CHAPTER 8

Prosociality and Religion

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The connection between religion and prosociality has long been debated. From the ancient Greeks to modern philosophers, scholars have often pondered whether morality can exist without religion. One of the best-known ancient texts dealing with this question is Plato's (427–347 BCE) *Euthyphro*, which dates back to the fourth century BCE. In this dialogue, Socrates (470–399 BCE) asks Euthyphro: "Is an action morally good because the gods command it, or do the gods command it because it is morally good?" In other words, is acting justly in our nature, or do we need religion to tell us what to do? Socrates did not get a satisfactory answer from Euthyphro, and the question has continued to be debated throughout the centuries.

Some of the founders of contemporary social science described religion as a motivational force that binds groups together, deters immoral conduct, and promotes altruistic behavior. For example, Émile Durkheim (1858–1917) saw religion as the "social glue" that holds society together. Auguste Comte (1798–1857) established the "religion of humanity," so that secular societies could still continue to function harmoniously in the absence of traditional forms of worship. And in his *Letter Concerning Toleration*, John Locke (1632–1704) excluded atheists from the right to be tolerated, as he thought they could not be trusted to behave morally: "Lastly, those are not at all to be tolerated who deny the being of a God. Promises, covenants, and oaths, which are the bonds of human society, can have no hold upon an atheist. The taking away of God, though but even in thought, dissolves all" (Locke 1689, II, ii2).

Before proceeding any further, it is important to note some of the intrinsic complexities and problems with studying religious prosociality. The very terms *religion* and *religiosity* are notoriously hard to define, let alone quantify with any precision. It is often said that there are as many definitions of religion as there are scholars of religion. Indeed, religion lacks a universally accepted definition, and different researchers use the term in different ways. Moreover, because most researchers come from Western countries, their understanding of religion is often tied to Judeo-Christian ideas that might not be applicable to other religions (Henrich, Heine, and Norenzayan 2010). The way a religiosity questionnaire is constructed

or presented might greatly influence participants' answers and, thus, limit the potential generalizability of the results. For example, a study conducted in Egypt found that when interviewed about their religiosity by a woman wearing a headscarf, Muslims over-reported their religiosity, while Christians under-reported it (Blaydes and Gillum 2013). Using crosscultural participant samples and questionnaires adapted to specific populations might help address this problem, although it does not necessarily solve it entirely.

To make matters worse, the term *morality* is equally problematic. Although people generally have no problem understanding the *concept* of morality, the *content* of the term—what is and what is not moral—is highly variable across cultures and individuals. For example, ritualized genital mutilation may be seen as an act of piety in some cultures and as an instance of child abuse in other societies. Drinking wine may seem acceptable in everyday life and a blessing at communion to a Christian, but is a grave sin under any circumstances to a Muslim. Furthermore, morality is an umbrella term that encompasses a number of different aspects of life (e.g., social relationships, cooperative exchanges, family life), and each of those aspects may have different associations with religiosity. Trying to fit all those behaviors under a single term generates vagueness and confusion, which negatively affects the potential of systematically studying the topic.

For example, when we want to examine whether someone is a moral person, do we look at whether he or she cooperates more, is more altruistic, or cheats less? Is stealing the opposite of helping, or are these two different behaviors? Does motivation matter, or is morality solely based on the outcome of a behavior? For instance, is donating money to charity to get a tax write-off moral, selfish, or both? Likewise, is mutualistic behavior that is beneficial for both the actor and the recipient morally virtuous? And what about behaviors that religions often consider to be highly immoral, although they involve no harm to anyone (e.g., homosexuality, premarital sex, or eating certain foods)? Such important nuances suggest that the concepts of religion and morality are too broad to be used as monolithic variables that can be measured with any degree of precision. A more fruitful methodology involves breaking down these concepts into more concrete aspects that can be operationalized for the purpose of scientific research. Although the terms *religion* and *prosociality* will be used throughout this chapter, they always will refer to some more specific operationalization (e.g., belief in God, ritual participation, helping behavior, cooperation) according to each case study.

