

## Oxford Handbooks Online

**Religion and Prosociality**

Jo-Ann Tsang, Wade C. Rowatt, and Azim Shariff

Online Publication Date: Mar 2014

Subject: Psychology, Personality and Social Psychology  
DOI: 10.1093/oxfordhb/9780195399813.013.013**[>] Abstract and Keywords**

Religions seek to encourage prosocial behavior. But do religious admonitions to generosity and compassion translate into actual helping behavior? When religious individuals are moved to help, is it out of genuine compassion, or of a desire to appear religiously good? Is this compassion extended to all others, or only to members of certain acceptable groups? This chapter explores research looking at the relationship between prosocial behavior and religion. It first examines differences between studies utilizing self-report versus behavioral measures of helping. The chapter then presents research looking at the relationship between religious orientation and prosocial motivation, and it then moves to research on religion and helping of ingroups versus outgroups. It also reviews more recent research on religious priming and prosocial behavior. Finally, it broadens the definition of prosocial behavior and reviews new research on the relationship between religion and prosocial concepts such as forgiveness and gratitude.

Keywords: religion, religious orientation, prosocial, volunteerism, forgiveness, gratitude

**Religion and Prosociality**

Clearly, religions seek to encourage prosocial behavior. All major religions have some form of a golden rule that encourages people to treat others as they wish to be treated, meaning people should treat each other compassionately. This compassion is to be extended to all others, not just to one's kin or to fellow believers. William James, in his *Varieties of Religious Experience*, calls this the saintly virtue of charity, describing it thusly,

Psychologically and in principle, the precept "Love your enemies" is not self-contradictory. It is merely the extreme limit of a kind of magnanimity with which, in the shape of pitying tolerance of our oppressors, we are fairly familiar. Yet if radically followed, it would involve such a breach with our instinctive springs of action as a whole, and with the present world's arrangements, that a critical point would practically be passed, and we should be born into another kingdom of being. Religious emotion makes us feel that other kingdom is close at hand, within our reach

(James, 1902, p. 260).

But do religious admonitions to generosity and compassion translate into actual helping behavior? When religious individuals are moved to help, is it out of genuine compassion, or of a desire to appear religiously good? Is this compassion extended to all others, or only to members of certain acceptable groups? In this chapter, we explore research looking at the relationship between prosocial behavior and religion. By "religion" we mean religiousness on a psychological (rather than an institutional) level, including individual differences in church attendance, religious belief, religious orientation, fundamentalism, and so on. We first examine differences between studies utilizing self-report versus behavioral measures of helping. We then present research looking at the relationship between religious orientation and prosocial motivation, and then move to research on religion and helping of ingroups versus outgroups. We also review more recent research on religious priming and prosocial behavior. Finally, we broaden the definition of prosocial behavior and review new research on the relationship between religion and prosocial concepts such as forgiveness and gratitude.

**Is Religion Related to Helping?****Religion and Self-Reports of Helping**

Religiousness is certainly related to self-reports of prosociality (Batson, Schoenrade & Ventis, 1993; Koenig, McGue, Krueger, & Bouchard, 2007; Norenzayan & Shariff, 2008). Batson et al. (1993) found that of the eight self-report or informant-report studies they reviewed, all found positive relationships between religiousness and helping or compassion. More recent research is consistent with this finding. For instance, Gillum and Masters (2010) found that church attendance predicted self-reported blood donation in women ages 18–44, as well as in men ages 24–34. This general relationship has been replicated in Eastern cultures and religions (Chou & Chen, 2005).

One area that provides strong support for the relationship between religiousness and self-reported prosociality is survey research on volunteerism. Theoretical and empirical connections between religion and volunteerism have been examined by scholars in a variety of disciplines, such as social work (Sherr, 2005), sociology (Ecklund & Park, 2007; Wilson, 2000), psychology (Clary & Snyder, 1999; Lodi-Smith & Roberts, 2007; Penner et al., 2005), and across cultures (Ruiter & De Graaff, 2006). A common theme is that socially connected people are more likely to volunteer than less connected persons. If religion and volunteerism are connected, it may be because religious organizations (e.g., temple, churches, mosques) bring

people together into relatively cohesive small groups or networks (Graham & Haidt, 2010), some well-suited to mobilize and respond in times of need.

Analyses of survey data from 53 countries revealed people who more frequently attend religious services were more active in volunteer work (Ruiter & De Graaf, 2010). Non-Christians and Protestants were somewhat more likely to volunteer than were Catholics or nonreligious persons. People living in a religiously devout country were almost four times as likely to volunteer as persons living in the most secular country. Connections between religion and volunteerism may differ across religions or ethnicity. For example, Protestant Asian Americans are more likely to volunteer than nonaffiliated Asian Americans (Ecklund & Park, 2007). However, a higher percentage of Asian Americans not affiliated with a religion volunteer than Hindu or Buddhist Asian Americans. Ecklund and Park (2007) surmised possible group-based pressure to volunteer may not be as strong among Hindu or Buddhist Asian Americans because of the individual nature of their religious practices.

We suspect religiousness and volunteerism are connected in large part because many volunteerism opportunities are planned through religious organizations. Increased helping by religious individuals may be due to differences in opportunity, not necessarily to changes in the individual brought about by religious doctrine. To see, we turned to the Baylor Religion Survey (BRS), a study of a national random sample of 1,648 adults in the contiguous United States. The BRS was administered in October and November 2007 by the Gallup Organization using a mix of telephone and self-administered mailed surveys. Additional methodological details and sample characteristics are provided elsewhere (Bader, Mencken, & Froese, 2007; Rowatt et al., 2009).

To operationalize “religiousness,” we summed responses to four items: degree of religiousness (i.e., How religious do you consider yourself to be?), religious service attendance, reading sacred texts, and praying outside of religious services. Items were transformed to z-scores before the aggregate variable was created. This brief measure of general religiousness was internally consistent ( $\alpha = .81$ ) and unidimensional (see Rowatt et al., 2009). Volunteerism was assessed with three questions, “About how many hours per month do you volunteer ... (a) for the community, through your place of worship; (b) for the community, not through your place of worship; and (c) for your place of worship?” Response options were *none*, *1–2 hours*, *3–4 hours*, *5–10 hours*, and *11 or more hours*.

Table 1. Correlations Between Self-Reported Indicators of Religiousness and Volunteerism in a National Random Sample of Americans in 2007

	Community not through place of worship	Community through place of worship	For place of worship
General religiousness	.04	.36	.48
Religious person (1–4 scale)	.02	.27	.37
Religious service attendance	.11	.43	.54
Reads sacred texts	.04	.33	.45
Pray/meditates outside religious services	.04	.25	.33

*Note.* General religiousness is the aggregate of the other four standardized independent variables listed (i.e., variables 2 to 5).

As shown in Table 1, general religiousness was uncorrelated with community service ( $r = .04$ ), unless the community service was planned through the place of worship ( $r = .36$ ) or was for the place of worship ( $r = .48$ ). Volunteering for one’s place of worship likely aids religious group members and increases or strengthens social connections. In sum, self-report studies of religiousness and helping show a relationship between religiousness and helping, but they are unclear as to the motivations underlying that helping, or the inclusiveness of the targets of help.

### Religion and Behavioral Measures of Helping

Correlational and quasi-experimental studies that have utilized behavioral measures of helping have shown a complex relationship between religion and prosocial behavior. Some studies have shown no relationships between dispositional religiousness and one-time donations to charities (Eckel & Grossman, 2004), generous responses in the dictator game (Ahmed & Salas, 2011; Norenzayan & Shariff, 2007; Tan, 2006), or generosity in a public goods dilemma (Ahmed & Salas, 2009, 2011; Bulbulia & Mahoney, 2008). Other studies have demonstrated that general religiousness is related to helping behaviors under limited circumstances. Sosis and Ruffle (2003) found that male (but not female) members of a religious kibbutz were more cooperative in a common-pool-resource dilemma compared to members of comparable secular kibbutzim, though the differences were small. Anderson and Mellor (2009) did not find any relationship between religious attendance or affiliation and generosity in a public goods dilemma. However, they did find that religiously affiliated participants did not show the general decline in contributions over 10 rounds of the dilemma that the nonreligiously affiliated showed. In another study, Anderson and Mellor (2009) found a positive relationship between religious affiliation and increased contribution in a public goods dilemma, but not in a trust game. Henrich et al. (2010) examined responses on the dictator game, the ultimatum game, and the third-party punishment game across 15 different locations in 10 different countries with varying levels of economic base and market integration. They found that involvement in a world religion (Christianity or Islam), compared to tribal or no religion, predicted more generosity in the ultimatum and dictator games, as well as more “altruistic” punishment in the third-party punishment.

