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"Four Gods" in Maximum Security Prison: Images of God, Religiousness, and Worldviews Among Inmates

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Abstract This paper extends research on images of God, which prior researchers based mostly on national survey data, to a study of offenders in prison. We first explore whether the distribution of Froese and Bader's (America's four gods: What we say about god-& what that says about us, Oxford University Press, New York 2010) four images of God among prison inmates is similar to that in the general population. We then examine whether an inmate's image of God is associated with the inmate's worldviews: beliefs and attitudes toward the law, other inmates, moral responsibility, and ultimate meaning and purpose in life. Finally, we test whether an inmate's belief in a forgiving God and religiousness explain the association. We analyzed data from a survey of 2249 inmates at America's largest maximum-security prison, the Louisiana State Penitentiary. We found the distribution of God-images among inmates was the same as that in national samples in terms of rank order. As hypothesized, we also found inmates with an image of an engaged God tended to report lower levels of legal cynicism and sense of illegitimacy of punishment and higher levels of collective efficacy, existential belief, and moral responsibility than those with images of a disengaged God or no God. Finally, we found an inmate's belief in a forgiving God and religiousness to mediate partly relationships between images of God and the inmate's worldviews.

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Introduction

In their book *America's Four Gods*, Froese and Bader (2010) explored how Americans view God in terms of the extent to which God judges and interacts with the world and proposed a typology. They identified four images of God based on an individual's belief in God's judgment and engagement: Authoritative, Benevolent, Critical, and Distant God. They also examined whether the images of God help explain social and political divisions as well as cultural diversity in America using nationally representative data and found one's image of God to be associated with the one's worldview indicated by various beliefs and attitudes. Other studies based on different datasets tended to report similar findings (e.g., Froese and Bader 2008; Johnson et al. 2015; Schreiber and Edward 2015; Unnever et al. 2006).

Unlike prior research conducted mostly based on a national sample of adults, the present study examines offenders in a maximum-security prison to see whether the image of God and its relationships with beliefs and attitudes are different among prison inmates, whose religion criminologists study in relation to their rehabilitation and identity transformation (e.g., Johnson 2011; Maruna 2001). Besides the applicability of the image of God concept to the offender population, it is worth studying the concept's relevance to offender rehabilitation and correctional policy. We first explore whether the distribution of the four images of God among prison inmates tends to be similar to that in the general public. We then examine whether an inmate's God-image is associated with the inmate's beliefs and attitudes. Finally, we test whether the inmate's belief in a forgiving God and religiousness explain the associations.

For empirical examination, we analyze data from an anonymous survey of 2249 inmates at America's largest maximum-security prison, the Louisiana State Penitentiary (a.k.a. Angola). The survey included items asking inmates about their images of God; religiousness (i.e., religious participation, practice, relationship with God, and coping); and views on the law, other inmates, moral responsibility, and meaning and purpose in life. It also included questions about sociodemographic and criminal backgrounds for which we controlled to test our hypotheses. We applied latent-variable structural equation modeling to analyze data from the survey. This paper begins with a summary of Froese and Bader's (2010) thesis and findings, followed by a review of prior research on images of God before explaining our research questions. We then describe our data and measures, present results, and discuss implications of our findings.

Images of God in America

For those who believe in the existence of God, God is an important source of their worldview as God is their "generalized other" (Mead 1934). As a result, a person's cognitive schema of image of God is likely to affect his or her beliefs and attitudes as well as religiousness. For Froese and Bader (2010), two key factors help us understand an individual's conception of God: the extent to which God judges and engages with the world. Using these two dimensions of belief in God's character,



they proposed a typology of "America's four Gods," or images of God, constructed based on nationally representative data from the 2005 and 2007 Baylor Religion Survey: Authoritative (both engaged and judgmental), Benevolent (engaged but nonjudgmental), Critical (disengaged but judgmental), and Distant God (disengaged and nonjudgmental).

Froese and Bader (2010) began with exploring whether a person's background characteristics, demographic and religious, were associated with the person's image of God and found a complicated set of background variables (e.g., age, sex, race, religious affiliation, etc.) were related to different images of God. Controlling for background, Froese and Bader (2010) examined whether different beliefs in God's judgment and engagement were related to religious involvement and various attitudes. First, they found believers in an Authoritative God and a Benevolent God were more likely to describe themselves as "religious" and attend church more often than those believing in a Critical or Distant God. In addition, believers in an Authoritative God were more likely to be biblical literalists, whereas those believing in a Critical or Distant God were less likely, with belief in a Benevolent God unrelated to biblical literalism.

Next, in terms of moral opposition to premarital and extramarital sex and gay marriage, believers in an Authoritative God were the most likely to be absolutist. Their moral absolutism was perhaps in part because of belief in the existence of evil (i.e., a clear distinction between right and wrong) unlike skeptics of evil or moral relativists who tended to believe in a disengaged God. Although believers in a Benevolent God held a moral stance closer to their peers believing in an Authoritative than Critical or Distant God, they tended to focus on the good that God brings rather than the existence of evil. Similarly, believers in an Authoritative God were the most negative toward abortion across various conditions, followed by believers in a Benevolent, Critical, and Distant God. On the other hand, while those with an engaged God (Authoritative or Benevolent) were more compassionate toward the sick and needy than those with a disengaged God (Critical or Distant), believers in an Authoritative God tended to view tragedies in life as God's warning to sinners, unlike the others. Besides the four images of God, Froese and Bader (2010: 71) examined a fifth view, no God, held by those who were certain that God did not exist, and found the atheists to "closely resemble believers in a Distant God in their [moral] attitudes and ... occupy a more tolerant end of the American moral continuum."

As an alternative to comparisons among the image-of-God groups, Froese and Bader (2010) analyzed the data using multi-item scales of God's judgment and God's engagement as separate variables, and the results were generally consistent with the group comparison findings. Both scales were related positively to absolutist opposition to gay marriage (i.e., "always wrong") and inversely to belief that people were homosexual by nature, whereas the perceived level of God's judgment increased the probability of believing that homosexuality was a choice, though perception of God's engagement did not. God's engagement and, to a lesser extent, God's judgment were positively related to belief that abortion was "always wrong" (as opposed to "almost always wrong," "only wrong sometimes," and "not wrong at all" combined) under various circumstances.

In sum, not surprisingly, believers in an engaged God were more likely to identify themselves as religious and attend church more often than believers in a



disengaged God and atheists. Believers in an engaged God were also more likely to be moral absolutists than believers in a disengaged God with believers in an Authoritative God and those in a Critical God being the most and the least likely, respectively, and atheists being not different from believers in a Distant God (i.e., Authoritative > Benevolent > Critical > Distant God \approx No God).