THE RELIGIOUS CONGRUENCE FALLACY

Into the twenty-first century, most people around the world posit a causal link between religious belief and morality. This attitude has been demonstrated cross-culturally by an experimental study of intuitive attitudes toward non-believers across thirteen societies on all continents (Gervais et al., forthcoming). To target subjects' visceral attitudes, the experimenters focused on the representativeness heuristic, a cognitive bias that can lead to stereotypical judgments of others based on superficial or irrelevant characteristics. For example, when asked whether a woman with a humanities degree and a track record of human rights activism is more likely to be (A) a bank teller, or (B) a bank teller and a feminist, most people will choose option (B) as more probable. However, that option is by definition the *less* likely one, because there are more bank tellers overall than there are *feminist* bank tellers. As Amos Tversky and Daniel Kahneman explain in "Judgments of and by Representativeness" (1982), this logical error is called the *conjunction fallacy*.

For their study, Gervais and coauthors provided two groups of subjects with descriptions of a person who committed multiple murders. The first group was asked whether it was more probable that this person was (A) a teacher, or (B) a teacher who was a religious believer. The second group was asked whether it was more probable that this person was (A) a teacher, or (B) a teacher who did not believe in God. Subjects in the atheistic condition produced much higher conjunction fallacy rates (picking option B), which suggests that people consider criminal behavior as more representative of atheists than of religious individuals. These results were stronger in more religious societies and among more religious individuals; however, even nonreligious participants in the study exhibited moral distrust of atheists. Other studies have found that people consider immoral behavior as being more characteristic of atheists than of any other group. There seems to be a widespread view that religion is a necessary precondition for moral behavior, that is, because religious ideologies commonly are concerned with regulating moral behavior, religious people must be more moral and, inversely, atheists should be less moral. In "Rain Dances in the Dry Season" (2010), Mark Chaves has called this assumption the religious congruence fallacy.

In reality, however, there is little evidence to support the view that religious people are more prosocial. For example, when we compare moral attitudes between religious and non-religious individuals, no consistent pattern emerges as a whole. Religious people are often more likely to advocate compassion and forgiveness, but at the same time they can be less tolerant of other groups (Stokes and Regnerus 2009) and less likely to support welfare for the poor (Stegmueller et al. 2012). In addition, whether religious or not, people do not always practice what they preach. Catholicism staunchly opposes abortion, but Catholic women are no less likely to abort (Adamczyk 2009), and communism is an egalitarian ideology that advocates the subjugation of the self to the common good, but people in communist societies are no less likely to be selfish. Furthermore, although no causality can be established, more secular countries generally have lower crime rates, according to Phil Zuckerman in *Society without God* (2008), and atheists are far less likely to end up in prison, according to the US Federal Bureau of Prisons "Freedom of Information Act Request Number 2015-06498" (2015).

But what is the empirical evidence for the relationship between religiosity and moral behavior? In this chapter, we will review various lines of research that have attempted to address this question, comparing self-reported with actual behavior; we will discuss some of the conceptual and methodological problems involved in providing a comprehensive answer; and we will suggest avenues for further research.

WHAT RELIGIOUS PEOPLE SAY THEY DO

Although the close link between religion and morality has been postulated for centuries, systematic research on the topic began only in recent decades. The earliest evidence was provided by sociological studies that used surveys and questionnaires as their main tool for studying the subject. Such surveys typically seek to assess relationships between various aspects of religiosity on the one hand (e.g., belief in God, ritual attendance, religious upbringing), and various parameters of personality and social conduct on the other (charity, compassion, cooperativeness).

For example, Vassilis Saroglou and colleagues' 2005 survey "Prosocial Behavior and Religion" of 180 Belgian high school students asked respondents to answer a series of questions about religiousness, empathy (perspective taking, concern about others, and personal distress from another's suffering), honesty (fairness, sincerity, and humility), and

altruism (e.g., "How often do you help a handicapped person cross the street?"). Each respondent was also asked to give the survey to one sibling and one friend, who provided their own independent assessments of that respondent's behavior. The results showed that altruism was positively correlated with religiousness (the higher one's religiousness, the higher their altruism), and the same correlation held for all three types of respondents (oneself, friend, sibling). Furthermore, there was a positive relationship between spirituality and perspective taking, although no other aspects of empathy and honesty were significantly correlated with religiosity. Together, these results suggest that religious people report being more altruistic and empathetic and that they are seen as such by their peers.