Other studies have suggested that the target of help may affect the relationship between dispositional religiousness and helping. Yinon and Sharon (1985) found that religiously identified Israeli participants donated more money in response to a charitable request compared to secular Israeli

participants. However, this effect only emerged when the target was a visible member of the religious ingroup who was making the request on behalf of a family who was not religious. Yinon and Sharon speculated that religious donors in this circumstance self-presented to religious solicitors by attempting to appear generous. Likewise, Tan, and Vogel (2008) found that religiousness on its own did not predict more generous responses in a trust game, but that individuals who were highly religious tended to give more generously to others who were also portrayed as more religious. Orbell, Goldman, Mulford, and Dawes (1992) found a relationship between generosity in the prisoner's dilemma and religiousness, but only within a Mormon sample in Utah (compared to a more secular sample from Oregon). They pointed out that the probability of Mormons in Utah being partnered with another Mormon in the prisoner's dilemma was high; thus participants from this sample may have been generous in response to the likely religious similarity of their dilemma partners. These collective results may have occurred because religious individuals are perceived as being more trustworthy (de Dreu, Yzerbyt, & Leyens, 1995; Orbell et al., 1992; Tan & Vogel, 2008), but it may also point to the possibility of social desirability concerns. Ahmed (2009) found that religious students from a madrasah, who were studying to be Muslim imams, were more cooperative in a public goods game and generous in a dictator game compared to students from a nonreligious university. However, in this study the religious students believed that their partners in the economic game were other religious students, whereas the nonreligious university students were playing against other university students. It is therefore unclear whether the religious students were more generous, or whether instead the religious targets were perceived as more trustworthy. In summary, much of the behavioral research on religion and helping call to question a straightforward relationship between the two.

### Why Might Religion Be Related to Helping?

The different results found between self-report and behavioral measures of helping suggest multiple explanations for a religiousness-helping relationship. On the most obvious level, religious doctrine and belief might directly affect prosocial behavior. We refer to this as the *religious belief hypothesis* (Shariff, 2008). Although most of the self-report data are consistent with this hypothesis, they cannot rule out the possibility of social desirability effects. For example, our data on volunteering suggest self-presentation motivations for helping: religious individuals help only through the church, because they are trying to present themselves as good religious people to other church members. Likewise, the pattern of results from studies that utilize behavioral measures of helping suggest the operation of third variables in addition to religiousness.

Therefore, a second, though not incompatible, possibility is that religiousness is related to helping due to social desirability concerns, which we label the *moral hypocrisy argument* (Shariff, 2008). According to this argument, highly religious individuals are concerned to present themselves as good religious adherents, helping more in order to *appear* helpful. However, when social desirability concerns are not salient or helping becomes too costly, religiousness is no longer related to helping (e.g., Batson et al., 1993). This could explain the discrepancy between self-report and behavioral helping data. Religious individuals self-report being more helpful in order to seem like good religious people, and self-reporting helpfulness is not costly. However, self-reports of helping do not translate into more costly helping behavior, unless self-presentation concerns are primed with, for example, a religious solicitor (Yinon & Shannon, 1985). Similarly, Norenzayan and Shariff (2008) argued that religiousness increases prosocial reputational concerns that evolved to facilitate human cooperation and group life. Thus, religious individuals should be more concerned to maintain a cooperative image, a hypothesis supported by the consistent finding that religiousness positively predicts socially desirable responding (e.g., Batson et al., 1993; Sedikides & Gebauer, 2010; Trimble, 1997)—a finding that reveals a serious confound in any research on this topic that is based on self-reports. Prosocial reputation management, after all, is not always synonymous with actual prosocial behavior.

A third explanation for the relationship between religiousness and helping is the social network hypothesis (Shariff, 2008). According to this hypothesis, it is not religious belief, in particular, that directly increases prosocial behavior, but the social relationships and social opportunities afforded by religious group membership that facilitate prosociality. Our volunteerism data also fit well with this argument: Religious individuals volunteer in order to increase social ties within their religious group, and because the social networks in their religious group provide them with opportunities to help. The social network hypothesis also helps explain research showing that religiousness is related to prosocial behavior only toward other religious group members (Orbell et al., 1992; Tan & Vogel, 2008; Yinon & Sharon, 1985).

### What Type of Religiousness Might Be Related to Helping?

Another reason why the data linking religion with helping is unclear may be due to the use of measures of general religiousness rather than of more specific measures of religiosity. Because different facets of religion may be more or less conducive to prosocial behavior (Tan, 2006), it makes sense to look beyond the general construct of religiosity to other more specific religious constructs. One concept that has been studied a great deal in the context of prosocial behavior and motivation is religious orientation. Allport (1950) originally conceived of intrinsic religious orientation as a mature religiousness in which the individual organizes his or her life around religious morals and beliefs. In contrast, individuals high in extrinsic religious orientation use religion to meet other, nonreligious ends, such as status, solace, or social relationships. Theoretically, intrinsic religious orientation would seem to be positively related to helping, whereas extrinsic religiousness might be unrelated or negatively related to helping. Batson et al. (1993) noted that Allport's measurement of intrinsic religious orientation missed components of his original conceptualization of mature religiousness, including cognitive complexity and the valuing of doubt. In response, Batson and colleagues introduced the religious orientation of quest, which entails being comfortable with doubt and a willingness to face existential questions in their full complexity (e.g., Batson & Schoenrade, 1991).

Darley and Batson's (1973) classic study illustrates the usefulness of measuring different religious orientations. Seminary students were randomly assigned to prepare a talk on either the Good Samaritan parable, or on the types of jobs for which seminary prepared its students. They were to give the talk in a building across campus; some of the students were told that they were late, whereas others were told that they had time to spare. On the way to the second building the students were confronted with a young man coughing and slumped in an alleyway. Students who were less rushed to get to the next building were more likely to offer help. Although neither the content of the talk nor the students' religious orientation significantly predicted whether or not the students helped, among those who did help, intrinsic religiousness was positively correlated, and quest religiousness was negatively correlated, with a persistent, rigid form of helping (Batson, 1976). Darley and Batson speculated that quest religiousness was related to a tentative



form of helping that was more sensitive to the young man's direct statements that he was alright and just needed time for his medication to work. In turn, the more persistent helpers were perhaps helping not out of concern for the young man's needs, but out of a need to see themselves as helpful people (Batson et al., 1993). Thus, religious orientation in this study was not related to an increase in helping, but to different types of help, and to possible differences in motivations underlying that help.

### Empirical Evidence for Different Helping Motivations

These results suggest that it is not only important to investigate the relationship between religious orientation and helping, but also the motivation behind the help. Many religions encourage their followers not just to help, but to help out of selflessness and compassion. For example, the Dalai Lama states that genuine compassion should be based on the needs of the person being helped, rather than on the expectations of the helper (Gyatso, 2003). Similarly, Jesus admonished his followers not to appear pious only in order to be seen by others, but to pray and give alms in secret, where only God can see (Matthew 6:1–7). If religious belief leads to the internalization of these religious doctrines of compassion, as the religious belief hypothesis suggests, then individuals scoring high in intrinsic religious orientation should exhibit more altruistically motivated helping. In contrast, if intrinsic religiousness is instead related to moral hypocrisy, then highly intrinsically religious individuals should exhibit more egoistically motivated helping with the goal of appearing helpful to the self and others. Research supports the assertion that intrinsic religiousness is related to a moral hypocrisy motivation for helping (Batson, 1976; Batson & Flory, 1990; Batson & Gray, 1981; Batson, Oleson, Weeks, Healy, Reeves, Jennings, & Brown, 1989; Batson et al., 1993). In contrast, quest religiousness seems to be related to a more altruistically motivated helping in line with the religious belief hypothesis.

For example, Batson et al. (1989) sought to differentiate between possible egoistic motivations associated with religious helping. To test the motivation to appear helpful, undergraduate students were asked to evaluate a walkathon program that supposedly helped individuals with rare medical conditions. During the study, participants were provided with an opportunity to participate in the walkathon, but only if they passed a qualifying test. Half of the participants were told that the qualifying standard for the test was very rigorous, and few people passed it. Because the majority of individuals tended not to qualify, participants could purposefully fail and easily justify their failure without admitting that they did not wish to help. Other participants were told that the qualifying standard was relatively easy, making it hard to volunteer without actually helping. Batson and colleagues (1989) found that intrinsic religious orientation was related to volunteering in the difficult standard condition, but not with increased effort during the qualifying task. This is consistent with the prediction that intrinsic religiousness is related to helping for egoistic reasons. In contrast, although scores on quest religious orientation were not associated with increased helping in either condition, of those people who did volunteer in the difficult standard condition, quest was related to increased effort on the qualifying task. This is consistent with the prediction that quest religious orientation is associated with an altruistic rather than egoistic motivation to help.

In a second study, Batson et al. (1989) examined the egoistic motivation of helping to avoid guilt or censure. Participants were given an opportunity to help a fellow student who had lost her parents and sister in an accident. They were presented with a sign-up sheet partially filled out by a number of other students. In the high-pressure condition, five of the seven students volunteered to help the student. In the low-pressure condition, two of the seven had volunteered. Batson and colleagues reasoned that if a given religious orientation were related to helping for the egoistic reason of avoiding guilt, high scores in that orientation would be related to helping more when the pressure was high, but not when the pressure was low. In contrast, if motivation were altruistic, helping should remain high even when social pressure was low. They found that intrinsic religiousness was not related to helping in either high- or low-pressure conditions, but quest religious orientation was related to helping in the low pressure condition. This supported a potentially altruistic motivation for quest religiousness. However, Batson and colleagues suggested that these results were also consistent with a principled, rather than altruistic, motivation for helping. Individuals motivated by principism do not have themselves or even the person in need as their ultimate goal; instead, they help in order to uphold moral principles. No empirical data has been presented thus far to refute or support a principist motivation for helping.