Prior Research

Several studies based on the 2005 or 2007 Baylor Religion Survey (BRS) data examined another aspect of God's character, loving God, which Froese and Bader (2010) do without for their construction of typology based on a finding that a loving God was an almost universal view in America, according to national surveys of the United States. Focusing on Christians and Jews who had no doubt about the existence of God, Mencken et al. (2009) found those who saw God as loving to be more likely to trust their neighbors, coworkers, and other people, including atheists, than their peers who saw God as judgmental. Examining the same data Mencken et al. (2009) analyzed, however, Hinze et al. (2011) found the same measure of a loving God image was not related to trust in Muslims, while that of a judgmental God was inversely related.² Similarly, Bader et al. (2010) found angry and judgmental images of God to be associated positively with favorable attitudes toward harsher punishment for criminals but the images of a loving and engaged God to be generally unrelated.³ Finally, Stroope et al. (2013) found the image of a loving God to be positively associated with a respondent's subjective sense of meaning that his or her life had a real purpose.

Two other studies that did not include the image of a loving God in their analysis using the BRS data examined relationships the judgmental and engaged God images had with volunteering behavior and attitudes toward same-sex relationships. Mencken and Fitz's (2013) study revealed that religious adherents with an image of a judgmental God were more likely to volunteer for their community through their place of worship rather than independently of it. Whitehead (2014) found God's judgment and engagement were both unrelated to attitudes toward same-sex civil unions or same-sex marriage, controlling for relevant predictors of the dependent variable such as traditional gender roles and masculine image of God, which were both inversely related to the support as anticipated (see also Whitehead 2012).

Findings from other survey data tend to be consistent with those based on the BRS data. Based on the 1998 International Social Survey Program data from eight (including the United States) of 32 participating countries, Froese and Bader (2008) reported that individuals with beliefs in God's personal engagement and

³ Bader et al. (2010) constructed two variables using Froese and Bader's (2010) six items of God's judgment: "God's anger" (2 items of God being "angered by human sins" and "angered by my sins") and "God's judgment" (4 items of whether adjectives "critical," "punishing," "severe," and "wrathful" apply to God).



 $^{^{1}}$ Their measure of loving God tapped the character of "forgiving," "friendly," and "kind" as well as "loving."

² Mencken et al. (2009) and Hinze et al. (2011) labeled Froese and Bader's (2010) judgmental God as "angry God."

authoritative character were most likely to be moral absolutists. Analyzing pooled data from the 1991 and 1998 General Social Survey (GSS), they also found individuals who view God as being authoritarian and actively involved in the world tended not only to be biblical literalists and church attenders but also restrictive on abortion and sexual morality (Bader and Froese 2005). Using the same pooled data, Froese et al. (2008) found an image of a wrathful God was related positively to intolerant attitudes toward members of particular groups (e.g., atheists and homosexuals), consistent with Mencken et al. (2009) and Hinze et al. (2011) that the image of angry God was inversely related to trust in other people. In addition, a punitive image of God was associated positively with support for harsher punishment of criminals including death penalty, whereas a personal relationship with a loving God and a gracious image of God were associated with support for their rehabilitation (Applegate et al. 2000; Unnever et al. 2005, 2006).

The Present Study

Our literature review revealed that previous researchers have not studied Froese and Bader's (2010) four images of God in relation to religiousness and worldview outcomes (i.e., beliefs and attitudes). Thus, first, we intend to address this gap in research, not only comparing the four images of God but also examining a judgmental and engaged God as separate variables. Next, this study intends to contribute to the literature by testing the God-image concept's applicability to a particular group of individuals other than the general population by analyzing data collected from a sample of offenders in a maximum-security prison (see the next section for a description of this study's research site). By expanding the scope of the concept's empirical test, our study of inmates allowed us to see whether the distribution of images of God and/or their associations with the image-holder's beliefs and attitudes tend to differ when people are in a harsh environment (a maximum-security prison), compared to an ordinary one.

For example, depending on whether a majority of offenders in prison are remorseful or not, the proportion of those believing in an engaged (especially, a Benevolent God) or disengaged God (i.e., a Critical or Distant God) is likely to be larger than what was the case with the general population as the remorseful are likely to seek God's loving and forgiving response to their repentance, whereas the remorseless might take their hardship as the evidence that an uncaring and judgmental God punishes them. In addition, to the extent that views on God's character among offenders are more categorical (e.g., either God loves or punishes as opposed to loving God who punishes) than among non-offenders, relationships

⁴ While based on non-survey data, two other studies are worth mentioning. First, Johnson et al. (2015) developed scales measuring personal representations of God as Authoritarian, Benevolent, Controlling, and Loving, and found Authoritarian God was related positively to an individual's priority value of power and security, while Benevolent and Loving God related positively to conformity, tradition, and benevolence, which were all inversely related to Controlling God. Second, studying the impact of a breast cancer diagnosis on their image of God, Schreiber and Edward (2015) found that those who believed in highly engaged God showed altruistic behaviors such as transformational life changes in self and others, whereas those believers in less engaged God showed egocentric behaviors like attitudinal changes only in self.



involving images of God are expected to be stronger in the prison than general population. Finally, if we find images of God among offenders to be inversely related to criminogenic beliefs and attitudes and positively to prosocial ones, our findings may have practical implications for offender rehabilitation.

To actualize these potential contributions, we first calculate the distribution of images of God among prison inmates and compare it with what was found in the general population to see whether they are different and, if so, how. We then examine relationships between an inmate's image of God and the inmate's religiousness and worldview outcomes including beliefs and attitudes toward the law, moral responsibility, other inmates, and meaning and purpose in life, which are likely to be associated with the inmate's behaviors, like infractions in prison and reoffending after release from prison. While comparing the distribution of image of God between this and previous studies is exploratory since it is hard to predict one way or the other, we propose the following (in)equalities as working hypotheses.

First, according to Froese and Bader (2010) and other studies, inmates with an engaged (Authoritative and Benevolent) God are more likely to be religious than those with a disengaged (Critical and Distant) God, whereas we expect atheist inmates, by definition, to be the least religious of all. In addition, based on Froese and Bader's (2008) finding that perception of God's engagement, but not God's judgment, was related positively to church attendance, religious experience, and sharing faith with others, we expect inmates with a Benevolent God to be more religious than those with an Authoritative God. Among inmates with a disengaged God, we expect inmates with a Critical God to be somewhat more religious than those with a Distant God because the former are likely to see God as critical of and angered by their sins (including a lack of religiousness) and punishing them unlike the latter, to whom God seems so far removed.

As explained in the next section, we operationalize an inmate's religiousness by the number of congregations the inmate attended in the prison (or, in short, congregational participation), religiosity (closeness to God and frequency of religious service attendance, prayer, and reading a sacred text), and positive and negative religious coping. We hypothesize the rank order of Benevolent > Authoritative > Critical > Distant > No God for all but one indicators of religiousness. The exception concerns negative religious coping, where the direction of inequality is reversed because it is the opposite of positive religious coping: that is, Benevolent < Authoritative < Critical < Distant < No God.