Similarly, a number of other studies show that in comparison with nonreligious participants, religious interviewees report having higher willingness to help and cooperate; being friendlier, more empathic, and forgiving; and having higher moral standards (Furrow, King, and White 2004; McCullough and Worthington 1999; Putnam and Campbell 2010). And not only do religious people see themselves as having these qualities, but they are also seen as such by their peers (Saroglou et al. 2005). These studies, however, only reported hypothetical behaviors and did not examine actual moral conduct. Does this self-professed prosociality manifest in real life?

THE PROBLEM WITH SELF-REPORTS

Survey data are helpful in uncovering participants' views and opinions, and they provide valuable insights into the process of self-presentation. They provide a cheap and fast way to obtain data, even from large samples, and often can be used to measure constructs that would be hard to study through observation. However, they also have serious constraints and limitations and do not always measure what they are intended to measure.

Self-presentation is subject to various conscious and unconscious biases, such as impression management, people's conscious or unconscious desires, and attempts to influence the way others see them (Goffman 1959; Schlenker and Pontari 2000). As a result, our self-descriptions do not always accurately represent our actual behavior. In other words, participants can present themselves as altruistic and cooperative but in reality their behavior might be quite different. This problem is particularly pronounced when answering questions about traits that are considered positive or desirable in the context of a particular culture. The tendency to over-report those traits is known as social desirability bias (Fischer 1993). And since both religiosity and prosociality are socially desirable traits, they are both known to be consistently over-reported (Brenner 2011).

In fact, evidence shows that religious people are particularly prone to social desirability bias. Will Gervais and Ara Norenzayan (2012) conducted a series of studies that focused on self-awareness among religious participants. When the researchers provided participants with reminders of religion (e.g., asking them to pick words to describe God), highly religious individuals were significantly more conscious of their external image and self-presentation, and more concerned about what others thought of them. The experimenters also gave participants an eleven-item questionnaire that contained realistic questions on undesirable traits (e.g., "I am sometimes irritated by people who ask favors of me") and unrealistic socially desirable statements ("No matter who I am talking to, I am always a good listener"). The results showed that compared with participants scoring low on self-reported religiosity, highly religious participants chose significantly more socially desirable answers. These findings suggest that reminding religious people of God increases their motivation to care about their self-presentation and social desirability. This makes self-reported

correlations between religiosity and prosociality even more problematic, as the more religious the respondents are, the less reliable this relationship is.

Even in the absence of bias, our introspective abilities are limited, which means that we are not always fully aware of our own internal states or our external behavior. This was illustrated in "Autobiographical Memory in a Fire-Walking Ritual" (2013b), a study reported by Dimitris Xygalatas and colleagues of a Spanish fire-walking ritual. Those who took part in the ritual provided subjective evaluations of their stress levels, but the researchers also used heart rate monitors to measure their arousal. When the self-reports were compared with the physiological measurement, the results revealed a sharp contradiction between the two: people reported feeling entirely calm when their physiological arousal reached extreme levels, often approaching 200 beats per minute. In fact, when these results were shown to the participants, they were shocked at how inaccurately they had perceived their own physiology. "Images from a Jointly Arousing Collective Ritual Reveal Emotional Polarization" (2013), a subsequent study by Joseph Bulbulia and coauthors of facial expressions during the same ritual, also confirmed that the high levels of stress were perceptible to observers, which suggests that in this case self-reports were the least reliable means of assessing arousal.

Self-reports are plagued by a number of problems related to the way people perceive, understand, and portray themselves. Thus, although surveys can be useful for revealing what religious people claim or think about their moral behavior, they cannot provide any conclusive clues with respect to their actual behavior.

WHAT RELIGIOUS PEOPLE ACTUALLY DO

To examine whether religious people actually behave more prosocially, social scientists use behavioral experiments that look at how participants respond to particular situations. Those experiments show a striking asymmetry between the findings of surveys and those of behavioral studies, suggesting that although religious people portray or think of themselves as more prosocial, this moral high ground does not manifest in their actual behavior.

