherents who are more dedicated to their faith are more likely to perform selfless actions, and if those actions are extended to people who fall outside the religious realm of the respondents. Additionally, I believe this research will allow others to understand the ways in which religion affects both religious and nonreligious individuals, and how those individuals choose to interact with one another.

Finally, in addressing the motives behind individual's behaviors, I look specifically at prosocial behavior and altruism. Prosocial behavior is defined as the general actions that help or benefit others. This is contrasted with altruism, which is also defined as performing actions that help others, but with a selfless intent (Simpson & Willer, 2015). While prosocial behavior and acting altruistically both involve actions that help or aid others, altruism additionally requires an individual to act selflessly and without selfish motivations.

Literature Review

In-Group-Out-Group Bias

The idea that people act differently within religious contexts than they do outside them is one that is well supported through sociological theory and research (Beal, Ruscher, & Schnake, 2001; von Hippel, 2006; Lee & Ottati, 2002). Arguably, one of the main reasons for this difference in behavior can be derived from the consequences that result from in-group-out-group bias. According to Social Identity Theory, people view individuals within their own groups (in-groups) more positively than individuals within other groups (out-groups) (Beal et al., 2001; von Hippel, 2006). Von Hippel (2006) asserts that "in-groups can be composed of people who share . . . traits or characteristics, such as being of the same religious affiliation" (p. 534). Further, Brewer asserted that in-group bias can take the form of "evaluations of performance, behavior, and personality," exhibited even by people without a strong affiliation to their group (as cited in von Hippel, 2006, p. 534).

The study of in-groups is important because in-groups often help individuals to derive a source for their identity (Beal et al., 2001; von Hippel, 2006; Lee & Ottati, 2002). Beal et al. (2001) explains that membership in the groups to which we belong gives a sense of identity and self-esteem. With in-groups so closely attached to an individual's identity, and because people often strive to be seen positively by others, people will frequently attempt to support or defend their groups against others (von Hippel, 2006; Lee & Ottati, 2002). This tendency to favor in-groups over out-groups or, inversely, to treat out-groups more negatively than in-groups, is how we define in-group-out-group bias (Lee & Ottati, 2002). However, the behaviors exhibited as a result of in-group favoritism are not consequences of simply liking one group over another, but are results of defining and aligning oneself so closely with his or her in-group (Beal et al., 2001). With our social identity so closely associated with the groups in which we are involved, we are increasingly motivated to defend our in-groups over out-groups. Therefore, assessing actions that stem from in-group favoritism is important both because of the possible ramifications that can result from biased behavior, and because these behaviors stem from our determination to establish and express our identity to others or ourselves.

One way people communicate their identity (and beliefs) is through their religious affiliation. Just as von Hippel (2006) states that in-groups are typically composed of people who share similar traits or characteristics, religion functions as an in-group for its adherents by existing as a community for people who share similar belief systems (Ysseldyk, Matheson, & Anisman, 2010). These mutually shared beliefs include the "guiding beliefs" that allow people to interpret and give meaning to their experiences, and the epistemological or ontological beliefs explaining what can be known and what can exist (Ysseldyk et al., 2010). However, because a wide spectrum of different religions exists, religion is not one big in-group, but is rather composed of several smaller ones representing a variety of different religious organizations, each possessing a different set of beliefs (Buchan, Johnson, & Croson, 2006). By establishing the traits (i.e. beliefs) required for membership within each religious group, all other groups seen as lacking these characteristics are then excluded and deemed as out-groups.

Religious In-Group Favoritism on Prosocial Behavior

Among the behaviors that can be influenced as a result of in-group-out-group bias, one of the most commonly studied in relation to religion is prosocial behavior measured by analyzing a person's volunteering, forgiveness, benevolence, or generosity (Saroglou, 2006). For example, Preston and Ritter (2013) performed several small studies to analyze prosociality within religious in-groups by analyzing their participant's charitable donations and likelihood of acting generously towards others. Their research suggests that prosocial behavior as it exists within religion largely stays within religion (Preston & Ritter, 2013, p. 1479). Thus, members of a religious faith act prosocially, but only towards

individuals of the same religion. They conducted a study including anywhere from 85 to 115 pedestrians, a majority being Caucasian and Christian, around the University of Illinois at Urbana-Champaign in four separate studies. Their purpose was to analyze how religion affected prosocial behavior by assessing some of the participants' belief in God and their opinions on God's role as a religious leader before asking them to complete tasks involving charitable donations or interacting with strangers (Preston & Ritter, 2013). They found that participants asked about God before completing a task were more likely to apply prosocial behaviors to in-group charities and individuals (Preston & Ritter, 2013). As a result, prosocial behavior is likely a byproduct of religious affiliation; however, these actions are not commonly extended to individuals or organizations that fall outside of the respondent's religious group.