Second, while we include an inmate's belief in a loving God in our analysis partly as a control variable in examining the fourfold typology of belief in God as Froese and Bader (2010) did, we also propose it as an outcome of the images of God. That is, we expect inmates with an engaged God to be more likely to believe in a loving God than those with a disengaged God. Among the former, those with a Benevolent God are more likely than their peers with an Authoritative God to believe in a loving God because a Benevolent God is likely to be perceived to be more consistent with a loving God than a judgmental God is. On the other hand, among inmates with a disengaged God, we expect that inmates believing in a God who cares enough to be judgmental (a Critical God) are more likely to believe in a loving God than those believing in a God who does not seem even to care to be



judgmental (a Distant God). Atheists who do not even believe in the existence of God are the least likely to have the image of loving God. In sum, we hypothesize the rank order of Benevolent > Authoritative > Critical > Distant > No God.

Third, we expect differences in beliefs and attitudes toward the law and the perception of moral responsibility among inmates who hold different images of God. For beliefs and attitudes toward the law, we examine legal cynicism (Sampson and Bartusch 1998) and perceived illegitimacy of punishment (Tyler 2003). Legal cynicism concerns whether (1) there are right and wrong ways to make money, (2) a person has to live for today, and (3) laws are made to be broken, whereas perceived illegitimacy of punishment whether inmates believe they are doing more time than deserved or serving time for a crime they did not commit. On the other hand, the perception of moral responsibility is the extent that an inmate agrees that the behavior that resulted in incarceration is wrong and admits that s/he is morally responsible for the offense.

We hypothesize inmates with an engaged God to have more conventional beliefs and attitudes toward the law and moral responsibility than those with a disengaged God based on prior research (Bader et al. 2010; Froese and Bader 2010). Among inmates with an engaged God, however, it is difficult to predict whether those with a Benevolent God are more or less likely to be cynical toward the law and to perceive punishment to be illegitimate than those with an Authoritative God. Therefore, we hypothesize no significant difference in legal cynicism and illegitimacy of punishment between the two groups. For moral responsibility, on the other hand, we expect inmates with a judgmental God to show higher levels of moral responsibility than those with a non-judgmental God because inmates with a judgmental God are more likely to be moral absolutists than those with a non-judgmental God (Froese and Bader 2010).

Fourth, since the image of a judgmental or angry God tends to be inversely related to trust and care for other people (Hinze et al. 2011; Mencken et al. 2009; Mencken and Fitz 2013), we expect inmates with a Benevolent God to have a more positive view on other inmates, like being trustworthy and willing to help others, than those with an engaged but judgmental God (i.e., an Authoritative God) in terms of the dimension of cohesion and trust of collective efficacy (Sampson et al. 1997). Between the two groups of believers of a judgmental God, inmates with an Authoritative God are expected to have a positive view on other inmates relative to those with a Critical God because they believe that God is positive toward them, being judgmental but concerned with their personal well-being, which is likely to lead them to hold a relatively positive view on other inmates. On the other hand, we have little basis to predict inequality between the two groups of inmates with a disengaged God, that is, a Critical versus Distant God.

Fifth, we expect inmates with an engaged God (who is concerned with their personal well-being and directly involved in what happens to them) to believe in the ultimate meaning and purpose in life compared to those with a disengaged God because the belief in God's concern and care for them provides a basis for the meaning and purpose of their existence as well as a reason for living. Between the two groups of engaged-God believers, we hypothesize that inmates with a Benevolent God are somewhat more likely to have the existential belief than those



with an Authoritative God given that images of a loving God, which is closer to the image of a Benevolent than Authoritative God, tend to be positively associated with a sense of meaning in life (Stroope et al. 2013). Since we have little substantive ground to establish inequality between inmates with a Critical God and those with a Distant God, we hypothesize no significant difference in their existential belief between the two groups of inmates with a disengaged God, whether they believe in a Critical or Distant God.

Finally, what should we expect about atheist inmates' worldviews with respect to beliefs and attitudes toward the law, moral responsibility, other inmates, and meaning and purpose in life compared to those who believe in God?

According to philosopher Evans (2013), atheists are more likely than not to reject objective morality as they reject God, the source of moral absolutes. While some believe in an objective moral order, 5 he suggests, atheists tend to believe in moral relativism, primarily either moral nihilism (e.g., Nietzsche) or anti-realism that denies the possibility of moral propositions being true or false at all or sees the propositions as expressing an attitude toward an object of evaluation (expressivism) or as a disguised prescription of how to behave. Other philosophers, however, argue that genuine morality does not require the existence of God but can be grounded upon atheism as posited in an "ideal observer" theory (e.g., Martin 2002). Similarly, philosophers have debated whether the ultimate meaning and purpose in life is possible without God. Many theists, and even some atheists (e.g., Bertrand Russell and J. L. Mackie), assume that if God does not exist, then life becomes ultimately meaningless, whereas atheists argue not only that meaning and purpose in life does not require the existence of God but also that God is not necessary for life to have meaning (e.g., Martin 2002; Megill and Linford 2016). Although theistic views are prominent in the philosophical literatures on objective morality and ultimate meaning in life and thus could be used as the basis of our hypotheses, we decided to explore group differences in legal cynicism, perceived illegitimacy of punishment, moral responsibility, and existential belief by proposing no difference between atheist inmates and those believing in God. We did the same for collective efficacy given the lack of empirical research on inmates' beliefs and attitudes toward others in prison.

In sum, we hypothesize the following (in)equalities for an inmate's worldview.

- Legal cynicism and illegitimacy of punishment: (Benevolent ≈ Authoritative < Critical ≈ Distant God) ≈ No God
- Collective efficacy and existential belief: (Benevolent > Authoritative > Critical ≈ Distant God) ≈ No God

⁶ According to the theory, an act is objectively morally wrong if and only if the act would be disapproved of by an ideal observer, were there such observer under ideal conditions. This theory, however, raises operating questions, like how this ideal observer would know what the correct course of action is.



⁵ They believe in objective moral truths based primarily on ethical naturalism (which posits that ethical propositions can be derived from science) or non-theistic non-naturalism (which holds that ethical truths are just brute facts, not reducible to any natural facts).

 Moral responsibility: (Authoritative > Benevolent > Critical > Distant God) ≈ No God

We also hypothesize that the relationships between the four images of God and the worldview outcomes (i.e., beliefs and attitudes) are partly attributable to an inmate's image of a loving God and religiousness for which we propose the following inequalities.

- The image of a loving God: Benevolent > Authoritative > Critical > Distant > No God
- Congregational participation, religiosity, and positive religious coping: Benevolent > Authoritative > Critical > Distant > No God
- Negative religious coping: Benevolent < Authoritative < Critical < Distant < No God

Research Site: "Angola" Prison

Louisiana State Penitentiary (a.k.a. "Angola") is America's largest maximum-security prison, housing over 6300 male inmates in five separate complexes ("Main Prison," the focus of our study, and four "Out-camps") spread over 18,000 acres of a working prison farm. A disproportionately large percentage of the inmates serving time at Angola have been convicted of violent offenses. Angola is arguably America's harshest prison in that 90% of inmates will die on its grounds—in part because a life sentence in Louisiana means "natural life" with no opportunity for early release of any kind. Louisiana also has America's highest imprisonment rate due to its slate of harsh sanctions levied for almost all criminal convictions, including non-violent drug crime (Carson 2015).