For example, in a study conducted at Princeton University, John Darley and C. Daniel Batson (1973) simulated the biblical parable of the Good Samaritan (Luke 10:29–37) to see what factors would influence helping behavior. The researchers recruited forty-seven theology students and randomly assigned them into two groups. The first group read a text on the parable of the Good Samaritan, and the second group read a text about job opportunities. After reading either of these narratives, participants were instructed to go to another building where they were going to give a talk on their reading. These instructions differed in how much participants had to hurry: some were told that they were late and should hurry, whereas some were told to take their time because the other researcher was not yet ready. In an alley on the way to that building, participants encountered a "victim" (who was, in fact, an actor) sitting on the pavement and coughing, looking quite sick. The researchers recorded which participants stopped and offered help to the victim and then looked at which situational or personality factors influenced their decisions.

The results of this experiment revealed that the only significant variable influencing participants' behavior was how much they were in a hurry: when the experimenters told participants that they were running late, they were much less likely to offer help to the victim. The fact that some participants were reminded of the Good Samaritan parable did not play a significant role, and neither did their degree of religiosity. That is, even in the

low-hurry condition, the more religious people were no more helpful than average. In fact, as the authors note, "on several occasions, a seminary student going to give his talk on the parable of the Good Samaritan literally stepped over the victim as he hurried on his way!" (Darley and Batson 1973, 107).

Since then, numerous studies have disputed the claim that religious individuals behave in more prosocial ways than nonreligious ones (Galen 2012). But that does not mean that religion has no effect on moral behavior. A cross-cultural study that examined economic behavior across eight societies (Purzycki et al. 2016) found that people's particular views about the personality of their gods was a significant predictor of their behavior towards other people. Specifically, individuals who saw their gods as moralizing and punitive were more willing to favor distant members of their group over themselves or local coreligionists.

This brings up an important observation: cases in which religiosity does influence moral behavior are usually constrained to the religious in-group (other members of the same religion) and do not necessarily extend to out-groups (members of other religions). Thus, when considering the effects of religion on prosociality, it is important to distinguish between the possible recipients of this behavior (e.g., in-group versus out-group). Religion might stabilize mutualistic exchange by increasing trust among its members while at the same time inducing hostility toward other groups. For example, in "Differences in Attitudes toward Outgroups in Religious and Nonreligious Contexts in a Multinational Sample" (2012), Jordan LaBouff and colleagues asked participants about their attitudes toward different religions either in front of a cathedral or in front of a town hall. Those who answered in front of the cathedral reported higher religiosity but also higher political conservatism and more negative attitudes toward other religious groups. Religion can bind people together, but can also divide them. A failure to distinguish between the identities of the recipients of those actions and attitudes could be a significant source of confusion.

RELIGIOUS DISPOSITION AND RELIGIOUS SITUATION

LaBouff and colleagues' 2012 study highlights another important aspect that often has been neglected in both surveys and experimental studies, namely, the role of situational factors. Surveys most commonly target only dispositional religiosity (having to do with personality), looking for the effects of conscious religious beliefs on hypothetical moral conduct. A recent body of research has revealed a significant effect of religious situation (contextual factors) on moral behavior. For instance, in "(When) Are Religious People Nicer?" (2008), Deepak Malhotra measured people's responses to an online appeal for charitable donations and found that religious people were significantly more charitable only on Sundays, while throughout the week religiosity made no difference in levels of generosity. Malhotra coined the term *Sunday effect* to describe this phenomenon, that is, that religious participants are prone to behave more prosocially only in religious contexts, such as upon returning from Sunday Mass. This paints a more interesting and complex picture of religious morality. As Malhotra acknowledges, the salient question is not "are religious people more moral?" but rather "under which conditions do they behave more morally?"

To study those conditions, researchers have often employed priming methods—using different stimuli to elicit certain moods, attitudes, and behaviors in participants. In a priming study, participants typically are exposed to a stimulus without full conscious awareness of its presence or its role, and researchers observe the effects that this stimulus has on participants' behavior and decision making. This paradigm often is used to examine the

automaticity of behavior, that is, how we sometimes make decisions without being conscious of all the subtle factors that influence those decisions.