The narrow focus on the effects of religious beliefs on adherents' behavior is not new, and people's perceptions on the existence of God have been shown in other studies to affect their choices or actions greatly (Shariff & Norenzayan, 2007). Shariff and Norenzayan (2007) conducted a study in Canada in which participants had an opportunity to take a set of dollar coins or leave them for another person. If they decided to leave coins, they did so anonymously. Half of the participants were subtly encouraged to think about God and religious concepts simultaneously (such as "spirit" or "divine") beforehand. Their results mirrored other similar research, finding that participants who are made aware of religion or religious concepts were more likely to leave or give money to the other participant (Galen et al., 2014; Preston & Ritter, 2013; Shariff & Norenzayan, 2007). Thus, prosocial behaviors in religiously affiliated individuals are not genuine, but are instead elicited out of the general need or desire to conform to their religious community (in-group) or stimulated through the need to please a higher being (Galen et al., 2014; Preston & Ritter, 2013; Shariff & Norenzayan, 2007).

This tendency is also influenced by demographics (including gender and race), which may precede and explain the original correlation between religiosity and prosocial behavior (Galen et al., 2014). Galen and Reitsma et al. (as cited in Galen, 2014) states that this spurious influence of gender is a consequence of women attending church services and participating at volunteer opportunities more than men. Religion can also be a "vital factor" in racial groups, indicating that race may at least precede religion in influencing prosocial behaviors as religious affiliation may be influenced by racial identity (King, Weich, Nazroo, & Blizard, 2006).

Prosociality in Terms of Altruism

Despite these researchers suggesting that religion contributes to prosocial behaviors through religious in-group bias, other studies have argued for the opposite, that the existence of religion encourages genuine, selfless behaviors in adherents. In other words, most research in this field has studied the correlation between religion and prosocial behaviors, arguing that the motivation for prosocial

behavior is grounded in supporting their religious in-groups—a motive deemed by some researchers as selfish or egoistic (Saroglou, 2006). However, an alternative motivation for committing prosocial actions could be altruism (Bennett & Einolf, 2017). Whereas prosocial behavior refers to general actions that help or benefit others, altruism is the personal, selfless intention to act prosocially (Simpson & Willer, 2015). Prosocial behaviors can either be motivated by egotistical and selfish agendas, or they can be inspired by a personal, selfless (altruistic) desire to help others. Therefore, acting prosocially with altruistic intentions is equivalent to taking action that benefits others without the desire or expectation for reward or reciprocation (Bennett & Einolf, 2017; Saroglou, 2006; Simpson & Willer, 2015). Thus, if someone acts prosocially (e.g. helps a stranger walk across the street) with altruistic motivations, then their behaviors are likely embedded in a genuine, selfless desire to help. Consequently, if a religious adherent is acting selflessly towards someone outside their religious organization, then the prosocial behaviors they exhibit are not a result of religious in-group favoritism and egoism, but are a result of altruistic intentions (Bennett & Einolf, 2017).

The Effect of Religiosity on Prosocial Behavior

Outside of religious affiliation, religiosity—or the degree to which one either hold religious beliefs or participates in religious activities—may have additional influences on prosocial behavior, regardless of the source of motivation (Blogowska, Lambert, & Saroglou, 2013; Vandsburger, Schneller, & Murphy-Norris, 2006). At present, research on religiosity has been mainly devoted to its correlation with mental health, leaving its relationship with behavioral studies to be less explored (King et al., 2006; Nie & Olson, 2016; Vandsburger et al., 2006). However, studies of the correlation between religiosity and prosocial behavior have often mirrored religion's correlation with prosocial behavior that typically comes as a result of in-group favoritism (Blogowska et al., 2013; Vandsburger et al., 2006).

Vandsburger et al. (2006) conceptualized religiosity as finding peace of mind through prayers and through "acceptance of what life offers" (pp. 144–5). In interviewing 43 older adults on major stressors in their lives and the activities in which they engaged to combat those stressors, they recorded the frequency and importance of prayer as well as mentions of a sense or feeling of connectedness to a higher power (Vandsburger et al., 2006, p. 144). Blogowska et al. (2013) also studied the relationship between religiosity and prosocial behavior, and determined a respondent's level of religiosity by using seven-point Likert scales measuring "the importance of God and the importance of religion in life, as well as frequency of prayer" (p. 528). They found that level of religiosity predicts prosocial attitudes, and found a positive correlation between religiosity and prosocial behavior (Blogowska et al., 2013). Both studies suggest that an increase in religiosity leads to an increase in prosocial behaviors.