Drawing upon the unique history of Angola, inmates are allowed to lead their own religious congregations, serving in lay ministry capacities in hospice, cellblock visitation, providing death notifications, pastoral counseling, leading churches, and tithing with care packages for indigent prisoners. While the number fluctuates as new ones are founded and some merge, the Main Prison had 21 congregations at the time of this study: 17 fully inmate-led Protestant congregations plus four congregations led by visiting outside clergy—Roman Catholic, Muslim, Episcopal, and Greek Orthodox. Angola is also home to a unique prison seminary—the New Orleans Baptist Theological Seminary, Angola Extension Center (a.k.a. "Bible College")—founded in 1995 and matriculating its graduates into functioning inmate-run churches (see Hallett et al. 2016 for details).⁷

⁷ Both Angola's congregations and its seminary flourished under longtime warden Burl Cain, although the congregations long preceded Cain's two-decade tenure. Cain introduced seminary instruction into the prison only after Congressional revocation of Pell Grant eligibility for convicted felons negatively affected Angola.



Methods

Data

Data for this study came from a survey we conducted at the Main Prison of Angola in 2015. We developed a questionnaire that included items to measure our key concepts as well as inmates' sociodemographic and criminal justice-related backgrounds. An initial version of the questionnaire was pretested with 11 inmates at Angola, and the final version was prepared based on their feedback on wording as well as content of questions.

We administered paper-and-pencil surveys dorm by dorm to all inmates at the Main Prison (all male) between March and May of 2015, during which the facility's inmate population was about 3000 in total. We asked them to participate in our survey, which we said intended to study their beliefs, attitudes, and behaviors. About three quarters of them (n=2249) agreed to participate by signing a consent form and completed the survey in groups, showing a high response rate (about 75%) despite no compensation offered. We conducted an anonymous survey and had no prison staff (including chaplain) present when it was administered so inmates could provide accurate and honest answers to survey questions. Since the survey was anonymous, we could not test whether and how those inmates who did not participate were different from the participants. While this limitation needs to be kept in mind when results are interpreted, the high response rate and large sample size offer an unprecedented opportunity to study images of God among inmates at America's largest maximum-security prison.

Measures

God's engagement was measured by four items asking inmates whether they thought God was concerned with their well-being and the world's well-being and directly involved in what happens to them and the world according to their "personal understanding" (see "Appendix A"; 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree). Since exploratory factory analysis showed the items were all loaded on a single factor with high loadings and inter-item reliability ($\alpha = .852$), we constructed a scale by averaging them as Froese and Bader (2010) did.

Our survey also included six items of *God's judgment*, two of which were asked along with the four items of God's engagement: whether God was angered by their sins and human sins. Inmates were also asked how well the words "critical," "punishing," "wrathful," and "severe" described God in "their opinion," using the same 4-point Likert scale. Exploratory factor analysis of the six items (using direct oblimin rotation) generated two factors: one with the two "angered" items ($\alpha = .834$), and the other the four adjective items ($\alpha = .808$), loaded highly on each factor (see "Appendix A"). Following Froese and Bader (2010), we constructed a



scale by averaging the six items ($\alpha = .765$) since the two-factor solution was likely a methodological artifact (the two and four items were separated in survey).⁸

We also followed Froese and Bader (2010) to measure four images of God by splitting the scales of God's engagement and judgment at their means (3.390 and 2.883). Treating scores above the mean as "high" values and "low" otherwise, we constructed dummy variables of belief in *Authoritative God* (high on both), *Benevolent God* (high on engagement but low on judgment), *Critical God* (low on engagement but high on judgment), and *Distant God* (low on both). We constructed these variables only for inmates who had "personal beliefs about God," regardless of their level of doubt that God exists. A fifth image of God, *No God*, refers to inmates who had no opinion or chose none of the options provided as well as being agnostic or atheistic (see "Appendix A"). Also, using an item about how well a word, "forgiving," described God, we created a proxy measure of inmate's belief in a loving God, *forgiving God*, for mediator as well as statistical control in examining the five images of God (Froese and Bader 2010).

Another mediator, an inmate's religiousness, was measured by four variables. First, we constructed a variable of *congregational participation* measuring the number of congregations with which an inmate participated (0 = none, 1 = one, $2 = \text{two} \dots 8 = \text{eight}$, 9 = nine or more). Second, a 5-item scale of *religiosity* was a composite standardized score of religious service attendance, praying outside of religious services, reading a sacred text in private, perceived closeness to God, and importance of religion, loaded on a single factor with high loadings, ranging from .638 to .792, and reliability ($\alpha = .801$). Next, using Pargament et al.'s (2011) Brief RCOPE items, we created 7-item *positive* ($\alpha = .861$) and 6-item *negative religious coping* scales ($\alpha = .851$) (see "Appendix A").

To measure an inmate's beliefs and attitudes toward the law, we used two variables. One is Sampson and Bartusch's (1998) 5-item scale of *legal cynicism* (e.g., "Laws are made to be broken"; 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree; see "Appendix A"), and the other is a 3-item scale of *illegitimacy of punishment* (e.g., "I have been treated unfairly by the criminal justice system"; 1 = false, 2 = true). We developed the latter based on Tyler's (2003) thesis that people who believe that the law is just are more likely to perceive the exercise of legal authority, such as legal punishment, to be fair and just than those who do not. The items of both scales loaded on a single factor with generally high loadings (see "Appendix A") and at least acceptable inter-item reliability ($\alpha = .756$ and .621).

We measured a respondent's view on other inmates using four items of Sampson et al.'s (1997) "social cohesion and trust" of *collective efficacy* (e.g., "Inmates here at Main Prison can be trusted") with some modification (see "Appendix A"), and

⁹ The former's "high" group consisted of inmates who strongly agreed (= 4) on God's engagement, whereas the latter's "high" included those who either agreed (= 3) or strongly agreed (= 4) on God's judgment.



⁸ The alpha of our God's engagement scale ($\alpha = .852$) was comparable to that of Froese and Bader's ($\alpha = .85$) despite using only half of their eight items, whereas that of our God's judgement scale ($\alpha = .765$) was not as high as Froese and Bader's ($\alpha = .91$), while we used the same as their six items, though it still had good internal reliability.

the items had a single-factor solution with high loadings and good reliability ($\alpha = .752$). To measure the extent to which an inmate assumed *moral responsibility* for his crime, we constructed three items (e.g., "I'm morally responsible for offenses I committed"), which had acceptable factor loadings and reliability ($\alpha = .680$). We also measured an inmate's belief in the ultimate meaning and purpose in life, using Jang's (2016) six items of *existential belief* (e.g., "I do not believe there is any ultimate meaning in life," reverse-coded) that were loaded on a single factor with good reliability ($\alpha = .729$). The items of collective efficacy, moral responsibility, and existential belief were all measured on a 4-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree).