For example, in a study conducted by John Bargh and his colleagues (1996), participants were presented with different versions of a scrambled-sentence task, in which they had to choose four out of five randomly ordered words to form a meaningful sentence. The experiment had three different conditions: polite, neutral, and rude. In the polite condition, participants had to order sentences that contained words like honor, respect, or patiently; in the neutral condition, the sentences contained words like normally, send, or watches; and in the rude condition, participants had to use words like bold, bother, or disturb. While participants were solving the scrambled-sentence task, the experimenter engaged in conversation with a confederate (an actor who is part of the experimenter's team unbeknown to participants). Upon finishing the task, participants were instructed to bring the finished sentences to the experimenter; however, since the experimenter was engaged in conversation, they had to decide whether or not to interrupt him. The main measurement in this study was whether participants interrupted the experimenter's conversation within 10 minutes. The results showed that the percentage of those who interrupted the conversation significantly differed between conditions: 18% of participants interrupted in the polite condition; 38% in the neutral condition; and 64% in the rude condition.

Thus, although participants did not make a conscious link between the scrambled sentences and their decision to interrupt, priming with emotionally charged words increased their tendency to behave in a specific way. The priming paradigm is an important tool that enables researchers to discover situational influences on decision making. In the context of the study of religion and morality, it opened new avenues for exploring how various religious concepts and contexts might affect people's prosocial behavior.

RELIGION AS A PRIME

RELIGIOUS CONCEPTS

In a controlled experiment that used the priming paradigm, Azim Shariff and Ara Norenzayan (2007) looked at the effects of implicit religious primes on prosocial behavior using a scrambled-sentence task. Half of the participants were given words that contained religious concepts like *spirit* or *divine*, and the other half was given neutral words. In other words, one group was primed with religious concepts, and the other group received no prime. Following this task, participants played an anonymous dictator game, in which they had the power to decide whether they would share any of their earnings with another player. The results showed that people who were primed with religious concepts acted more prosocially, that is, shared more of their earnings with other players. But while the religious primes had an impact on their behavior, the players' religiosity had no effect on their decisions.

Shariff and Norenzayan proposed two possible mechanisms that might be responsible for this effect. First, religious primes might trigger conceptual associations with norms and behaviors that are then unconsciously and automatically enacted: God is semantically related with morality, so reminding people of God makes them behave more morally. Second, religious primes might trigger a sense of being monitored by a supernatural watcher. It is well known that people change their behavior in the presence of cues of being watched, even if it is simply a pair of stylized eyes on the wall. This sense of being monitored may activate

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reputational concerns and thus lead people to behave in more moral ways. Notably, these two mechanisms are not mutually exclusive, and indeed they have been shown independently to operate in the presence of religious cues.

RELIGIOUS CONTEXTS

More recently, a number of studies have applied the priming paradigm in real-life settings. Although those studies often do not have the same level of control as laboratory experiments, they use more culturally salient, naturalistic stimuli and thus have greater ecological validity, that is, they better approximate the conditions under which these phenomena would occur in real life. In addition, because these studies are conducted in more natural settings, they provide an opportunity for cross-cultural comparisons beyond the typical samples of Western undergraduate students. This approach is particularly valuable when it comes to studying religion, which is heavily laden with culturally specific meanings and values that cannot be replicated easily in sterilized laboratory environments.

In Xygalatas's "Effects of Religious Setting on Cooperative Behavior" (2012), a field experiment conducted in Mauritius, local Hindu participants were randomly assigned into two groups that played a common pool resource game. Those in the first group played the game in a religious temple, and those in the second group played in a restaurant. Each player had to make a financial decision independently and anonymously. The game consisted in deciding how much to withdraw from a common pool of 500 Mauritian rupees (a substantial amount of money equivalent to two to three days' salary for an unskilled worker). If the cumulative total withdrawn by both players was lower than 500 rupees, the remaining amount would be increased by 50 percent and shared among the two players, in addition to their withdrawal. But if the cumulative amount exceeded 500 rupees, both players would lose and receive nothing. This game provides a measure of cooperation, as players have to balance between their self-interest to withdraw as much as possible and the collective benefit that depends on sharing as much as possible. The results showed that those who played in the temple were more cooperative (withdrew less money) compared with those in the restaurant, although the players' religiosity had no effect on their decisions. In a similar study conducted in Chile, Ali Ahmed and Osvaldo Salas (2013) found that people who played an economic game in a chapel were significantly more cooperative than those who played the same game in a lecture hall.