Religiosity Promoting Altruistic Behaviors

Bennett and Einolf (2017) present an alternative study on religiosity: they analyze the relationship between the degree of religiosity and altruistic behaviors, examining the extent to which one identifies as religious and if the degree of (self-reported) religiosity impacts one's tendency towards acting altruistically. Earlier studies have mainly discussed either religion or religiosity in terms of prosocial behavior, or in terms of altruistic intentions. However, Bennett and Einolf (2017) not only discuss how religiosity encourages altruistic intentions, but they do so by suggesting that these behaviors are adopted out of selfless intentions and not as a result of in-group-out-group bias. They measured genuine altruistic behavior by asking a series of questions regarding how often people reported helping a stranger within the last month (labeled as "informal volunteering"), and gauged their level of religiosity through self-reported service attendance from the last seven days. A respondent was reported as having high religiosity if they were both religiously affiliated and reported that they had attended at least one religious service in the last seven days. Those who showed higher rates of religiosity were also shown to report helping strangers more frequently (Bennett & Einolf, 2017). Vandsburger et al.'s (2006) research further supports this claim and states that religiosity "encourages the development of altruism," especially later in life.

Therefore, unlike most other research, Bennett and Einolf (2017) argue that religion does not just promote prosocial behavior, but that it encourages the altruistic motivations behind prosocial behavior. Unlike those who state that religious adherents likely have selfish motivations behind their prosocial behavior, Bennett and Einolf's (2017) research suggests that religious individuals act positively towards one another not out of egoism, but out of their honest, personal desire to do so. They also affirm that no study has been done correlating altruistic behaviors to helping strangers specifically, and their research suggests that religion may be an exception to the in-group-out-group bias theory. However, their research on religiosity and altruism considers altruistic actions but excludes a discussion concerning altruistic feelings or intent. Barasch et al. (2014) suggests that the intent to act prosocially does not always correlate with acting prosocially, and that people may assert their interest or intention in helping others without acting on those corresponding altruistic behaviors. Thus, people may be influenced by religion to hold pro-altruistic thoughts and beliefs, but they may not act on those feelings.

I intend to build on Bennett and Einolf's study (2017) to provide additional data to analyze the impact of religiosity on altruism. However, I will expand my definition of religiosity, and will further distinguish between altruistic intention and altruistic action when measuring altruism. In doing so, I intend to analyze religiosity and its effects on individuals' altruism, and I expect that an increase in religiosity will correlate with an increase in both altruistic intentions and actions. Further, I expect the relationship with religiosity and altruism to be

stronger for African-Americans and females since African-Americans are more likely to hold religious identities and because females are more likely to be pious (Galen et al., 2015; King et al., 2006).

Methods

Sample

The data in this study was retrieved from the 2014 General Social Survey (GSS), which is a longitudinal instrument measuring Americans' attitudes toward a wide range of social factors, including religiosity and altruism. According to the GSS Codebook, the National Opinion Research Center was responsible for creating the survey, and used a sample representative of the American adult population (anyone 18 years of age or older) through probability sampling methods such as stratification (Smith, Marsden, & Hout, 2015). Addresses maintained by the United States Postal Service and the United States Census Bureau were used to develop the sampling frame, which included 72% of the American population, and their sample included 2,538 surveys collected from the end of March through mid-October (Smith et al., 2015). These surveys lasted approximately 90 minutes, included both English and Spanish speaking respondents, and were conducted either face-to-face or over the phone (Smith et al., 2015). Of the 2,538 surveys, no more than 1,231 respondents answered the corresponding questions I analyzed for my secondary data analysis. Of the 1,231 respondents, approximately 15% were African-American and approximately 85% were Caucasian.

Methods and Procedure—Independent Variable: Religiosity

Religiosity was conceptualized as how strongly one feels about their religion in conjunction with how often they attend religious services and engage in religious actions. I operationalized religiosity by combining three different variables addressing religious service attendance and prayer frequency, as well as a self-reported strength of religiosity. This expanded religiosity beyond the single church attendance variable that Bennett and Einolf (2017) used to conceptualize and define religiosity. Though attendance is an important factor to consider, including frequency of prayer and self-rated feelings of religiosity may account for religious respondents who do not go to religious services, either for personal reasons or because it is not applicable to their religious affiliation. Also, including prayer provided a way to measure the degree to which respondents physically involved themselves in religious events or behaviors, while the variable on self-reported religiosity was added to provide an additional measure of religiosity that included a nonphysical, emotional connection to religion.

Originally, the attendance variable included nine separate answers that ranged from "never" to "more than once a week," prayer was composed of six answers that ranged from "several times a day" to "never," and strength of

religiosity ranged from "very strong" to "no religion." In creating an index for religiosity, I recoded these three variables so the numerical values of each response would align with the frequency described in the qualitative responses. Both the attendance and prayer variables ranged from 0 to 4 while religiosity strength ranged from 0 to 3, with an answer of 0 indicating "never" or "no religion." The possible answers for the index then spanned from 0 to 11 with those on the low end (0 to 5) having low religiosity, and those one the high end (8 to 11) having high religiosity.