To control for sources of spuriousness, we constructed measures of an inmate's religious affiliation and criminal as well as sociodemographic backgrounds. An inmate's religious affiliation was measured by dummy variables of *Catholic*, *Islam*, *other religion*, and *no religion* with Protestant being a reference category. ¹⁰ Next, a composite measure of *prior offending* was the mean of five items about lifetime number of arrests, incarceration in an adult prison before coming to Angola, and convictions for violent, property, and drug offenses (see "Appendix A"). The first two items and the average of the last three were loaded on a single factor with high loadings and had a good inter-item reliability ($\alpha = .709$).

In addition, an inmate's *length of sentence* being served and number of *years at Angola* were measured based on inmate's self-report, and we constructed a variable of an inmate's participation in *non-religious programs* by adding two items asking inmates whether they had ever participated or enrolled in some type of educational and vocational program at the time of our survey (see "Appendix A"). Finally, sociodemographic controls include an inmate's *age* (in years), race (dummy variables of *black* and *other race* with white being a reference category), marital status (dummies of *single*, *divorced/separated*, and *widowed* with married being a reference category), *education*, and whether he had *children* (see "Appendix A").

Analytic Strategy

We applied a structural equation modeling approach to test our hypotheses. Latent-variable modeling is appropriate given that most of our key concepts are abstract and thus not observable (e.g., religiosity and existential belief). It also enables us to control for measurement errors so we can test hypotheses based on more valid and reliable results than what manifest-variable modeling would produce (Bollen 1989).

For model estimation, we employed Mplus 7.4 (Muthén and Muthén 1998–2012) that incorporates Muthén's (1983) "general structural equation model" and full information maximum likelihood (FIML) estimation, which allows not only continuous but also dichotomous and ordered polytomous variables to be indicators of latent variables. Because variables were measured by ordered categorical (e.g., education) and continuous variables (e.g., age), we used the estimation option of MLR: "maximum likelihood parameter estimates with standard errors ... that are robust to non-normality and non-independence of observations" (Muthén and

The category of other religion included Judaism, Hinduism, Buddhism, and "other religion."



Table 1 Descriptive statistics of variables used in analysis (n = 2249)

Variable	и	Mean/%	SD	Min.	Мах.	Variable	и	Mean/%	SD	Min.	Мах.
Age	1905	44.680	11.875	18	96	Positive religious coping					
Race	1926					(a) a stronger connection with God	2014	3.480	859	_	4
White	545	28.3%				(b) seek God's love and care	1994	3.457	887	_	4
Black	1200	62.3%				(c) seek help from God	1953	3.067	1.082	_	4
Other race	181	9.4%				(d) strengthen me in this situation	1969	3.321	.952	_	4
Marital status	1932					(e) my plans together with God	1948	3.015	1.033	_	4
Single	1080	55.9%				(f) ask forgiveness for my sins	1967	3.546	.849	_	4
Married	249	12.9%				(g) focus on religion	1935	2.187	1.198	_	4
Divorced/Separated	526	27.2%				Negative religious coping					
Widowed	77	4.0%				(a) God has abandoned me	1976	1.678	1.018	_	4
Children	1924	.748	.434	0	_	(b) feel punished by God	1957	1.852	1.047	_	4
Education	1834	4.480	1.642	_	8	(c) what I did for God to punish	1940	1.619	866.	_	4
Non-religious programs	1917	1.135	.783	0	2	(d) question God's love for me	1946	1.456	.911	_	4
Length of sentence	1922	4.927	1.777	1	9	(e) my church has abandoned me	1923	1.529	.949	1	4
Prior offending	1938	1.948	.824	-	7	(f) question the power of God	1952	1.322	805	1	4
Arrest	1877	2.549	1.713	_	7	Legal cynicism					
Incarceration	1910	1.881	1.140	-	7	(a) okay to do anything you want	2196	1.946	.940	-	4
Conviction	1906	1.782	759.	-	7	(b) no right and wrong ways	2176	1.741	.837	-	4
Violent offense	1853	1.889	.722	1	7	(c) nobody else's business	2171	2.233	696	-	4
Property offense	1649	1.592	939	-	7	(d) live pretty much for today	2170	2.331	1.027	-	4
Drug offense	1682	1.678	766.	-	7	(e) laws are made to be broken	2066	1.671	.826	-	4
Years at Angola	1599	12.859	10.253	0	74	Illegitimacy of punishment					
Religious affiliation	1983					(a) doing more time than I deserve	2176	1.864	.342	_	2
Protestant	751	61.6%				(b) for a crime I didn't commit	2141	1.764	.425	1	2
Catholic	312	15.8%				(c) treated unfairly by the system	2132	1.520	.500	1	2



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Variable	и	Mean/%	SD	Min.	Max.	Variable	и	Mean/%	SD	Min.	Max.
Islam	93	4.7%				Collective efficacy-cohesion & trust	2157	1.842	.364	1	2
Other religion	582	5.5%				(a) willing to help others					
No religion	245	12.4%				(b) can be trusted	2124	2.940	.760	_	4
Images of God	1999					(c) share my moral values	2117	2.866	969:	_	4
Authoritative God	979	31.3%				(d) help a friend having trouble	2071	2.451	.841	_	4
Benevolent God	419	21.0%				Moral responsibility					
Critical God	330	16.5%				(a) the behavior was wrong	2066	2.403	.812	_	4
Distant God	484	24.2%				(b) feel disgusted	2103	3.011	.721	-	4
No God	140	7.0%				(c) morally responsible	2056	3.099	756.	-	4
Forgiving God	1985	3.681	.629	1	4	Existential belief					
Congregational participation	2021	1.357	1.852	0	6	(a) believe in ultimate truth	2045	3.015	1.037	_	4
Religiosity						(b) to discover the purpose	2053	3.120	986	-	4
(a) religious service	2035	5.528	2.429	1	∞	(c) significant philosophy	21111	3.398	.701	_	4
(b) praying	1973	4.834	1.572	1	9	(d) know my purpose in life	2136	3.300	.851	-	4
(c) reading religious text	1953	5.737	2.421	1	∞	(e) part of a much larger plan	2088	3.198	.763	1	4
(d) closeness to God	1955	3.863	1.103	1	5	(f) ultimate meaning in life	2119	3.108	.813	_	4
(e) importance of religion	2027	3.901	1.298	_	S						



Muthén 1998–2012: 484). To treat missing data, we employed FIML, which tends to produce unbiased estimates, like multiple imputations (Baraldi and Enders 2010; Graham 2009). Finally, besides the Chi square statistic, we report three types of model fit index—incremental (CFI: Comparative Fit Index), absolute (SRMR: Standardized Root Mean squared Residual), and parsimonious fit index (RMSEA: Root Mean Square Error of Approximation). We determined that a model had a "good" fit to the data if we met one of two joint criteria that Hu and Bentler (1999) suggested: (CFI \geq .950 and SRMR \leq .080) or (SRMR \geq .080 and RMSEA \leq .060).