In summary, research on prosocial motivations and religious orientation has revealed that religion does affect helping, in multiple ways. Consistent with the moral hypocrisy hypothesis, intrinsic, devout religiousness is related to increased helping, but that helping is motivated by the helper's own needs, rather than care and compassion for the person in need. Consistent with the religious belief hypothesis, quest religious orientation may be related to a more altruistically motivated helping that is focused on the person being helped, rather than on the self.

### Universal Compassion or Selective Helping?

In addition to investigating motivations underlying helping, it is important to examine whom religious people choose to help. Most world religions preach helping of all others, not just members of one's ingroup. As William James (1902) mentioned (see above), Christianity preaches not only that we are to love others, but to love our enemies as well. Buddhism encourages followers to have compassion not just on other humans, but on animals and the entirety of the natural world. Therefore, the religious belief hypothesis would predict that devoutly religious individuals would exhibit a universal compassion. On the other hand, a moral hypocrisy explanation based on self-presentation—and indeed much of what is known in social psychology about ingroup-outgroup behavior—would predict a selective compassion that is limited to ingroup members. The studies reviewed above suggest that general religiousness is related to helping, but only when the target is another religious person (e.g., Orbell et al., 1992; Tan & Vogel, 2008; Yinon & Sharon, 1985). These findings are consistent with the moral hypocrisy argument, and, perhaps unsurprisingly, they indicate that basic psychological processes of group dynamics are not easily swayed by theological teachings. But all religiousness is not the same. Allport (1950) would argue that extrinsic religiousness, which characterizes the majority of religious adherents, should lead to selective helping, but that more devout, intrinsic religiousness should lead followers to internalize a more universal compassion. The empirical evidence, however, suggests otherwise.

Batson, Floyd, Meyer, and Winner (1999) conducted one of the first studies examining the relationship between intrinsic religiousness and helping

members of value-violating outgroups. Participants were provided an opportunity to help two people win a gift card. One person they knew nothing about; the other person was allowed to write them notes. The first note either revealed that the person was gay, or said nothing about sexual orientation. The second note detailed what the person would do with the gift card if he or she were to win. In the value-violating condition, the person wrote that he or she was planning on attending a gay pride rally; in the non value-violating condition, he or she was planning on visiting grandmother. Participants were then given two minutes to divide their helping between the participant who wrote the note and the unknown participant in any manner in which they chose. Batson and colleagues found that scores on intrinsic religiousness were related to helping the person less when it was revealed that he or she was gay; it did not matter whether the person's actions were related to the value violation. Intrinsic religion was therefore related to helping only when the person being helped was not an outgroup member.

Bassett et al. (2001) examined the reaction that intrinsically religious individuals had toward a more diverse target base. Using a role-playing methodology modeled after Batson et al. (1999), they presented participants with a gay student in a romantic relationship who wanted to attend a gay pride rally, a gay student in a romantic relationship who wanted to visit grandparents, a gay student who was abstaining from sex and wanted to visit grandparents, or a heterosexual student who wanted to visit grandparents. They found that for participants scoring high on the intrinsic religion scale, helping differed only between the gay sexually active student attending the rally and the heterosexual student. Patterns of means suggested that students high in intrinsic religion (as well as those scoring high in quest) appeared to be making distinctions based on whether the student said he or she was sexually active or abstained from sex, and this was just as important as whether or not the student was intending to attend a gay pride rally or visit grandparents. Although these results are intriguing, there were differences between the studies that may have accounted for the discrepancy between Bassett et al.'s and Batson et al.'s (1999) results. First, Bassett et al.'s methodology utilized role-play; participants knew they were not helping an actual person. The researchers tried to address this by selecting out participants who scored high in social desirability. Second, Bassett et al.'s study was conducted with participants at a private religious college; these participants were likely more religious than Batson et al.'s participants, who were from a state university. Yet, Bassett et al. address the important point that Batson et al.'s study may not have independently varied outgroup membership from value violation. A sexually active gay person who is visiting his or her grandmother's house may still be violating some religious individuals' values.

Bassett, Kirnan, Hill, and Schultz (2005) further demonstrated that some religious individuals distinguish between celibate and sexually active gay people. In a validation of the Sexual Orientation and Practices Scale, they compared attitudes toward sexually active single gay people, gay people who are abstaining from sexual activity, and sexually active single straight people. Bassett and colleagues found that religious individuals who were "universally accepting" of gay individuals regardless of sexual activity status were more likely to allocate money from the experiment to a church that accepted all gay individuals, regardless of behavior. In contrast, religious individuals who reported more positive attitudes toward celibate gay people, but negative attitudes toward sexually active gay people, were less likely to donate money to the universally accepting church. Likewise, individuals who rejected gay people regardless of their behaviors also donated less money to the accepting church.

Mak and Tsang (2008) also explored the relationship between intrinsic religious orientation and selective helping. Borrowing Batson et al.'s (1999) methodology, they presented participants with notes from either a gay or presumably straight individual. This individual directly stated that she was either sexually promiscuous or abstained from sex. In all conditions, the individual expressed the desire to visit her grandparent's house. Mak and Tsang found that individuals scoring high in intrinsic religiousness helped the target less when she stated that was sexually promiscuous, regardless of the target's sexual orientation. In contrast to Batson et al., these intrinsically religious participants seemed to be focused on the value-violating behavior rather than on the target's outgroup membership.

The research therefore suggests that devout, intrinsic religiousness is perhaps not related to universal compassion, counter to the religious belief hypothesis. Instead, intrinsic religiousness is related to the avoidance of helping when the person in need is a member of a stigmatized outgroup or violates the helper's values, suggesting help more in line with the moral hypocrisy argument.

Might quest religiousness fare better at universal compassion? Quest should be related to helping all others, even outgroup members, as long as quest values are not being violated. In other words, individuals with high scores on the quest religious orientation are putatively able to "love the sinner but hate the sin." Batson, Eidelman, Higley, and Russell (2001) looked at the relationship between quest scores and helping a target who stated that she was anti-gay. This target either planned to visit her grandparents or attend an anti-gay rally. High scores in quest religiousness were related to helping the anti-gay target less, but only when she was planning to attend the anti-gay rally. In other words, quest religion indeed enabled individuals to "hate the sin" without hating the "sinner."

Goldfried and Miner (2002) noted that the value violation used in Batson and colleagues' (2001) study confounded belief content with the manner in which one holds one's belief. For instance, is it possible for an individual to be anti-gay, but hold this anti-gay belief in a questing manner, believing that she doesn't yet hold the final answer on the morality of homosexuality, and probably never will? Would this individual be a value-violator for someone scoring high in quest? Goldfried and Miner presented participants with a value violation that was more directly at odds with the quest religious orientation. Participants read a note disclosing that the target was either religiously fundamentalist or made no mention of religiousness. The target then either disclosed that he or she wished to promote religious fundamentalism or engage in an activity unrelated to religion. They found that high scores in quest religiousness were related to helping the religious fundamentalist less than the religiously unspecified person when he or she was engaging in an activity unrelated to religious fundamentalism. In contrast to Batson et al.'s (2001) findings, high quest scores were related to helping selectively depending on group membership.

Batson, Denton, and Vollmecke (2008) pointed out that Goldfried and Miner (2002) included individuals who were not interested in religion, along with individuals from non-Christian backgrounds, in their study. The Quest Religious Orientation Scale has only been validated in Christian samples, and because it measures a way of being religious, it makes little sense to utilize a non-religious population. Therefore, Batson et al. strove to replicate Goldfried and Miner's study with a more appropriate population of individuals with Christian background and with at least a moderate interest in religion. Additionally, Goldfried and Miner used Altemeyer and Hunsberger's (1992) measure of quest religious orientation, which Batson and colleagues characterized as a measure of "anti-fundamentalism" rather than a measure of quest. Participants were presented with a target who said

that he or she was fundamentalist or did not mention religion, and the target either planned to attend a fundamentalist rally or to visit grandparents. High quest scores were related to helping the fundamentalist just as much as a nonfundamentalist, as long as he or she was visiting grandparents. Fundamentalists who were violating quest values by attending the fundamentalist religion rally were helped less by high quest individuals. This provided further support for Batson and colleague's claim that quest religious orientation is related to the ability to "love the sinner" but to "hate the sin." Quest religiousness is thus related to a more universal compassion, and is relatively unaffected by group membership, even from groups thought to violate quest values.