Dependent Variable: Altruism

Like Bennett and Einolf (2017), I wanted to conceptualize altruism as being selflessly motivated to help others, and to distinguish altruistic behaviors from behaviors that are motivated by religious in-group favoritism. Though I can't fully determine the true intention behind a respondent acting prosocially towardothers, I can assume that a respondent's intentions are selflessly motivated by only assessing their tendency to help strangers (Bennett & Einolf, 2017, p. 3). Because people are not usually cognizant of a stranger's religious identity, their willingness to help someone they do not know is likely rooted in a selfless desire to help them (and not as a result of religious out-group bias). In contrast to the Bennett and Einolf study, I also split the concept of altruism into two composite variables: altruistic intent and action. These were measured separately by combining questions that asked respondents about their feelings and intention toward helping others, and questions that asked how often they acted selflessly. By keeping them separate, I can assess if religion has a different impact on how one feels about helping others and if respondents act on those feelings. Furthermore, measuring altruism in any capacity differs from most studies regarding religiosity and selfless behavior because they measure prosociality in general, and not the motivations (i.e. altruism) behind the behavior (Preston & Ritter, 2013; Saroglou, 2006; Shariff & Norenzayan, 2007).

Altruistic intent was measured using three variables that were meant to capture how strongly a respondent feels about helping other people, regardless of how often they act on those feelings. Because people are more likely to express feelings or intentions than they are to act on them, altruistic intention is meant to provide an alternate self-reporting measure for altruistic behaviors (Barasch et al., 2014). These three variables included if respondents believed people should be willing to help others who are less fortunate, if personally assisting people in trouble was important to them, and how often they felt a selfless caring for others on a daily basis. A five-point Likert Scale was applied to the first two variables, with answers ranging from strongly agree to strongly disagree. The third variable only calculated the frequency a respondent felt a selfless caring for others on a daily basis, and had categorical responses of "many times a day" to "never or almost never."

By combining these three variables for altruistic intention after recoding

their values, the possible spread of responses ranged from 3 to 15. Respondents who reported feeling little to no care toward helping others in the individual three variables scored low in altruistic intention (3 to 8, recoded as 1), while those who reported strong, positive feelings toward helping others scored highly (11 to 15, recoded as 3). The remaining participants were categorized as having moderate altruistic intentions (9 to 10, recoded as 2). The answers of the variables chosen allowed for these numbers to be recoded in three sections: Respondents falling within the 3 to 8 range were grouped together because their answers to the corresponding questions correlated to a lack of altruistic intent, while participants scoring from 11 to 15 corresponded with answers that conveyed an interest in altruistic intent. The remaining respondents (scoring from 9 to 10 in their answers to the corresponding questions) were moderate in terms of possessing altruistic intent.

In contrast, I operationalized altruistic action by using other variables that assess how often a respondent exhibited physical altruistic behaviors, which directly contrasts previous studies that assessed prosocial behavior. As opposed to studying if respondents were more likely to exhibit prosocial behaviors (such as donating money or cooperating with others) to in-groups compared to out-groups, the altruistic behavior variable was meant to measure the extent to which respondents act with selfless intentions regardless of a stranger's in-group or out-group status (Galen et al., 2015; Preston & Ritter, 2013; Shariff & Norenzayan, 2007). In other words, instead of measuring how often a respondent acts prosocially toward people of their religious faith compared to people outside of their religion, I evaluated how often respondents helped others without considering the stranger's religion or in-group status. While it is appropriate (and possible) to compare physical prosocial behaviors exhibited within or between in-groups and out-groups to study in-group-out-group bias, it is not appropriate for studying altruism because altruism is a motivation behind acting prosocially and not a type of action. Because I cannot measure how altruistic someone is regarding their religious in-group as opposed to regarding their out-groups (since that would be in-group-out-group bias, and not inherently altruistic), I assessed altruistic behavior through respondents' answers to the survey question inquiring generally how often they helped strangers. This allowed me to determine if respondents were helping others without a religious bias. Because genuine altruism must be devoid of religious in-group favoritism, the questions I used to measure altruistic behaviors did not ask respondents to consider religious group affiliation, God, or other aspects of religion prior to assessing altruistic actions (Galen et al., 2015; Preston & Ritter, 2013; Shariff & Norenzayan, 2007).

Similar to Bennett and Einolf (2017), these seven variables measuring altruistic action addressed how often a respondent had done the following in the last twelve months: given food or money to a homeless person, done volunteer work, given money to a charity, allowed a stranger to go ahead of them in line, offered up their seat on a bus or in a public place to a stranger who was standing,

carried a stranger's belongings (like groceries or shopping bags), and given directions to a stranger. Each of their seven possible responses to these questions was ordered from lowest to highest frequency (or 1 to 7), and, when combined, created a composite variable ranging from 7 to 35. This altruistic action variable was then recoded, with 7 to 17 being re-categorized as 1 (low altruistic behavior), 18 to 21 as 2 (moderate altruistic behavior), and 22-35 as 3 (high altruistic behavior). Thus, the more often a respondent answered "very frequently" or "frequently," the more likely they were labeled as highly altruistic.