Results

Table 1 shows the frequency and percentage distributions of nominal-level variables and the descriptive statistics of others along with the number of valid observations for each variable. For example, almost 90% of inmates reported a religious affiliation: Christianity, Islam, and other religion (5.5%; which included .6% Judaism, .1% Hinduism, .2% Buddhism, and 4.6% "other"; not shown in table), whereas 12.4% had no affiliation. About 60% (61.5%) of inmates said that they participated in one or more religious congregations in the prison.

More importantly, inmates believing in an Authoritative God were the largest group (31.3%), followed by those with a Distant (24.2%), Benevolent (21.0%), and Critical God (16.5%), with inmates with No God being the smallest (7.0%). This rank order is consistent with what was found in national surveys: Authoritative > Distant > Benevolent > Critical > No God. Specifically, Froese and Bader (2010) found that the largest percentage of Americans believed in an Authoritative God (31.4% in 2005 and 28.2% in 2007) and the smallest were atheists (5.2 and 4.8%) with believers in a Distant (24.4 and 23.9%), Benevolent (23.0 and 22.3%), and Critical God (16.0 and 20.9%) falling in-between.

Table 2 shows results from estimating an initial model, where the five latent variables of worldview were regressed on the exogenous variables including images of God without the mediator of religiousness and forgiving God. The model had a good fit with RMSEA (.032) and SRMR (.029) being smaller than their cutoff (.060 and .080), while CFI (.880) came short of the maximum cutoff (.950) and Chi square statistic (1684.191, df = 499) was significant probably because of the large sample size (Bollen 1989). Estimated measurement models are reported in "Appendix B", where all indicators of each latent variable were found to have high loadings, consistent with the results from exploratory factor analysis (see "Appendix A").

We first tested the hypothesis about worldview differences among inmates with different images of God: that is, (Benevolent \approx Authoritative < Critical < Distant) \approx No God for legal cynicism and perceived illegitimacy of punishment;

¹¹ While 12.4% of inmates said that they had no religion, the "No God" category had a smaller percentage (7%). If asked, some of the inmates might have identified themselves as "spiritual but not religious" (Jang and Franzen 2013), who had "personal beliefs about God" but disassociated themselves from organized religion.



(Benevolent > Authoritative > Critical > Distant) \approx No God for collective efficacy and existential belief; and (Authoritative > Benevolent > Critical > Distant) \approx No God for moral responsibility. Controlling for an inmate's religious affiliation and background variables and using belief in a Benevolent God as the reference category, we estimated the effects of belief in an Authoritative, Critical, Distant, and No God on the endogenous variables, whose relationships among themselves we specified as their residual correlations. This model's parameter estimates (b) and their standard error (SE) are presented in the first panel of Table 2. The next three panels show only the non-redundant coefficients of dummy variables of belief in God in the alternative models using an Authoritative, Critical, and Distant God as the reference category.

Given the complexity of (in)equalities proposed in our hypotheses, we summarized results for hypothesis-testing in Table 3 in addition to parameter estimates presented in Table 2. The first two columns of Table 3 show the endogenous variable and (in)equalities of each hypothesis, whereas the last two columns show the number and percentage of (in)equalities found consistent with hypothesis with the columns between the first and last two columns indicating whether the hypothesized (in)equality received empirical support or not, denoted by $\sqrt{}$ or by the observed (in)equality, respectively. The first panel concerns the five ultimate endogenous variables of worldviews, and the second the five mediating endogenous variables (i.e., forgiving God and four measures of religiousness). The bottom panel shows the number and percentage of each hypothesized pairwise (in)equality that received empirical support.

While we proposed no difference in *legal cynicism*, inmates with an Authoritative God were found to be more cynical toward the law than those with a Benevolent God (b=.092; see the first panel of Table 2). As anticipated, however, inmates with an engaged God were less likely to be cynical than inmates with a disengaged God (i.e., A < C, D and B < C, D), whereas three of the four hypotheses involving No God received support (i.e., A \approx N, C \approx N, and D \approx N; b=.093,-.076,-.036, all p>.05; see the bottom three panels of Table 2) with the exception being atheist inmates reporting higher levels of legal cynicism than inmates with a Benevolent God (b=.185; see the first panel of Table 2). On the other hand, as expected, inmates with a Critical and Distant God were not different in legal cynicism (b=-.040, p>.05; see the third panel of Table 2). Thus, we found eight of the ten hypothesized comparisons received empirical support (see the first row of Table 3).

Next, we found eight of the 10 comparisons in *illegitimacy of punishment* and seven in *collective efficacy* to be consistent with the hypothesis (see the second and third row of Table 3). Four of the five comparisons that failed to receive empirical support involved No God: atheist inmates reported higher levels of perceived illegitimacy of punishment (i.e., A < N and B < N) and less positive view of other inmates à la collective efficacy (i.e., A > N and B > N) than those with a disengaged God (b = .064 and .062; - .194 and - .239, respectively). A fifth

¹² Significant residual correlations among the endogenous variables were in the expected direction (see "Appendix B"), which indicated construct validity of the latent variables.



Table 2 Baseline model of worldviews among prison inmates (n = 2249): parameter estimates and their standard error (SE)

	Legal cyr	nicism	Illegitima punishme		Collective	e	Existentia belief	al	Moral responsib	ility
	b	SE	b	SE	b	SE	b	SE	b	SE
Age	005*	.002	001	.001	008*	.002	004*	.001	004*	.002
Black	.014	.032	.047*	.015	.062	.032	.144*	.022	012	.026
Other race	.083	.053	.005	.025	121*	.059	.064	.037	095	.051
Single	197*	.042	069*	.017	062	.040	005	.027	.082*	.034
Divorced/ Separated	228*	.042	074*	.017	044	.038	014	.027	.129*	.034
Widowed	327*	.072	049	.035	015	.083	045	.047	.096	.064
Children	.016	.039	.035*	.015	.028	.038	.003	.025	065*	.031
Education	099*	.010	005	.004	.006	.010	.022*	.006	.018*	.008
Prison programs	039*	.022	006	.008	.051*	.021	012	.014	.046*	.017
Length of sentence	009	.011	.053*	.005	006	.010	011	.007	012	.008
Prior offending	.026	.022	012	.008	005	.022	036*	.014	.044*	.018
Years at Angola	.007*	.002	003*	.001	.007*	.002	001	.001	.006*	.002
Catholic	.070	.042	028	.019	.025	.043	085*	.027	070*	.035
Islam	.101	.075	.059*	.023	013	.072	.046	.050	176*	.059
Other religion	.084	.069	.047*	.021	129	.069	063	.041	097	.059
No religion	.215*	.053	.010	.021	077	.046	166*	.034	104*	.041
Authoritative God	.092*	.042	003	.018	045	.043	062*	.025	.073*	.035
Critical God	.261*	.049	.045*	.019	154*	.047	305*	.033	039	.039
Distant God	.221*	.042	.038*	.018	175*	.043	344*	.031	168*	.037
No God	.185*	.063	.062*	.026	239*	.073	429*	.053	203*	.058
R^2	.183*	.020	.190*	.024	.070*	.014	.272*	.024	.124*	.019
Ref.: Authoritative God										
Critical God	.169*	.046	.047*	.017	109*	.042	243*	.030	112*	.035
Distant God	.129*	.039	.041*	.016	130*	.038	282*	.029	241*	.035
No God	.093	.061	.064*	.025	194*	.070	367*	.050	276*	.056
Ref.: Critical God										
Distant God	040	.044	007	.017	021	.041	039	.031	129*	.037
No God	076	.063	.017	.026	085	.070	124*	.050	164*	.057