Studies looking at dimensions of religiousness beyond religious orientation have also found differences in universal versus tribal compassion. For instance, Saroglou and Dupuis (2006) found that in their sample of Western Buddhists, religious investment was related to valuing universalism. This is contrasted with previous studies where Christian, Muslim, and Jewish participants showed a positive relationship between religiousness and benevolence, yet no relationship with universalism (Saroglou, Delpierre, & Dernelle, 2004; Saroglou & Galand, 2004; Saroglou & Muñoz-Garcia, 2008), and positive relationships between spirituality and universalism (Saroglou & Galand, 2004; Saroglou & Muñoz-Garcia, 2008). In contrast, Jackson and Esses (1997) found that religious fundamentalism is related to beliefs that gay men and lesbians, on the one hand, and single mothers, on the other—two groups that violate religious fundamentalist values—should solve their own problems rather than receive help from others. Gribbins and Vendenberg (2011) likewise found that religious fundamentalism was related to preferences to donate money to a religious ingroup compared to a religious outgroup, and that fundamentalism was unrelated to helping when the groups in question were not religiously related at all.

In summary, intrinsic, devout religiousness and related constructs such as religious fundamentalism are linked to a more selective compassion, in that intrinsically religious individuals will help some individuals but not others. In contrast, quest religiousness and related constructs such as spirituality are related to a more universal compassion, where helping is given without regard to group membership.

## Effects of Religious Primes on Helping

The studies above looked at correlations between religious orientation and helping. However, because correlations do not allow researchers to make strong causal inferences, it is unclear whether certain types of religion causes increased helping, or whether certain types of people tend to become religious and also tend to be more helpful. More recent research in priming has examined the causal effects of religious salience on prosocial behavior (see Galen, 2012, and Preston, Ritter, & Hernandez, 2010, for reviews). Pichon and Saroglou (2009) presented participants with a picture of an individual who was said to either be homeless or an illegal immigrant. They manipulated religious salience by varying whether the target individual was at a church or a gymnasium. Participants were more likely to endorse helping the homeless individual when the individual was depicted in a religious rather than secular context. This effect of religious salience was not present when the target was portrayed as an illegal immigrant. Pichon and Saroglou interpreted this to mean that religious salience increases the propensity to help targets who are closer to the ingroup (from the same country) compared to targets who are perceived more as outgroups (illegally immigrating from another country).

Other studies have verified that religious manipulations also affect behavioral helping measures. Shariff and Norenzayan (2007) found that participants exposed to a supraliminal but implicit religious prime disguised as a word game distributed more money to an anonymous player in a dictator game compared to participants not exposed to a prime, or exposed to a neutral prime. Interestingly, priming secular moral institutions had a similar effect. Using the same primes, Ahmed and Salas (2011) found similar results on both a dictator game and a prisoner's dilemma. Randolph-Seng and Nielson (2007) found that both supraliminal and subliminal religious primes eliminated cheating behavior, compared to sports and neutral primes. In contrast, intrinsic religious orientation did not have any relationship with cheating. Pichon, Boccato, and Saroglou (2007) found that subliminal presentations of positive religious words increased the number of charity pamphlets that participants took with them at the end of the study—a measure of the intention to help. Neutral religious words did not have the same effect. In a second study, Pichon et al. found that a supraliminal presentation of positive religious words made prosocial concepts more cognitively accessible in a lexical decision task, and that neutral religious words again did not produce a similar effect. They concluded that positive religious words had the potential to increase prosocial behavior by increasing accessibility of prosocial thoughts. Sasaki et al. (in press) found that the effect of religious prime depended on individual differences in the dopamine D4 receptor (DRD4) gene: a supraliminal religious prime only increased prosocial behavior in a dictator game for individuals with 2-7-repeat alleles. This suggests an interaction between religious salience and individual differences: religion may be an especially powerful motivator of prosocial behavior for certain people.

Malhotra (2010) argued that religious salience accounted for previous data demonstrating correlations between religiousness and prosocial behavior. For example, intrinsically religious individuals likely engage in prayer more frequently and attend places of worship more often, thus increasing their exposure to religious norms. It is this exposure to religious norms, not religiousness in and of itself, that drives the relationship between religiousness and prosocial behavior. Accordingly, he demonstrated that religious individuals were more likely to respond to prosocially worded requests to rebid on an online charity auction compared to nonreligious individuals, but this effect was only significant on Sundays, when religious people had presumably been attending church (or were at least thinking about doing so), and had thus experienced a "real world" religious prime. Religious people were also more likely to rebid if the request was worded competitively rather than prosocially, but this relationship did not show a day-of-the-week effect.

Complicating the issue, religious primes are not only associated with prosociality, but also with antisocial behaviors such as aggression and ingroup favoritism (Galen, 2012). Preston et al. (2012) suggested that many priming studies have confounded religious group membership with that of supernatural moral enforcer in their religious primes. They present data showing that the use of religious group primes such as "religion" leads to increased helping of ingroup members, whereas the use of supernatural primes such as "God" leads to increased helping of outgroup members. It may be that religious group salience leads to ingroup favoritism and aggression toward outgroups, whereas the salience of supernatural beings leads to a more universal compassion toward all others.

The relationship between religiousness and prosociality, then, depends on the type of religiousness being examined. Intrinsic religiousness is related to the egoistic motivation to appear helpful, and to providing help to ingroup rather than outgroup members. Similarly, religious group-centered primes



increase prosocial behavior, but only toward ingroup members, and may instead encourage hostility toward outgroup members. These results are consistent with the moral hypocrisy hypothesis. Religious calls for universal compassion are not fully internalized here, but the desire to appear as a good religious adherent is present. In contrast, quest religiousness is related to possibly altruistic helping, and to helping people regardless of their group membership. Likewise, religious primes related to supernatural beings encourage more inclusive prosocial behaviors toward outgroup members. These results are consistent with the religious belief hypothesis. Paradoxically, however, quest religious orientation tends to be related to lower levels of involvement with religious institutions. Thus, individuals high in intrinsic religiousness, through the social networks argument, may end up helping more because they are involved in religious institutions that provide them with more opportunities to help and to appear helpful. Yet the quality of help given in the context of religious institutions may be less sensitive to the needs of those being helped, or the help may be given selectively to socially accepted groups. Quest religiousness might be related to an increase in universal compassion, but individuals higher in quest may have fewer opportunities to help due to their lessened connection to religious institutions. In each case, then, the relationship between religion and prosocial behavior is present, but complicated. Taken altogether, the research suggests that religions have ample room for encouraging greater helping in their followers.

## Religion, Forgiveness, and Gratitude

Typically, when researchers think of the topic of prosociality, they think of helping. However, other "virtues" from positive psychology are also relevant to prosociality. Two of those virtues include forgiveness and gratitude (Karremans & Van Lange, 2010). Forgiveness can be defined as a post-transgression transformation from negative motivations, such as avoidance and revenge, to more positive motivations, such as benevolence (e.g., McCullough, 2001; McCullough & Witvliet, 2002). Research has also been conducted on forgiveness as a disposition, which can be defined as a person's propensity to forgive (e.g., Mullet, Neto, & Riviere, 2005). Forgiveness, like altruism, is facilitated by feelings of empathy (McCullough et al., 1998; McCullough & Witvliet, 2002; McCullough, Worthington, & Rachal, 1997). Although not appropriate in all circumstances (Lamb, 2002), forgiveness is linked with positive relationship outcomes (Berry & Worthington, 2001; Fincham & Beach, 2002; Fincham, Paleari, & Regalia, 2002; Karremans, Van Lange, Ouwerkerk, & Kluwer, 2003).

Gratitude, which can be conceptualized as "a positive emotional reaction to the receipt of a benefit that is perceived to have resulted from the good intentions of another" (Tsang, 2006, p. 139), can encourage grateful people to be prosocial both to their benefactors (e.g., Mikulincer & Shaver, 2010; Tsang, 2006) and to unrelated others (Bartlett & DeSteno, 2006). This is related to the *moral motivator* function of gratitude posited by McCullough and colleagues (e.g., McCullough, Kilpatrick, Emmons, & Larson, 2001; McCullough, Kimeldorf, & Cohen, 2006). Gratitude expressed by the beneficiary can also function for the benefactor as a *moral reinforcer* (McCullough et al., 2001). For example, expressions of thanks have been shown to increase return sales (Carey, Clicque, Leighton, & Milton, 1976) and increase the amount of tips left for wait staff (Rind & Bordia, 1995). Thus, both forgiveness and gratitude seem to facilitate prosocial behavior toward others.

## Religion and Forgiveness

Forgiveness is a key virtue in the major world religions. Jewish forgiveness is exemplified in the belief that as God forgives us, we must also forgive others. Forgiveness is conditional upon the repentance of the transgressor, but if forgiveness is sought and not given, the unforgiving person commits a sin (Rye et al., 2000). Christianity likewise views forgiveness as central to its tenets (Marty, 1998). Jesus emphasized the importance of forgiveness when he admonished followers to forgive "seventy times seven" times (Matthew 18:21–22). Adherents of Islam forgive in order to follow the example of Muhammad and the commandments of Allah (Rye et al., 2000). For example, in the Qur'an it is written that after many years of war in Mecca, Muhammad forgave all who fought against him. Buddhism discusses forbearance and compassion, which are similar to forgiveness. Both facilitate the reduction of suffering, a major goal in Buddhism (Higgins, 2001). Hinduism focuses on the role of forgiveness in promoting good karma. Forgiveness and forbearance are important for Hindus who strive toward the path of righteousness (Klostermaier, 1994).