There are, however, negative consequences in using self-reported data regarding altruistic actions and intentions: respondents are more likely to answer in a socially desirable and, therefore, possibly in an inaccurate way. Future studies may want to improve the validity of these two variables through direct observation of the respondents, and by referring to close acquaintances of the respondent on their beliefs in reference to helping strangers.

Control Variables

I further analyzed the relationship between religiosity with both altruistic behaviors and intentions by including race and sex as control variables. The race and sex categories were largely unaltered from the original GSS data, however, I declared the "other" option under race as missing since there were too few respondents to assess trends or effectively run a chi-square analysis. As a result, I could only analyze race with Caucasian and African-American respondents. Additionally, sex was a dichotomous nominal variable, with male and female representing the two response categories. When controlling for these variables, I expect the relationship with religiosity and altruism to be stronger for African-Americans and females.

Statistical Methods

In analyzing my cross-tabulations, I utilize three main statistical methods: chi-square (χ^2), p-value, and gamma (γ). Chi-square is used for testing the association between variables, and calculates the difference between the observed values and the values expected. A p-value < 0.05 indicates that the data is statistically significant and warrants further investigation regarding the association between the variables. Finally, gamma measures the strength of association between the independent and dependent variables. A gamma value further from 0 and closer to either -1 or 1 demonstrates a stronger level association, and indicates that changes in the independent variable can be used to predict changes in the dependent variable.

Results

Religiosity and Altruistic Intention

As shown in Table 1, the association between religiosity and altruistic intention was found to be both moderate and significant ($\chi^2 = 77.490$, $p < 0.001$, $\gamma = 0.372$). For example, 15% of low religiosity respondents reported low altruistic intentions compared to the 5% of those who responded with high religiosity. Conversely, 52% of low religiosity individuals responded with high altruistic intentions compared to 76% of respondents who responded with high religiosity and high altruistic intentions. Therefore, as religiosity increases, altruistic intentions increase—which is also a trend that can be found within the subsequent multi-variate cross-tabulations.

Table 1

			Religiosity Scale			
			Low Religiosity	Moderate Religiosity	High Religiosity	Total
Altruistic Intention	Low	Count	77	11	22	110
		%	15.3%	4.7%	4.5%	9.0%
	Moderate	Count	165	75	99	339
		%	32.9%	32.2%	20.1%	27.6%
	High	Count	260	147	372	779
		%	51.8%	63.1%	75.5%	63.4%
Total		Count	502	233	493	1228
		%	100.0%	100.0%	100.0%	100.0%

$\gamma = 0.372$, $\chi^2 = 77.490$, $p < 0.001$

Religiosity and Altruistic Intention: Multi-variates

As seen in Table 2, the strength of relationship when controlling for race was statistically significant for both Caucasians and African-Americans ($\chi^2 = 57.417$, $p < 0.001$, $\gamma = 0.382$; $\chi^2 = 17.854$, $p < 0.05$, $\gamma = 0.393$ respectively). For Caucasians, 52% of those with low religiosity had high altruistic intentions in relation to 76% with high religiosity and high altruistic intention. Similarly, for African-Americans, 47% who reported low religiosity had high altruistic intentions, 77% of those with high religiosity had high altruistic intentions. This suggests a similar trend as was found in the initial bi-variate relationship that the higher the religiosity, the higher the altruistic intent.

Table 2

Race				Low Religiosity	Moderate Religiosity	High Religiosity	Total
					Religiosity Scale		
Caucasian[a]	Altruistic Intention	Low	Count	66	11	12	89
			%	15.9%	6.3%	3.6%	9.7%
		Moderate	Count	132	50	68	250
			%	31.9%	28.6%	20.4%	27.1%
		High	Count	216	114	253	583
			%	52.2%	65.1%	76.0%	63.2%
	Total		Count	414	175	333	922
			%	100.0%	100.0%	100.0%	100.0%
African-American[b]	Altruistic Intention	Low	Count	5	0	8	13
			%	15.6%	0.0%	7.3%	7.2%
		Moderate	Count	12	14	17	43
			%	37.5%	36.8%	15.5%	23.9%
		High	Count	15	24	85	124
			%	46.9%	63.2%	77.3%	68.9%
	Total		Count	32	38	110	180
			%	100.0%	100.0%	100.0%	100.0%
Total	Altruistic Intention	Low	Count	71	11	20	102
			%	15.9%	5.2%	4.5%	9.3%
		Moderate	Count	144	64	85	293
			%	32.3%	30.0%	19.2%	26.6%
		High	Count	231	138	338	707
			%	51.8%	64.8%	76.3%	64.2%
	Total		Count	446	213	443	1102
			%	100.0%	100.0%	100.0%	100.0%

a. $\gamma = 0.382$, $\chi^2 = 57.417$, $p < 0.001$
b. $\gamma = 0.393$, $\chi^2 = 17.854$, $p < 0.05$