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Table	2	continued

	Legal cy	nicism	Illegitim punishme	•	Collective efficacy	re	Existentia belief	al	Moral responsib	oility
	b	SE	b	SE	b	SE	b	SE	b	SE
Ref.: Distant God										
No God	036	.058	.023	.025	064	.068	085*	.049	035	.054

Model fit indices: chi-square = 1684.191, d.f. = 499, p < .05; RMSEA = .032 (90% CI .031 and .034); CFI = .880; SRMR = .029

comparison with no support was no significant difference between the two groups of inmates with an engaged God (i.e., B \approx A, b=-.045, p>.05; see the first panel of Table 2) although inmates with a Benevolent were expected to report higher levels of collective efficacy than those with an Authoritative God. On the other hand, as hypothesized, inmates with a disengaged God were more likely to perceive illegitimacy of punishment (C > A, B and D > A, B; b=.047, .045 and .041, .038) and less likely to report collective efficacy than those with an engaged God (C < A, B and D < A, B; b=-.109, -.154 and -.130, -.175).

The hypothesis about *existential belief* failed to receive empirical support in four of 10 comparisons (see the fourth row of Table 3), all of which involved No God: that is, atheist inmates were less likely to believe in meaning and purpose in life than the four groups of inmates with an image of God (N < A, N < B, N < C, and N < D; - .367, - .429, - .124, and - .085). The hypothesis about *moral responsibility* also failed to receive support in four of 10 comparisons, three of which involved No God: atheist inmates reported lower levels of moral responsibility than those with an Authoritative, Benevolent, and Critical God (N < A, N < B, and N < C; - .276, - .203, and - .164), while no significant difference was found between atheist and believer of a Distant God (- .035, p > .05). The other comparison that failed to receive support was difference between inmates with a Benevolent and Critical God found to be not significant (- .039, p > .05), though the former was expected to report higher levels of moral responsibility than the latter.

In sum, 70% (35) of 50 (5 variables \times 10 comparisons) hypothesized relationships received support. First, as expected, inmates with an engaged God tended to



^{*}p < .05 (two-tailed test)

Table 3 A summary of results from testing hypothesis about differences in beliefs and attitudes among immates with authoritative, benevolent, critical, distant, and no god

icism (B \approx A $<$ C \approx D) \approx N $<$ y of (B \approx A $<$ C \approx D) \approx N $<$ cefficacy (B $>$ A $>$ C \approx D) \approx N $<$ tefficacy (B $>$ A $>$ C \approx D) \approx N $<$ ponsibility (B $>$ A $>$ C \approx D) \approx N $<$ ponsibility (A $>$ B $>$ C $>$ D $>$ N $<$ Cod (B $>$ A $>$ C $>$ D $>$ N $<$ Cod (B $>$ A $>$ C $>$ D $>$ N $<$ consistent (A $>$ B $>$ A $>$ C $>$ D $>$ N $<$ tition (B $>$ A $>$ C $>$ D $>$ N $<$ tition (B $>$ A $>$ C $>$ D $>$ N $<$ tition (B $>$ A $>$ C $>$ D $>$ N $<$ religious coping (B $>$ A $>$ C $>$ D $>$ N religious $<$ B $>$ A $>$ C $>$ D $>$ N religious $<$ D $>$ N religious			more during and to the second	SOII							Supported	eq
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Total# supported	9	10	6	5	6	10	5	~	7	9	75	
% supported	%09	100%	%06	%05	%06	100%	%09	%08	%02	%09		75%

A check mark $(\sqrt{\ })$ refers to hypothesized relationship that received empirical support at the level of .05 (two-tailed test) A Authoritative God, B Benevolent God, C Critical God, D Distant God, N No God; ≈ no significant difference



report lower levels of legal cynicism and perceived illegitimacy of punishment, on the one hand, and higher levels of collective efficacy, existential belief, and moral responsibility, on the other, than those with a disengaged God. Second, as hypothesized, inmates with a Critical God reported higher levels of moral responsibility than those with a Distant God, whereas they were not different in legal cynicism, perceived illegitimacy of punishment, collective efficacy, and existential belief. Third, inmates with a Benevolent God reported lower levels of legal cynicism and moral responsibility and higher levels of existential belief than those with an Authoritative God, but they were not different in the perception of illegitimate punishment and collective efficacy. Finally, 60% (12) of 20 comparisons involving atheist inmates failed to receive empirical support.

Table 4 presents results from estimating the final model, where the variables of a forgiving God and religiousness were added to the initial model as mediators between the exogenous and ultimate endogenous variables. This model also had a good fit with RMSEA (.032) and SRMR (.035), smaller than their maximum cutoff (.060 and .080), though CFI (.885) did not reach the minimum cutoff (.950) and Chi square statistic (4545.426, d.f. = 1356) was significant. First, eight of ten comparisons for a forgiving God were consistent with the hypothesis as inmates with an engaged God were more likely to believe in forgiving God than those with a disengaged God. The two exceptions were inmates with a Benevolent or Distant God being no different from inmates with an Authoritative God and atheists, respectively (see the second panel of Table 3).