Research has shown forgiveness to be correlated with several religious and spiritual variables (Carlisle & Tsang, in press). Measures of forgiveness are positively correlated with religious and existential well-being (Rye et al., 2001), spiritual transcendence (Leach & Lark, 2004), religious fundamentalism (Brown, Barnes, & Campbell, 2007), and religious involvement (Macaskill, 2007). Schultz, Tallman and Altmaier (2010) found forgiveness to be related to increased post-traumatic growth. This relationship was mediated by religious and spiritual importance, suggesting that the effectiveness of forgiveness was primarily through religious variables.

Another new variable that may be related to forgiveness is spiritual similarity. Davis et al. (2009) found that self-reports of forgiveness for a recalled transgression increased as spiritual similarity to the transgressor increased. In a second study, some participants recalled a transgression by a person spiritually close to them, whereas others recalled a transgression by someone spiritually dissimilar to them. They found that those recalling transgressions by spiritually closer transgressors were more likely to forgive. These studies suggest that people might be more willing to forgive members of their ingroup compared to outgroup members, consistent with a moral hypocrisy hypothesis of the relationship between religion and forgiveness.

Recently, Lambert, Fincham, Stillman, Graham, and Beach (2009) found both experimentally and longitudinally that prayer increased forgiveness. Participants who were instructed to pray for their significant other expressed more forgiveness toward them. In a second study, participants who prayed for their friend every day for four weeks expressed more forgiveness toward their friend compared to participants in nonpraying control groups. Although more research is needed regarding the mechanism underlying this effect, this does suggest that some aspects of religion may play a causal role in forgiveness.

Research has also examined differences among Christian denominations. Toussaint and Williams (2008) conducted a phone survey and showed that Protestants report valuing and seeking forgiveness more than Catholics. Research has also found individual differences in beliefs within the same denomination. Exline (2008) found slight differences in endorsement of various beliefs about forgiveness among a Baptist sample.

## Religion and Prosociality

Only a few studies have compared differences in forgiveness between religions. Cohen, Malka, Rozin, and Cherfas (2006) found that Jews were more likely than Protestant Christians to believe in unforgivable sins. Fox and Thomas (2008) found a tendency toward less self-reported forgiveness among Muslims and Jews compared to Christians. S. Ahmed (2009), in a comparison of Muslim and Christian youth, found that highly religious Muslim youth reported greater dispositional forgiveness compared to less religious Muslim youth, but there was no relationship between high religiousness and forgiveness within the Christian sample. More research is needed looking at forgiveness across and within different denominations and religious groups, not only to describe differences, but also to explain why differences exist.

Although the preponderance of evidence suggests that forgiveness and religion are highly correlated, is it the case that religion actually facilitates forgiveness? Religious people report valuing forgiveness more and being more forgiving in general, but when specific events are measured, religious people are often no different in how much they forgive (McCullough & Worthington, 1994). Ongoing research in our lab has been consistent with this religion-forgiveness discrepancy (Carlisle & Tsang, 2012). Half of the participants in our study were offended by a distribution partner who gave 2 of 10 raffle tickets, whereas participants in the control condition received the same negative distribution outcome distributed by chance. Although many religious measures were correlated with dispositional forgiveness, religiousness was related neither to behavioral nor to self-reported forgiveness for the specific study transgression.

Tsang, McCullough, and Hoyt (2005) suggested two possible explanations for this discrepancy: (1) it is a measurement problem, and (2) religious people are able to use different religious meaning systems to rationalize their unforgiveness. Supporting the measurement explanation, Tsang et al. found that highly religious participants were no more likely to forgive than those low in religiousness, but that the measurement confound of recall bias was attenuated by restricting potential participants to those who had experienced an offense within the last two months. In an additional study, religious people showed higher levels of forgiveness when aggregate measures of forgiveness were used. These studies indicate that the discrepancy between the value that religious individuals place on forgiveness and ratings of their actual forgiveness for specific transgressions may in part be a measurement issue.

Similarly to the moral hypocrisy hypothesis, Tsang et al. (2005) also theorized that religions teach people to forgive, but also give adherents multiple meaning systems from which they can draw in order to justify forgiving and unforgiving behavior alike. Tsang et al. conducted a pilot study showing that people who endorsed a just and vengeful God or had a more vengeful religious meaning system had lower forgiveness scores, compared to participants who had a more merciful God image. This study gives some support to the rationalization hypothesis, but more research is needed with larger samples and using experimental studies with behavioral measures.

A third explanation for the religion-forgiveness discrepancy has been proposed by Barnes and Brown (2010). They posited that individuals often show a value-congruent bias when predicting future behaviors, meaning that when individuals forecast future behaviors, they place more weight on their values than they do on their past behaviors. Individuals are thus often in error, because past behaviors are the better predictor. In two studies, Barnes and Brown applied this theory to the religion-forgiveness discrepancy and found that the relationship between religiousness and forgiveness forecasts was mediated by the value a person places on forgiveness.

Another possible reason for the religion-forgiveness discrepancy may be that the relationship between the two variables is being masked by a more complex relationship. For instance, Witvliet, Hinze, and Worthington (2008) found that religion interacted with offense severity, in that religious people were more likely to forgive more severe transgressions than were less religious people. Powers, Nam, Rowatt, and Hill (2007) found that participants scoring high in both humility and spiritual transcendence were more likely to forgive than those low in both, but if they were high in only one of these variables they were no more likely to forgive than someone who was low in both. If these interactions replicate, researchers might find religious people to be more forgiving than nonreligious people only if they take other key variables into account.

Further, Schultz et al. (2010) uncovered a relationship between self-reported forgiveness for an offense and post-traumatic growth. The relationship between the benevolence dimension of forgiveness and growth was mediated by self-reports of religious and spiritual importance. In this way, researchers can go beyond the question of "Are religious people more forgiving" to an additional question of "Do religion and spirituality have an effect on some of the outcomes of forgiveness?"

## Religion and Gratitude

The cultivation of gratitude is emphasized in all the major world religions, including Judaism (Emmons & Kneezel, 2005; Schimmel, 2004), Christianity (Roberts, 2007), Islam (Emmons & Crumpler, 2000), and Buddhism (Berkwitz, 2003). Gratitude toward others and toward deities is seen as a natural religious reaction to the sacred (see Carlisle & Tsang, in press, for a review). Research has shown that gratitude in a religious context is related to many positive variables. For instance, prayers of thanksgiving have been shown to be related to increases in subjective well-being in a sample of individuals visiting an arthritis clinic (Laird, Snyder, Rapoff, & Green, 2004). Similarly, gratitude toward God has been shown to attenuate the relationship between stress and poorer health in a sample of older Americans, especially older women (Krause, 2006).

Is religiousness related to increases in gratitude? Correlational research on primarily Christian samples has revealed a positive relationship between religion and self-reported gratitude. Laird et al. (2004) found that intrinsic religiousness and increased prayer frequency were related to prayers of thanksgiving. Krause and Ellison (2009) found that church attendance was positively related to increased gratitude toward God, and this relationship occurred through variables of perceptions of church cohesiveness, social support, and feelings of increased connection toward others. Research has uncovered links between grateful disposition and religious variables such as general religiousness (McCullough, Emmons, & Tsang, 2002), religious orientation, the "divine control" subscale of locus of control (Watkins, Woodward, Stone, & Kolts, 2003), prayer frequency (Lambert, Fincham, Braithwaite, Graham, & Beach, 2009), and spirituality (Adler & Fagley, 2005; Diessner & Lewis, 2007; McCullough et al., 2002). Emmons and Kneezel (2005) reported a positive relationship between state and trait gratitude and a host of religiousness/spirituality measures in a population of individuals with neuromuscular disorders. In addition to some of the relationships mentioned above, they found that striving sanctification and the degree to which strivings helped participants feel close to God were also positively related to dispositional and daily gratitude.



In addition to cross-sectional correlations, some longitudinal research has been conducted on gratitude and religion. Krause and Ellison (2009), mentioned above, found that the relationship between closeness to others in one's church and gratitude toward God persisted after three years, although the longitudinal relationship was weaker than the relationship with immediate gratitude. Lambert, Fincham, Braithwaite, et al. (2009) found that prayer frequency was related to dispositional gratitude 6 weeks later. This cross-lagged effect remained significant after controlling for religious participation. They replicated in a second sample the longitudinal relationship between prayer frequency and gratitude controlling for social desirability and religiousness.

A few experiments have examined causal relationships between religion and gratitude. Lambert, Fincham, Braithwaite, et al. (2009), in an additional study, found that participants who were induced to pray daily reported higher values of grateful personality after 4 weeks compared to individuals in nonpraying conditions. This effect remained when controlling for initial prayer frequency and religiousness. This is consistent with a religious belief hypothesis of the relationship between religion and gratitude, with religion causally related to increased gratitude.