RELIGIOUS PRACTICES

Another line of research has examined the impact of ritual participation on prosocial behavior. For example, a study conducted in Israel (Sosis and Ruffle 2003) found that among the members of a Kibbutz (a collectivist community), those who participated more frequently in communal prayers were more cooperative in an economic game.

Indeed, rituals involve a variety of elements that may promote prosociality. Such elements include music, synchrony, arousal, and suffering. For example, studies have shown that when a group of people moves in synchrony (e.g., marching, dancing), this can increase interpersonal rapport. In a field study conducted in a Spanish town (Konvalinka et al. 2011), heart-rate measurements were obtained during the performance of a fire-walking ritual. The researchers found that even in the absence of any motor synchrony, participation in this ritual led to the alignment of people's physiological states and that these effects extended to the entire community—not merely to fire-walkers themselves. Such emotional synchrony can strengthen bonds within a community and foster group cohesion.

Similar effects have been demonstrated at the behavioral level. In a field experiment conducted in Mauritius, Xygalatas and his colleagues (2013a) studied one of the most widely performed high-intensity rituals in the world, the Tamil practice of *kavadi*. This ritual involves piercing of the body with needles and skewers, carrying heavy bamboo objects (kavadi) in a long procession, and dragging chariots the size of cars with chains attached to the skin through hooks. The researchers compared donations to a charity among those who had taken part in this ritual to those who had participated in a collective prayer. Although participation in both rituals led to higher donations than a control group, the painful ritual produced much higher donations than the low-arousal one. Notably, the level of pain that participants experienced predicted the level of donations. Finally, just as we saw in the Spanish study, these effects also extended to observers. Similar effects of pain and suffering have been well documented in controlled studies, such as Brock Bastian, Jolanda Jetten, and Laura Ferris's "Pain as Social Glue" (2014), which show that painful experiences elicit prosocial responses.

IS BELIEF NECESSARY?

Given that religious priming often works at a subconscious level, can we assume that even nonreligious people will be primed with religion, or are the effects of religious primes constrained only to believers? Answering this question requires a better understanding of the cognitive mechanisms that facilitate the effects of religious priming. We need to understand how the associations between religious words and symbols and moral behavior originate as well as the role of socialization in the formation of these associations. For example, some religious words, such as God, might be universally recognized as religious among English speakers and thus activate an association with religion, whereas some other symbols, such as religious music, might be known only to the practitioners who have been exposed to them during religious services. This effect was documented in a study conducted in three countries (the Czech Republic, Mauritius, and the United States), in which Martin Lang and his colleagues (forthcoming) examined the influence of religious music on participants' moral behavior. After being exposed to either a religious or a secular piece of music, participants had to solve a series of mathematical problems, and they received a monetary reward for each successfully solved problem. However, the research design intentionally provided the opportunity to cheat to increase the payoff. The results showed that only religious participants behaved more morally after hearing religious music, but the music did not have any significant effects on non-believers.

Another study conducted among Mauritian Christians used a within-subject design (examined how the same people behave in different situations) to study the effects of religious context (Xygalatas et al., forthcoming). Participants in that study were asked to solve a series of puzzles, each in a different location: a Christian Church, a Hindu temple, and a restaurant. Each time they solved a puzzle, they were rewarded with 100 rupees, but then they also had the opportunity to contribute part of their earnings to a charity organized for those who could not successfully solve the puzzle. The identities of the recipients were unknown to the givers. The results showed that donations were significantly higher in both the Hindu temple and the Christian church compared with the restaurant, suggesting that the effects of religious priming are not restricted to primes pertaining to the group but also extend to reminders of religion in general. The results also revealed an interaction between religiosity and location, indicating that belief played an important role: religious people donated more when they were located in a religious setting. As seen in the music study,

belief and context interact in meaningful ways to produce results stronger than either of those factors alone can produce.

Does this finding mean that people need to be religious to be affected by religious stimuli? So far, results coming from different studies have been mixed. Some primes affected both religious and nonreligious participants, whereas some only affected believers. In a recent meta-analysis (a statistical procedure calculating the cumulative results of multiple studies), Shariff and his colleagues (2016) found no overall effects of religious primes on non-believers. However, the evidence is far from conclusive, as specific data from non-religious samples are lacking. Most existing studies simply examined religiosity on a spectrum and compared more with less religious participants, but low religiosity is not the same as no religiosity. This lack of evidence suggests that we need to be cautious when it comes to interpreting the existing data and that more research is needed to resolve the issue.