In testing the association between religiosity and altruistic intent while controlling for sex, the same general trend found in the bivariate can be seen in both males and females (Table 3). This relationship remains statistically significant with both males and females, but the strength of association increased from the initial bivariate cross-tabulation for males and decreased for females (males: $\chi^2 = 45.127$, $p < 0.001$, $\gamma = 0.406$; females: $\chi^2 = 28.121$, $p < 0.001$, $\gamma = 0.280$). Of males, nearly half (48%) of those with low religiosity had high altruistic intentions in relation to the 76% of respondents with high religiosity and high altruistic intentions. Of females, 58% of low religiosity respondents reported having high altruistic intentions compared to 75% who were highly religious and had high altruistic intentions.

Table 3

Sex				Low Religiosity	Moderate Religiosity	High Religiosity	Total
Male[a]	Altruistic Intention	Low	Count	47	7	5	59
			%	15.9%	6.8%	3.0%	10.4%
		Moderate	Count	108	42	35	185
			%	36.5%	40.8%	20.8%	32.6%
		High	Count	141	54	128	323
			%	47.6%	52.4%	76.2%	57.0%
	Total		Count	296	103	168	567
			%	100.0%	100.0%	100.0%	100.0%
Female[b]	Altruistic Intention	Low	Count	30	4	17	51
			%	14.6%	3.1%	5.2%	7.7%
		Moderate	Count	57	33	64	154
			%	27.7%	25.4%	19.7%	23.3%
		High	Count	119	93	244	456
			%	57.8%	71.5%	75.1%	69.0%
	Total		Count	206	130	325	661
			%	100.0%	100.0%	100.0%	100.0%
Total	Altruistic Intention	Low	Count	77	11	22	110
			%	15.3%	4.7%	4.5%	9.0%
		Moderate	Count	165	75	99	339
			%	32.9%	32.2%	20.1%	27.6%
		High	Count	260	147	372	779
			%	51.8%	63.1%	75.5%	63.4%
	Total		Count	502	233	493	1228
			%	100.0%	100.0%	100.0%	100.0%

Religiosity Scale spans Low Religiosity, Moderate Religiosity, High Religiosity.

a. $\gamma = 0.406$, $\chi^2 = 45.127$, $p < 0.001$
b. $\gamma = 0.280$, $\chi^2 = 28.121$, $p < 0.001$

Religiosity and Altruistic Action

The bi-variate cross-tabulation analysis between religiosity and altruistic action (see Table 4) indicates that there is a moderately strong, statistically significant relationship ($\chi^2 = 22.957$, $p < 0.001$, $\gamma = 0.195$). Most notably, 60% of low religiosity respondents reported low levels of altruistic behavior compared to 46% of high religiosity respondents showing low levels of altruistic behaviors. Additionally, 15% of low religiosity respondents had high levels of altruistic action whereas 24% of high religiosity respondents reported the same. Therefore, as religiosity increases, altruistic action increases – this is a trend mirrored in the following two multi-variate cross-tabulations.

Table 4

			Religiosity Scale			
			Low Religiosity	Moderate Religiosity	High Religiosity	Total
Atruistic Action	Low	Count	299	128	228	655
		%	59.6%	54.9%	46.0%	53.2%
	Moderate	Count	130	63	147	340
		%	25.9%	27.0%	29.6%	27.6%
	High	Count	73	42	121	236
		%	14.5%	18.0%	24.4%	19.2%
Total		Count	502	233	496	1231
		%	100.0%	100.0%	100.0%	100.0%

$\gamma = 0.195$, $\chi^2 = 22.957$, $p < 0.001$

Religiosity and Altruistic Action: Multi-variates

For race, a higher religiosity is associated with a higher level of altruistic action between Caucasians and African-Americans (see Table 5), but this is only significant for Caucasians (Caucasians: $\chi^2 = 14.794$, $p < 0.05$; African-Americans: $\chi^2 = 4.610$, $p = 0.33$). For Caucasians, 59% of low religiosity respondents were categorized as having low altruistic actions compared to 47% of those with high religiosity, and their strength of association was moderate ($\gamma = 0.178$). This positive correlation can also be seen among Caucasians with high levels of altruistic action, though not as clearly. Among African-Americans, high religiosity is also moderately correlated with high altruistic action ($\gamma = 0.229$); however, low cell counts likely prevented the data from being statistically significant.