In contrast, data from our lab suggests that there may also be a religion-gratitude discrepancy, akin to the religion-forgiveness discrepancy (Tsang, Schulwitz, & Carlisle, 2012). Religion was primed for half of the undergraduate participants via a scrambled sentence task. Some participants then received a generous amount of raffle tickets from a distribution partner, whereas other participants were told they received a generous amount of raffle tickets by chance. When given the opportunity, participants who received the favor from the partner were more generous in return. Participants for whom religion was made salient were marginally more generous back to their partner. Intrinsic religiousness was positively correlated with a dispositional measure of gratitude, but it was related to grateful behavior in the form of returning a favor. The effect of religious priming is supportive of a religious belief hypothesis of the relationship between religion and gratitude, yet the relationship between intrinsic religiousness and gratitude is more consistent with a moral hypocrisy account. This suggests both that religion may have a positive effect on situational gratitude, but that other motivations, such as individual differences in self-presentation, may easily intrude and effect expressions of gratitude.

## Future Directions

Like much research in the psychology of religion, research in the area of religion and prosociality suffers from a dearth of experimental research (Batson et al., 1993). The correlational nature of the research limits researchers' ability to make causal inferences. As reviewed above, recent research has manipulated religiousness by inducing participants to engage in religious activities such as prayer (e.g., Lambert, Fincham, Braithwaite et al., 2009; Lambert, Fincham, Stillman et al., 2009), or by priming religiousness (Galen, 2012; Preston et al., 2010). Additional research needs to be conducted that manipulates religious behavior or religious cognitions to examine more directly the effects of religiousness on prosociality. In the area of priming, more research needs to be conducted to differentiate the prosocial and antisocial effects of primes related to religious institutions from those of primes related to the supernatural (Preston et al., 2010). It would also be interesting to further investigate the mechanisms by which religious versus supernatural primes work. Do religious primes function similarly to other variables that affect ingroup biases? Do supernatural primes function due to a "supernatural watcher" mechanism, and if so, how does the effectiveness of secular civic primes fit in? In addition to contributing to basic research in religion and helping, answers to these and related questions would aid those who wish to encourage religiously based prosocial behaviors.

We encourage the use of multiple methods in studying religion and prosocial behavior. Just as researchers have relied heavily on correlational research, they have also relied heavily on self-report measures of prosociality. Given the socially desirable nature of prosocial behavior, especially in religious contexts, the use of behavioral-dependent measures of prosociality should be encouraged. Likewise, the use of experimental studies in the laboratory, with their tight controls but artificial environments, should be balanced with field studies of helping behavior in more natural environments.

Religious belief seems to encourage prosocial attitudes and behaviors such as helping, forgiveness, and gratitude. Some types of religiousness, such as intrinsic religiousness and religious primes, may increase prosociality in a limited way through social desirability concerns and ingroup biases. Other types of religiousness, such as quest religiousness and supernatural primes, may encourage a more universally compassionate prosociality. The effects of religion on prosociality may be related to a possible evolutionary function of religiousness. For instance, a number of researchers have theorized that religion was the key cultural innovation that enabled human beings to exist harmoniously in large groups of unrelated strangers (e.g. Atran & Henrich, 2010; Norenzayan & Shariff, 2008). Institutions such as religions enable these larger societies to move beyond kinship and simple reciprocity in order to punish unfairness and encourage social harmony. Religion may accomplish this by encouraging people to think about unrelated individuals as kin (Batson, 1983), or by introducing the idea of moral scrutiny by the supernatural (Shariff & Norenzayan, 2007; Rossano, 2007). Regardless of the mechanism, and though the effects may be far from unqualified, religions' admonitions to "Love your enemies," to show mercy and thanksgiving, and to bind people together have left a strong and perhaps indispensable mark on human society.

## References

- Adler, M. G. & Fagley, N. S. (2005). Appreciation: Individual differences in finding value and meaning as a unique predictor of subjective well being. *Journal of Personality*, 73, 79–114.
- Ahmed, A. M. (2009). Are religious people more prosocial? A quasi-experimental study with *madrasah* pupils in a rural community in India. *Journal for the Scientific Study of Religion*, 48, 368–374.
- Ahmed, A. M., & Salas, O. (2009). Is the hand of God involved in human cooperation? *International Journal of Social Economics*, 36, 70–80.
- Ahmed, A. M., & Salas, O. (2011). Implicit influences of Christian religious representations on dictator and prisoner's dilemma game decisions. *The Journal of Socio-Economics*, 40, 242–246.
- Ahmed, S. (2009). Religiosity and presence of character strengths in American Muslim youth. *Journal of Muslim Mental Health*, 4, 104–123. doi:

Allport, G. W. (1950). *The individual and his religion: A psychological interpretation*. New York: Macmillan.

Altemeyer, B., & Hunsberger, B. (1992). Authoritarianism, religious fundamentalism, quest, and prejudice. *The International Journal for the Psychology of Religion*, 2, 113–133.

Anderson, L. R., & Mellor, J. M. (2009). Religion and cooperation in a public goods experiment. *Economics Letters*, 105, 58–60.

Atran, S., & Henrich, J. (2010). The evolution of religion: How cognitive by-products, adaptive learning heuristics, ritual displays, and group competition generate deep commitments to prosocial religions. *Biological Theory: Integrating Development, Evolution, and Cognition*, 5(1): 18–30.

Bader, C. F., Mencken, C. & Froese, P. (2007). American piety: Content and methods of the Baylor Religion Survey. *Journal for the Scientific Study of Religion*, 46, 447–464.

Barnes, C. D., & Brown, R. P. (2010). A value-congruent bias in the forgiveness forecasts of religious people. *Psychology of Religion and Spirituality*, 2, 17–29. doi: 10.1037/a0017585

Bartlett, M.Y., & DeSteno, D. (2006). Gratitude and prosocial behavior: Helping when it costs you. *Psychological Science*, 17, 319–325.

Bassett, R. L., Baldwin, D., Tammaro, J., Mackmer, D., Mundig, C., Wareing, A., & Tschorke, D. (2001). Reconsidering intrinsic religion as a source of universal compassion. *Journal of Psychology and Theology*, 30, 131–143.

Bassett, R. L., Kirnan, R., Hill, M., & Schultz, A. (2005). SOAP: Validating the Sexual Orientation and Practices Scale. *Journal of Psychology and Christianity*, 24, 165–175.

Batson, C. D. (1976). Religion as prosocial: Agent or double-agent? *Journal for the Scientific Study of Religion*, 15, 29–45.

Batson, C. D. (1983). Sociobiology and the role of religion in promoting prosocial behavior: An alternate view. *Journal of Personality and Social Psychology*, 45, 1380–1385.

Batson, C. D. (2011). What's wrong with morality? *Emotion Review*, 3, 230–236.

Batson, C. D., Denton, D. M., & Vollmecke, J. T. (2008). Quest religion, anti-fundamentalism, and limited versus universal compassion. *Journal for the Scientific Study of Religion*, 47, 135–145.

Batson, C. D., Eidelman, S. H., Higley, S. L., & Russell, S. A. (2001). "And who is my neighbor?" II: Quest religion as a source of universal compassion. *Journal for the Scientific Study of Religion*, 40, 39–50.

Batson, C. D., & Flory, J. D. (1990). Goal-relevant cognitions associated with helping by individuals high on intrinsic, end religion. *Journal for the Scientific Study of Religion*, 29, 346–360.

Batson, C. D., Floyd, R. B., Meyer, J. M., & Winner, A. L. (1999). "And who is my neighbor?": Intrinsic religion as a source of universal compassion. *Journal for the Scientific Study of Religion*, 38, 445–457.

Batson, C. D., & Gray, R. A. (1981). Religious orientation and helping behavior: Responding to one's own or to the victim's needs? *Journal of Personality and Social Psychology*, 40, 511–520.

Batson, C. D., Oleson, K. C., Weeks, J. L., Healy, S. P., Reeves, P. J., Jennings, P., & Brown, T. (1989). Religious prosocial motivation: Is it altruistic or egoistic? *Journal of Personality and Social Psychology*, 57, 873–884.

Batson, C. D., & Schoenrade, P. A. (1991). Measuring religion as quest: 2) Reliability concerns. *Journal for the Scientific Study of Religion*, 30, 430–447.

Batson, C. D., Schoenrade, P. A., & Ventis, W. L. (1993). *Religion and the individual*. Oxford, England: Oxford University Press.

Berkwitz, S. C. (2003). History and gratitude in Theravāda Buddhism. *Journal of the American Academy of Religion*, 71, 579–604. doi: 10.1093/jaarel/lfg078

Berry, J. W., & Worthington, E. L. (2001). Forgivingness, relationship quality, stress while imagining relationship events, and physical and mental health. *Journal of Counseling Psychology*, 48, 447–455.

Brown, R. P., Barnes, C. D., & Campbell, N. J. (2007). Fundamentalism and forgiveness. *Personality and Individual Differences*, 43, 1437–1447. doi:10.1016/j.paid.2007.04.025

Bulbulia, J., & Mahoney, A. (2008). Religious solidarity: The hand grenade experiment. *Journal of Cognition and Culture*, 8, 295–320.

Carey, J. R., Clicque, S.H., Leighton, B.A., & Milton, F. (1976). A test of positive reinforcement of customers. *Journal of Marketing*, 40, 98–100.

Carlisle, R. D., & Tsang, J. (2012). The effect of apology, restitution, and religious orientation on forgiveness of a stranger. Unpublished manuscript.