BELIEF AND PRACTICE

Both belief and practice are important parts of religion, but we need to better understand how these aspects work together. Some deeply religious individuals do not participate in organized ritual activities. On the other hand, many people regularly attend religious rituals without having strong religious convictions. Does religion affect those two groups in the same way? Can we predict, for example, that they will behave similarly in the presence of religious symbols or after the performance of a collective ritual? Is it the social aspect of collective rituals that motivates people to behave morally, as Comte and Durkheim would have it, or is it their belief systems, as Locke argued? Or is it both?

To answer this question, we need to gain a better understanding of how belief and ritual practice might independently affect moral behavior. For example, we can look at secular rituals devoid of any belief in the supernatural as well as religious beliefs without ritual participation, as secular groups like armies, fraternities, and corporations frequently use high-intensity rituals to boost cohesion and cooperative behavior among their members. In the United States, fire-walking rituals can be purchased as team-building activities, whereas in New Zealand the ritual dance of *haka* is performed by sports teams before each match to increase bonding among team members. On the other hand, some people might believe that they are one with the universe and thus have the moral imperative to behave altruistically toward others without engaging in any ritual practices. A deeper understanding of how different religious beliefs and practices work independently might help us identify some of the underlying mechanisms affecting morality.

For instance, belief in ancestral spirits or some impersonal spiritual power might not pose any demands on one's behavior, but belief in an omnipotent god can motivate people to behave morally because of this deity's ability to punish transgressors. Likewise, participation in low-arousal communal prayers might affect people's motivations in different ways than participation in high-intensity rituals that involve pain and suffering.

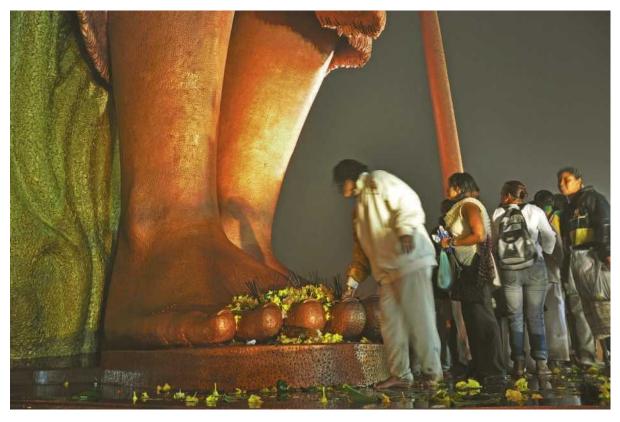
In "Big Gods in Small Places" (forthcoming), a study conducted in Mauritius, Xygalatas and colleagues gave participants the chance to cheat to maximize their profit from a monetary task and examined some of the factors affecting the levels of cheating. The two most important factors that were negatively associated with cheating were belief in an omnipotent punishing version of God and regular participation in the *kavadi* ritual that involves prolonged suffering. Both factors independently predicted lower cheating rates, but



Religious beliefs and practices in relation to cheating. Researchers in Mauritius are shown preparing for a field experiment in a local Hindu temple. Their study found that the two most important factors negatively associated with cheating were belief in an omnipotent punishing version of God and regular participation in the kavadi ritual that involves prolonged suffering (Xygalatas et al., forthcoming). © EVA KUNDTOVÁ KLOCOVÁ.

no such effects were observed for belief in other kinds of deities or participation in low-arousal rituals. These results stress the importance of a more detailed understanding of participants' religious beliefs and practices and also demonstrate that specific beliefs and practices can be effective irrespective of each other. But if those factors can independently affect moral behavior, what happens when they are combined?

Thus far, the combined effects of religious belief and practice have been only hypothesized. For example, anthropologist Roy Rappaport (1926–1997) wrote in *Ritual and Religion in the Making of Humanity* (1999) that by participating in rituals, individuals signal their commitment to the rest of the community. However, their actual intentions to behave morally or to cheat on other community members are concealed from others. Although their behavior might be moral in public, they might still be inclined toward immoral conduct in private. In contrast, religious belief can provide a strong motivation for moral behavior, even in private. But such belief might quickly dry up without a supporting community and a frequent re-establishment of moral order through the performance of collective rituals. As indicated earlier, religious people do not necessarily behave more morally. The repetition of moral axioms and a collective renewal of group identity might be important instruments that reinforce individual belief. In this respect, religious belief and practice might interact and reinforce each other to promote a particularly effective complex that influences moral behavior. To test this theory, we need to look at the combined effects of specific beliefs and practices in experimental and field studies.