Table 5

Race				Religiosity Scale			
				Low Religiosity	Moderate Religiosity	High Religiosity	Total
Caucasian[a]	Altruistic Action	Low	Count	243	96	157	496
			%	58.8%	54.5%	46.7%	53.6%
		Moderate	Count	114	49	102	265
			%	27.6%	27.8%	30.4%	28.6%
		High	Count	56	31	77	164
			%	13.6%	17.6%	22.9%	17.7%
	Total		Count	413	176	336	925
			%	100.0%	100.0%	100.0%	100.0%
African-American[b]	Altruistic Action	Low	Count	20	18	48	86
			%	64.5%	48.6%	43.6%	48.3%
		Moderate	Count	7	11	33	51
			%	22.6%	29.7%	30.0%	28.7%

				Low	Moderate	High	Total
		High	Count	4	8	29	41
			%	12.9%	21.6%	26.4%	23.0%
	Total		Count	31	37	110	178
			%	100.0%	100.0%	100.0%	100.0%
Total	Altruistic Action	Low	Count	263	114	205	582
			%	59.2%	53.5%	46.0%	52.8%
		Moderate	Count	121	60	135	316
			%	27.3%	28.2%	30.3%	28.6%
		High	Count	60	39	106	205
			%	13.5%	18.3%	23.8%	18.6%
	Total		Count	444	213	446	1103
			%	100.0%	100.0%	100.0%	100.0%

a. $\gamma = 0.178$, $\chi^2 = 14.794$, $p < 0.05$
b. $\gamma = 0.229$, $\chi^2 = 4.610$, $p = 0.33$

Sex, the last control variable tested with religiosity and altruistic behavior (see Table 6), additionally indicates that the relationships were both moderately strong and statistically significant (males: $\chi^2 = 10.812$, $p < 0.05$, $\gamma = 0.171$; females: $\chi^2 = 20.903$, $p < 0.001$, $\gamma = 0.247$). Of males, 18% of respondents with low religiosity had high levels of altruistic action compared to 28% of high religious respondents. Among females, the same trend can be found of respondents reporting low religiosity having high altruistic action (10%) compared to highly religious respondents (23%). Females, with a larger gamma value, have a stronger relationship with religiosity and altruistic action than males.

Table 6

				Religiosity Scale			
Sex				Low Religiosity	Moderate Religiosity	High Religiosity	Total
Male[a]	Altruistic Action	Low	Count	168	52	78	298
			%	57.1%	50.0%	45.3%	52.3%
		Moderate	Count	74	34	46	154
			%	25.2%	32.7%	26.7%	27.0%
		High	Count	52	18	48	118
			%	17.7%	17.3%	27.9%	20.7%
	Total		Count	294	104	172	570
			%	100.0%	100.0%	100.0%	100.0%
Female[b]	Altruistic Action	Low	Count	131	76	150	357
			%	63.0%	58.9%	46.3%	54.0%
		Moderate	Count	56	29	101	186
			%	26.9%	22.5%	31.2%	28.1%
		High	Count	21	24	73	118
			%	10.1%	18.6%	22.5%	17.9%

	Total		Count	208	129	324	661
			%	100.0%	100.0%	100.0%	100.0%
Total	Altruistic Action	Low	Count	299	128	228	655
			%	59.6%	54.9%	46.0%	53.2%
		Moderate	Count	130	63	147	340
			%	25.9%	27.0%	29.6%	27.6%
		High	Count	73	42	121	236
			%	14.5%	18.0%	24.4%	19.2%
	Total		Count	502	233	496	1231
			%	100.0%	100.0%	100.0%	100.0%

a. $\gamma = 0.171$, $\chi^2 = 10.812$, $p < 0.05$
b. $\gamma = 0.247$, $\chi^2 = 20.903$, $p < 0.001$

Discussion

The purpose of this study was to build a more comprehensive understanding of religiosity and its influence on genuine altruism. I intended to explore Bennett and Einolf's (2017) research that suggests that more religiously involved individuals exhibit genuine (non-religious) altruistic behaviors. I expanded on their research by including a more comprehensive and inclusive measure of religiosity that could be applicable to a wider spectrum of people, and by dividing altruism into behavior and intention. My original hypothesis stated that as religiosity increased, both altruistic intentions and behaviors would also increase. This trend was supported by both bivariate analyses comparing religiosity to altruistic intentions and actions as well as among all multi-variate analyses, and thus supports Bennett and Einolf's conclusion that religion encourages altruistic tendencies that are not motivated by religious in-group favoritism. These findings further argue against the dominant sociological view that religion, as an in-group, will encourage prosocial behaviors purely as a result of in-group-out-group bias (Galen et al., 2014; Preston & Ritter, 2013; Saroglou, 2006; Shariff & Norenzayan, 2007).