Carlisle, R. D., & Tsang, J. (in press). The virtues: Gratitude and forgiveness. In K. Pargament (Ed.), *APA Handbook of Psychology, Religion, and Spirituality*. Washington DC: American Psychological Association.

- Chou, T., & Chen, M.-C. (2005). An exploratory investigation of differences in personality traits and faith maturity among major religions in Taiwan. *Chinese Journal of Psychology, 47*, 311–327.
- Clary E. G., & Snyder M. (1999). The motivations to volunteer: Theoretical and practical considerations. *Current Directions in Psychological Science, 8*, 156–159.
- Cohen, A. B., Malka, A., Rozin, P., & Cherfas, L. (2006). Religion and unforgivable offenses. *Journal of Personality, 74*, 85–118. doi:10.1111/j.1467-6494.2005.00370.x
- Darley, J. M., & Batson, C. D. (1973). "From Jerusalem to Jericho": A study of situational and dispositional variables in helping behavior. *Journal of Personality and Social Psychology, 27*, 100–108.
- Davis, D. E., Worthington, E. L., Hook, J. N., Van Tongeren, D. R., Green, J. D., & Jennings, D. J. (2009). Relational spirituality and the development of the Similarity of the Offender's Spirituality Scale. *Psychology of Religion and Spirituality, 1*, 249–262. doi:10.1037/a0017581
- de Dreu, C. K. W., Yzerbyt, V. Y., & Leyens, J.-P. (1995). Dilution of stereotype-based cooperation in mixed-motive interdependence. *Journal of Experimental Social Psychology, 31*, 575–593.
- Diessner, R. & Lewis, G. (2007). Further validation of the Gratitude, Resentment, and Appreciation Test (GRAT). *Journal of Social Psychology, 147*, 445–447.
- Eckel, C. C., & Grossman, P. J. (2004). Giving to secular causes by the religious and nonreligious: An experimental test of the responsiveness of giving to subsidies. *Nonprofit and Voluntary Sector Quarterly, 33*, 271–289.
- Ecklund, E. H., & Park, J. Z. (2007). Religious diversity and community volunteerism among Asian Americans. *Journal for the Scientific Study of Religion, 46*, 233–244.
- Emmons, R. A., & Crumpler, C. A. (2000). Gratitude as human strength: Appraising the evidence. *Journal of Social and Clinical Psychology, 19*, 56–69.
- Emmons, R. A., & Kneezel, T. T. (2005). Giving thanks: Spiritual and religious correlates of gratitude. *Journal of Psychology and Christianity, 24*, 140–148.
- Exline, J. J. (2008). Beliefs about God and forgiveness in a Baptist Church sample. *Journal of Psychology and Christianity, 27*, 131–139.
- Fincham, F. D., & Beach, S. R. H. (2002). Forgiveness in marriage: Implications for psychological aggression and constructive communication. *Personal Relationships, 9*, 239–251. doi:10.1111/1475-6811.00016
- Fincham, F. D., Paleari, F. G., & Regalia, C. (2002). Forgiveness in marriage: The role of relationship quality, attributions, and empathy. *Personal Relationships, 9*, 27–37.
- Fox, A., & Thomas, T. (2008). Impact of religious affiliation and religiosity on forgiveness. *Australian Psychologist, 43*(3), 175–185. doi:10.1080/00050060701687710
- Galen, L.W. (2012). Does religious belief promote prosociality?: A critical examination. *Psychological Bulletin, 138*, 876–906.
- Gillum, R. F., & Masters, K. S. (2010). Religiousness and blood donation. *Journal of Health Psychology, 15*, 163–172. DOI: 10.1177/1359105309345171
- Goldfried, J., & Miner, M. (2002). Quest religion and the problem of limited compassion. *Journal for the Scientific Study of Religion, 41*, 685–695.
- Graham, J., & Haidt, J. (2010). Beyond beliefs: Religions bind individuals into moral communities. *Personality and Social Psychology Review, 14*, 140–150.
- Gribbins, T. & Vandenberg, B. (2011). Religious fundamentalism, the need for cognitive closure, and helping. *The International Journal for the Psychology of Religion, 21*, 106–114. DOI: 10.1080/10508619.2011.556999
- Gyatso, T. (2003). *The compassionate life*. Boston, MA: Wisdom Publications.
- Henrich, J., Ensminger, J., McElreath, ... J. Ziker. (2010). Markets, religion, community size, and the evolution of fairness and punishment. *Science, 327*, 1480–1484. DOI: 10.1126/science.1182238
- Higgins, R. (2001). Buddhists practice forgiveness: Mindful suffering. *Christian Century, 118*, 9–10.
- Jackson, L. M., & Esses, V. M. (1997). Of scripture and ascription: The relation between religious fundamentalism and intergroup helping. *Personality and Social Psychology Bulletin, 23*, 893–906.
- James, W. (1902/1990). *The varieties of religious experience*. New York, NY: Vintage Books.
- Karremans, J. C., & Van Lange, P. A. M. (2010). The malleability of forgiveness. In M. Mikulincer and P. R. Shaver (Eds.), *Prosocial motives, emotions, and behavior: The better angels of our nature* (pp. 285–301). Washington, DC: American Psychological Association.
- Karremans, J. C., Van Lange, P. A., Ouwerkerk, J. W., & Kluwer, E. S. (2003). When forgiving enhances psychological well-being: The role of interpersonal commitment. *Journal of Personality and Social Psychology, 84*, 1011–1026.



Klostermaier, K. K. (1994). *A survey of Hinduism*. Albany: State University of New York Press.

Koenig, L. B., McGue, M., Krueger, R. F., & Bouchard, T. J., Jr. (2007). Religiousness, antisocial behavior, and altruism: Genetic and environmental mediation. *Journal of Personality, 75*, 265–290.

Krause, N. (2006). Gratitude toward God, stress, and health in late life. *Research on Aging, 28*, 163–183. doi: 10.1177/0164027505284048

Krause, N., & Ellison, C. G. (2009). Social environment of the church and feelings of gratitude toward God. *Psychology of Religion and Spirituality, 1*, 191–205. doi: 10.1037/a0016729

Laird, S. P., Snyder, C. R., Rapoff, M. A., & Green, S. (2004). Measuring private prayer: Development, validation, and clinical application of the multidimensional prayer inventory. *International Journal for the Psychology of Religion, 14*, 251–272.

Lambert, N. M., Fincham, F. D., Braithwaite, S. R., Graham, S., & Beach, S. (2009). Can prayer increase gratitude? *Psychology of Religion and Spirituality, 1*, 39–49.

Lambert, N. M., Fincham, F. D., Stillman, T. F., Graham, S. M., & Beach, S. R. (2009). Motivating change in relationships: Can prayer increase forgiveness? *Psychological Science, 21*, 126–132. doi:10.1177/0956797609355634

Lamb, S. (2002). Women, abuse, and forgiveness: A special case. In J.G. Murphy & S. Lamb (Eds.), *Before forgiving: Cautionary views of forgiveness in psychotherapy* (pp. 155–171). Oxford, England: Oxford University Press.

Leach, M. M., & Lark, R. (2004). Does spirituality add to personality in the study of trait forgiveness? *Personality and Individual Differences, 37*, 147–156.

Lodi-Smith, J., & Roberts, B. W. (2007). Social investment and personality: A meta-analysis of the relationship of personality traits to investment in work, family, religion, and volunteerism. *Personality and Social Psychology Review, 11*, 68–86.

Macaskill, A. (2007). Exploring religious involvement, forgiveness, trust, and cynicism. *Mental Health, Religion & Culture, 10*, 203–218. doi:10.1080/13694670600616092

Mak, H., & Tsang, J. (2008). Separating the “sinner” from the “sin”: Religious orientation and prejudiced behavior toward sexual orientation and promiscuous sex. *Journal for the Scientific Study of Religion, 47*, 379–392.

Malhotra, D. (2010). (When) are religious people nicer? Religious salience and the “Sunday Effect” on pro-social behavior. *Judgment and Decision Making, 5*, 138–143.

Marty, M. E., (1998). The ethos of Christian forgiveness. In E. L. Worthington, Jr. (Ed.), *Dimensions of forgiveness* (pp. 9–28). Philadelphia, PA: Templeton Foundation Press.

McCullough, M. E. (2001). Forgiveness: Who does it and how do they do it? *Current Directions in Psychological Science, 10*, 194–197.

McCullough, M. E., Emmons, R. A., & Tsang, J.-A. (2002). The grateful disposition: A conceptual and empirical topography. *Journal of Personality and Social Psychology, 82*, 112–127. doi:10.1037//0022-3514.82.1.112

McCullough, M. E., Kilpatrick, S. D., Emmons, R. A., & Larson, D. B. (2001). Is gratitude a moral affect? *Psychological Bulletin, 127*, 249–266.

McCullough, M. E., Kimeldorf, M. B., & Cohen, A. D. (2006). An adaptation for altruism? The social causes, social effects, and social evolution of gratitude. *Current Directions in Psychological Science, 17*, 281–285.