Relationship between religious participation and moral behavior. Hindu devotees are shown paying tribute to a gigantic statue of Shiva during the annual pilgrimage of Maha Shivaratri in Mauritius. People who participate in religious rituals may be signaling their commitment to the rest of the community and appear to be displaying moral behavior, but they might still be inclined toward immoral conduct in private. © DIMITRIS XYGALATAS.

FUTURE DIRECTIONS

This overview of the state of the art in the research on religion and morality reveals a number of important questions that remain unanswered and need to be addressed by future studies. Some of the main challenges are related to the lack of precise measures of religious belief; the need for more contextualized studies of moral behavior; and the need to obtain a better understanding of how different religious beliefs and practices and their interaction affect moral behavior.

To address the first issue, that is, developing better measures of religiosity, we need to develop measures that will combine emic (insider) and etic (outsider) perspectives to provide more comprehensive and contextually relevant research instruments. For example, in polytheistic religions, adherents' preferences, commitments, and affection may vary significantly between different deities. In those contexts, asking questions abstractly about *gods* may not adequately capture people's understanding of the divine.

In addition, it is important to distinguish between people who are nonreligious and those that score low on religiosity. If we can put religiosity on a scale from zero to ten, the

difference between zero and one is probably not equidistant to that between any other two consecutive points on that scale. In other words, a difference in degree of religiosity is qualitatively not the same as the difference between being a believer and being an atheist. Clarifying this conceptual problem might lead to a better methodological treatment of the issue of measurement.

The second issue, that is, the need for more contextualization, recently has received attention as various scholars have raised criticism of the way psychological research is conducted. The vast majority of psychological experiments is conducted with samples consisting of Western undergraduate students. In "The Weirdest People in the World?" (2010), Joseph Henrich, Steven J. Heine, and Ara Norenzayan showed that while researchers typically take those samples to be representative of the global population as a whole, in fact they are often outliers in many domains of cognition and behavior. Clearly, this has severe implications on the potential replicability and generalizability of psychological research.

To address this problem, we need cross-cultural, interdisciplinary research, which will move beyond sterilized laboratory settings, into the real-world contexts in which religion actually takes place to increase the ecological validity of the findings. This requires a synergy among anthropology, psychology, and other related disciplines that traditionally have studied religion in isolation and without interaction with one another.

The third issue, that is, the interaction between religious belief and practice, is particularly complex and requires systematic research. Although the connection between doctrine and ritual is observed worldwide, there is no particular theoretical reason why the two should always co-occur. After all, in the secular domain, there are plenty of ideologies without rituals and rituals without belief systems. In the religious domain, the two are intricately related and interacting in complicated ways.

To get a better understanding of religion's link to morality, we need to be able to account for the effects of beliefs and practices both independently and cumulatively. This requires implementing a systematic division of labor while at the same time maintaining a cohesive bird's-eye view. Although this is certainly easier said than done, being able to isolate these factors will give us a better understanding of what makes religion so successful.

Summary

As we have seen, the relationship between religion and morality is far more complicated than one might expect. The challenges of defining, operationalizing, and measuring both religion and morality require a fractionating approach. This approach involves examining various aspects of the problem separately and then trying to put the pieces of the puzzle together to look at the broader picture rather than relying on isolated studies. Furthermore, the observed discrepancy between self-reported and actual behavior demonstrates additional problems with measuring socially desirable traits like religion and morality.

A careful look at the available evidence shows that religious people are no more or less moral than non-believers, despite what they often report, and in the face of widespread popular assumptions and stereotypes. Although religious disposition plays little role in moral behavior, religious situation can exert significant influence on it. Religious concepts, contexts, and practices can independently influence social conduct, and their interaction can

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make religion a powerful social force. This force can be used for better or for worse, either directed toward building cohesive communities and increasing in-group cooperation or producing hostility and suspicion toward out-groups.

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