One of the most interesting findings was replicating the original bivariate relationship when controlling for race. It was suggested by King et al. (2006) that religious involvement has a strong correlation with race. Because of this, I expected the introduction of race to impact the strength of association for both religiosity on altruistic action and intention. More specifically, I expected a stronger correlation and strength of association between religiosity and altruism (in intention and action) for African-Americans; however, with trends in percentages mirroring the percentages found in each respective bivariate, and with gamma values remaining fairly stable in comparison to the gamma value found in either religiosity and altruistic action or intention, controlling for race only replicated the initial bivariate relationships. As a result, though my hypothesis still holds, race did not have an influence on religiosity in either altruistic actions or intentions as I originally thought. Though I hypothesized that race would

specify both relationships with African-Americans having stronger associations, my low cell counts for African-Americans may have accounted for this. If the respondent sample included more African-American respondents (since there were four times more Caucasians than African-Americans), I may have been able to find a stronger, statistically significant association among African-Americans than for Caucasians; however, the absence of data on races outside of Caucasians and African-Americans is a limitation in my study. Popular religions existing in cultures outside of Caucasian and African-American cultures could potentially have a less explicit correlation between religiosity and altruism.

Finally, sex specified the relationship of religiosity and altruistic intention and action, which runs counter to previous research. This finding does not support Galen et al. (2015) and Reitsma et al. (as cited in Galen et al., 2015) with their suggestion that trends or correlations that arise from religiosity and prosocial behavior can be attributed to gender. Though their reasoning (that women are more likely to be involved in religion or church services, as well as more likely to be altruistic) may appear logical, my data suggests that the relationship between religiosity and altruism is not spurious. Gender specifies the relationship. In other words, religiosity correlates with altruistic action and intention, regardless of sex; however, the strength of association varied between males and females for both altruistic intention and action. In relation to altruistic intentions, the strength of association increased for males but decreased for females. Alternatively, for altruistic action, the strength increased for females while it decreased for males. More research is necessary to investigate these differences in association among males and females for both altruistic intention and altruistic action.

Therefore, religiosity influences both altruistic intentions and actions, and these relationships are replicated or specified by race and sex. The variables used to measure altruism were based in actions motivated by personal or selfless intentions, which indicates that the religiosity does not necessarily lead to prosocial behaviors as a result of in-group-out-group bias, but out of genuine altruistic motivations. While this supports Bennett and Einolf's research (2017), it also challenges both Reitsma's claim that demographics in relation to religiosity and prosocial behavior are likely spurious (as cited in Galen et al., 2015), and the general claim that religion functions as other in-groups do in relation to altruistic tendencies (Galen et al., 2014; Preston & Ritter, 2013; Saroglou, 2006; Shariff & Norenzayan, 2007). Finally, it is important to note that religiosity influenced both altruistic intentions and actions with little distinction between the two relationships, further demonstrating religion's ability to promote selflessness in both intentions and actions.

In addition to separating altruistic intent and action, this study also distinguished altruism from prosocial behavior. Most studies analyzing the influence of religion on compassionate or caring (prosocial) behavior suggest that these actions are only reciprocated toward members of the same religious group (Galen et al., 2014; Preston & Ritter, 2013; Saroglou, 2006; Shariff &

Norenzayan, 2007); however, these findings contradict the core principles of most major religions that encourage the performance of prosocial behavior on a universal scale and not purely within religious groups (Preston & Ritter, 2013). Alternatively, studying altruism—the selfless motivation through which people decide to act prosocially—escapes this religious lens to determine the underlying intention behind prosocial behaviors outside of religious contexts. (Altruism cannot be studied in terms of in-groups and out-groups because individuals cannot act selflessly within their own religious group and simultaneously avoid in-group favoritism). In other words, the previous studies analyzing religiosity and prosocial behavior are limited to assessing prosocial behavior in the dichotomy of religious in-groups versus religious out-groups; they do not consider prosocial behavior outside of religion; however, prosocial behavior is not just prevalent in religious-based settings, and the intentions behind these caring actions exist beyond those that are religious. In order to determine if religion does prevent individuals from acting in a selfless manner toward others, it is imperative that we study prosocial behaviors outside the scope of religion. By assessing the tendency for people to act prosocially without a given social context (i.e. religion), we can measure the intentions of the individual—free from religious bias. While the possible range of intentions behind prosocial behaviors can be extremely varied, limiting the scope of prosocial behaviors to that of helping strangers allows for a safe assumption that the intentions are selfless and altruistic. Thus, finding a positive correlation between religiosity and altruism suggests that religion not only promotes prosocial behavior, but that religion encourages altruistic motives in religious adherents that are performed for people regardless of their religion.

Finally, future research is needed to address the limitations of this study. My research was restricted because I was broadly studying religiosity and did not distinguish religiosity among various religious groups. Additional research is necessary to understand altruistic tendencies beyond a general religiosity scale to develop a more extensive understanding of altruism within different religious identifications. Also, because this study was limited by a lack of African-American respondents, as well as respondents from a variety of other races, it is imperative that further research studies a more racially diverse group of respondents (that better reflects the racial makeup of the American population). This additional research is also needed to build a more comprehensive understanding of religion and its influence on religious individuals: By continuing to develop more extensive and reliable measures of altruism, researchers can more effectively understand how it should be conceptualized and, subsequently, how religion and religiosity influences altruistic motives in its adherents.

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