McCullough, M. E., Rachal, K. C., Sandage, S. J., Worthington, E. L., Jr., Brown, S. W., & Hight, T. L. (1998). Interpersonal forgiving in close relationships II: Theoretical elaboration and measurement. *Journal of Personality and Social Psychology, 75*, 1586–1603.

McCullough, M. E., & Witvliet, C. V. (2002). The psychology of forgiveness. In C. R. Snyder and S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 446–458). New York, NY: Oxford University Press.

McCullough, M. E., & Worthington, E. L. (1994). Models of interpersonal forgiveness and their applications to counseling: Review and critique. *Counseling and Values, 39*, 2–14.

McCullough, M. E., Worthington, E. L., Jr., & Rachal, K. C. (1997). Interpersonal forgiving in close relationships. *Journal of Personality and Social Psychology, 73*, 321–336.

Mikulincer, M., & Shaver, P. R. (2010). Does gratitude promote prosocial behavior? The moderating role of attachment security. In M. Mikulincer & P. R. Shaver (Eds.), *Prosocial motives, emotions, and behavior: The better angels of our nature* (pp. 267–283). Washington, DC: American Psychological Association.

Mullet, E., Neto, F., & Riviere, S. (2005). Personality and its effects on resentment, revenge, and forgiveness and on self-forgiveness. In E.L. Worthington Jr. (Ed.), *Handbook of forgiveness* (pp.159–182). New York: Brunner-Routledge.

Norenzayan, A., & Shariff, A. F. (2008). The origin and evolution of religious prosociality. *Science, 322*, 58–62.

Orbell, J., Goldman, M., Mulford, M., & Dawes, R. (1992). Religion, context, and constraint toward strangers. *Rationality and Society, 4*, 291–307.

- Penner, L. A., Dovidio, J. F., Piliavin, J. A., & Schroeder, D. A. (2005). Prosocial behavior: Multilevel perspectives. *Annual Review of Psychology*, *56*, 365–392.
- Pichon, I., Boccato, G., & Saroglou, V. (2007). Nonconscious influences of religion on prosociality: A priming study. *European Journal of Social Psychology*, *37*, 1032–1045. DOI: 10.1002/ejsp.416
- Pichon, I., & Saroglou, V. (2009). Religion and helping: Impact of target thinking styles and just-world beliefs. *Archive for the Psychology of Religion*, *31*, 215–236.
- Powers, C., Nam, R. K., Rowatt, W. C., & Hill, P. C. (2007). Associations between humility, spiritual transcendence, and forgiveness. *Research in the Social Scientific Study of Religion*, *18*, 75–94. doi:10.1163/ej.9789004158511.i-301.32
- Preston, J. L., Ritter, R. S., & Hernandez, J. I. (2010). Principles of religious prosociality: A review and reformulation. *Social and Personality Compass*, *4*, 574–590.
- Randolph-Seng, B., & Nielson, M. E. (2007). Honesty: One effect of primed religious representations. *The International Journal for the Psychology of Religion*, *17*, 303–315.
- Rind, B., & Bordia, P. (1995). Effect of server's "Thank you" and personalization on restaurant tipping. *Journal of Applied Social Psychology*, *25*, 745–751.
- Roberts, R. C. (2007). *Spiritual emotions: A psychology of Christian virtues*. Grand Rapids, MI: William B. Eerdmans.
- Rossano, M. J. (2007). Supernaturalizing social life: Religion and the evolution of human cooperation. *Human Nature*, *18*, 272–294.
- Rowatt, W. C., LaBouff, J. P., Johnson, M., Froese, P., & Tsang, J. (2009). Associations among religiousness, social attitudes, and prejudice in a national sample of American adults. *Psychology of Religion and Spirituality*, *1*, 14–24.
- Ruiter, S., & De Graaf, N. D. (2006). National context, religiosity, and volunteering: Results from 53 countries. *American Sociological Review*, *71*, 191–210.
- Ruiter, S., & De Graaf, N. D. (2010). National religious context and volunteering: More rigorous tests supporting the association. *American Sociological Review*, *75*, 179–184.
- Rye, M. S., Pargament, K. I., Ali, M. A., Beck, G. L., Dorff, E. N., Hallisey, C., Narayanan, V., et al. (2000). Religious perspectives on forgiveness. In M. E. McCullough, K. I. Pargament, & C. E. Thoresen, (Eds.), *Forgiveness: Theory, research, and practice* (pp. 17–40). New York, NY: Guilford Press.
- Saroglou, V., Delpierre, V., & Dernelle, R. (2004). Values and religiosity: a meta-analysis of studies using Schwartz's model. *Personality and Individual Differences*, *37*, 721–734.
- Saroglou, V. & Dupuis, J. (2006). Being Buddhist in Western Europe: Cognitive needs, prosocial character, and values. *The International Journal for the Psychology of Religion*, *16*, 163–179.
- Saroglou, V. & Galand, P. (2004). Identities, values, and religion: A study among Muslim, other immigrant, and native Belgian young adults after the 9/11 attacks. *Identity: An International Journal of Theory and Research*, *4*, 97–132.
- Saroglou, V. & Muñoz-García, A. (2008). Individual differences in religion and spirituality: An issue of personality traits and/or values. *Journal for the Scientific Study of Religion*, *47*, 83–101.
- Sasaki, J. Y., Kim, H. S., Mojaverian, T., Kelley, L. D. S., Park, I. Y., & Janušonis, S. (in press). Religion priming differentially increases prosocial behavior among variants of the dopamine D4 receptor (DRD4) gene. *Social Cognitive and Affective Neuroscience*, *8*, 209–215. doi:10.1093/scan/nsr089
- Schimmel, S. (2004). Gratitude in Judaism. In R. A. Emmons & M. E. McCullough (Eds.), *The psychology of gratitude* (pp. 37–57). Oxford, England: Oxford University Press.
- Schultz, J. M., Tallman, B. A., & Altmaier, E. M. (2010). Pathways to posttraumatic growth: The contributions of forgiveness and importance of religion and spirituality. *Psychology of Religion and Spirituality*, *2*, 104–114
- Sedikides, C., & Gebauer, J. E. (2010). Religiosity as self-enhancement: A meta-analysis of the relation between socially desirable responding and religiosity. *Personality and Social Psychology Review*, *14*, 17–36.
- Shariff, A. F. (2008). *Religion—Social curse or social blessing? The state of the scientific literature*. Unpublished manuscript.
- Shariff, A.F., & Norenzayan, A. (2007). God is watching you: Priming God concepts increases prosocial behavior in an anonymous economic game. *Psychological Science*, *18*, 803–809.
- Sherr, M. E. (2005). Volunteerism, social work, and the church: A historic overview and look into the future. *Social Work and Christianity*, *32*, 97–115.
- Sosis, R., & Ruffle, B. J. (2003). Religious ritual and cooperation: Testing for a relationship on Israeli religious and secular ibbutzim. *Current Anthropology*, *44*, 713–722.
- Tan, J. H. W. (2006). Religion and social preferences: An experimental study. *Economics Letters*, *90*, 60–67.

- Tan, J. H. W., & Vogel, C. (2008). Religion and trust: An experimental study. *Journal of Economic Psychology*, 29, 832–848.
- Toussaint, L., & Williams, D. (2008). National survey results for Protestant, Catholic, and nonreligious experiences of seeking forgiveness and of forgiveness of self, of others, and by God. *Journal of Psychology and Christianity*, 27, 120–130.
- Trimble, D.E. (1997). The Religious Orientation Scale: Review and meta-analysis of social desirability effects. *Educational and Psychological Measurement*, 57, 970–986.
- Tsang, J.-A. (2006). Gratitude and prosocial behavior: An experimental test of gratitude. *Cognition and Emotion*, 20, 138–148.  
doi:10.1080/02699930500172341
- Tsang, J.-A., McCullough, M. E., & Hoyt, W. T. (2005). Psychometric and rationalization accounts of the religion-forgiveness discrepancy. *Journal of Social Issues*, 61, 785.
- Tsang, J.-A., Schulwitz, A., & Carlisle, R. D. (2012). An experimental test of the relationship between religion and gratitude. *Psychology of Religion and Spirituality*, 4, 40–55.
- Watkins, P. C., Woodward, K., Stone, T., & Kolts, R. L. (2003). Gratitude and happiness: Development of a measure of gratitude, and relationships with subjective wellbeing. *Social Behavior and Personality*, 31, 431–451.
- Wilson, J. (2000). Volunteering. *Annual Review of Sociology*, 26, 215–240.
- Witvliet, C.V.O., Hinze, S. R., & Worthington, E. L., Jr. (2008). Unresolved justice: Christian religious commitment, forgiveness, revenge, and cardiovascular responding. *Journal of Psychology and Christianity*, 27, 110–119.
- Yinon, Y., & Sharon, I. (1985). Similarity in religiousness of the solicitor, the potential helper, and the recipient as determinants of donating behavior. *Journal of Applied Social Psychology*, 15, 726–734.

**Jo-Ann Tsang**

Jo-Ann Tsang, Baylor University

**Wade C. Rowatt**

Wade C. Rowatt, Department of Psychology and Neuroscience, Baylor University, Waco, Texas

**Azim Shariff**

Azim Shariff, University of Oregon