Table 4 and the second panel in Table 3 show that 80% (40) of 50 (forgiving God and four measures of religiousness × 10 comparisons) relationships were consistent with our expectation. Inmates with an engaged God were more likely to participate in congregations, be religious in terms of practice and closeness to God, use positive religious coping, and less likely to employ negative religious coping than those with a disengaged God. Although inmates with a Critical God were expected to show higher levels of congregation participation than those with a Distant God and atheists and those with a Distant God to show higher levels than atheists, none of the differences were significant (b = .140, -.062, -.202, all p > .05; see the bottom two panels of Table 4). In addition, inmates with a Critical God did not report higher levels of religiosity than those with a Distant God (b = .104, p > .05; see the second to last panel of Table 4), and inmates with an Authoritative and a Benevolent God were not different in positive religious coping (b = .003, p > .05; see the second to top panel of Table 4), although we expected the latter inmates to show higher levels than the former. Finally, regarding negative religious coping, three of 10 hypothesized inequalities failed to receive empirical support. That is, inmates with an Authoritative God were found to be no different from those with a Distant God and atheists (b = -.007 and .017, both p > .05; see the fourth panel of Table 4), and inmates with a Distant God and atheists were not different in the use

Only parameter estimates (b) are presented (i.e., without their standard error) due to space constraints. We specified relationships among the mediators as their residual correlations like those among the variables of worldview to avoid model misspecification given that their structural relationships were not of our interest.



Table 4 Mediational model of religiosity and worldviews among prison inmates (n = 2249); parameter estimates

		,			,	1				
	Forgiving god	Congregational participation	Religiosity	Positive religious coping	Negative religious coping	Legal	Illegitimacy of punishment	Collective	Existential belief	Moral responsibility
Age	.001	.012*	*610.	000.	*700. –	003	000.	*600. –	005*	004*
Black	.158*	.260*	.487*	.314*	001	.063	.045*	002	.075*	053
Other race	680.	.209	.382*	.161*	.030	.116*	.002	162*	.025	116*
Single	027	.047	260*	127*	114*	.199*	063*	032	.017	*680`
Divorced/ separated	017	.156	081	138*	154*	211*	*60. –	029	004	.134*
Widowed	091	.049	423*	259*	036	351*	.047	.034	.005	.120
Children	053	059	620. –	.017	.061	001	.033*	.039	.015	*090. –
Education	014	.051	*660	600. –	*890. –	*980. –	001	.002	.015*	.017*
Prison	.005	.091	.040	.013	.010	035	900. –	.048*	014	.044
programs										
Length of sentence	900. –	.082*	.027	000.	.015	007	.052*	008	011	012
Prior offending	036*	.004	133*	052*	.047	.010	014	.010	019	.053*
Years at Angola	002	012	026*	*200. –	.003	.005	003*	*600	.001	*400.
Catholic	082*	493*	231*	990. –	.118*	.029	034	.053	055*	049
Islam	044	853*	.123	008	.155	.073	.048*	018	.050	156*
Other religion	282*	.747*	366*	253*	059	.037	.051*	054	.003	.048
No religion	457*	935*	-2.223*	754*	.103	.012	.012	.173*	890.	.004
Authoritative God	012	258*	181*	.003	.217*	.053	013	030	039	.084*
Critical God	361*	643*	932*	311*	*207*	.117*	.025	040	168*	.039
Distant God	576*	503*	828*	− .426*	.210*	.104*	.035*	039	197	075



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	Forgiving god	Congregational participation	Religiosity	Positive religious coping	Negative religious coping	Legal cynicism	Illegitimacy of punishment	Collective	Existential belief	Moral responsibility
No God	753*	*902' –	- 1.857*	831*	.234*	018	*650.	.001	176*	062
Forgiving God						055	.016	.112*	*560:	.074*
Congregation participation						017*	005	.004	004	.010
Religiosity						071*	.002	.081*	.058*	900. –
Positive 1						900.	003	.017	.082*	.092*
religious coping										
Negative religious						.101*	.047*	.025	052*	039
R^2	.313*	*960'	.442*	.371*	*560:	.249*	.214*	.131*	.409	.157*
Ref.: Authoritative God										
Critical God	349*	386*	751*	314*	.290*	.064	.038*	010	129*	045
Distant God	564*	246*	647*	430*	700. —	.051	.048*	600. –	159	159*
No God	741*	448*	-1.676*	834*	.017	071	.072*	.031	138*	147
Ref.: Critical God	pc									
Distant God	215*	.140	104	116*	297*	013	.010	.001	029	114*
No God	392*	062	925*	520*	272*	135*	.034	.041	008	102
Ref.: Distant God	þ									
No God	177	202	-1.029*	404*	.025	122*	.023	.040	.021	.012
										Î

Model fit indices: chi-square = 4545.426, df = 1356, p < .05; RMSEA = .032 (90% CI .031 and .033); CFI = .885; SRMR = .035*p < .05 (two-tailed test)



of negative religious coping, either (b = .025, p > .05; see the last panel of Table 4).

In sum, 80% (40) of 50 (5 variables \times 10 comparisons) relationships of the second set of hypotheses received empirical support. Thus, taken together with the first set, 75% (75) of 100 hypothesized comparisons were empirically supported as shown in Table 3.

Comparisons of the coefficients of image of God variables before (Table 2) and after adding mediators (Table 4) indicate some support for our hypothesis about mediation of religiousness. Almost half (12) of 25 relationships between five mediators and five ultimate endogenous variables were significant in the expected direction: that is, positive measures of religiousness and a forgiving God were related inversely to legal cynicism (b = -.017 and -.071) but positively to collective efficacy (b = .112 and .081), existential belief (b = .095, .058, and .082), and moral responsibility (b = .074 and .092), whereas negative religious coping was related positively to legal cynicism and illegitimacy of punishment (b = .101and .047) and inversely to existential belief (b = -.052). Moreover, when we added the mediators, 80% (32) of 40 coefficients of God-image variables that were initially significant (see Table 2) became non-significant (19) or reduced in size (13), whereas the others remained non-significant (13), increased in size (3), or became significant (2).¹⁴ While these findings are generally consistent with our mediation hypothesis, we tested each indirect effect's statistical significance and report all significant mediation in Supplemental Table 1.

About one third (32.0%, 80) of the 250 (10 group comparisons \times 5 mediators \times 5 ultimate endogenous variables) relationships between the key exogenous and ultimate endogenous variables were found to be mediated by the measures of religiousness (56 of 80, 70.0%) and the image of a forgiving God (24 of 80, 30.0%). Thus, our hypothesis about the mediation of religiousness received partial support, specifically 22.4% (56 of 250), whereas 9.6% (24 of 250) of the significant mediation involved the image of a forgiving God. Among the religiousness variables, religiosity contributed to the explanation of 23 (28.8%) of the 80 relationships, whereas positive and negative religious coping influenced 15 (18.8%) and 18 (22.5%) of the relationships, respectively. Congregational participation, however, was not a significant mediator at all. On the other hand, 29 (36.3%) of the 80 relationships concerned differences in moral responsibility, whereas 16 (20.0%), 15 (18.8%), 14 (17.5%), and six of them (7.5%) had to do with those in collective efficacy, existential belief, legal cynicism, and illegitimacy of punishment, respectively.

For example, we found inmates with an Authoritative God tended to report higher levels of legal cynicism than those with a Benevolent God (.092; see Table 2) because they were more likely to use negative religious coping than the others (.022; see Supplemental Table 1). We also found inmates with a Critical God

¹⁴ Two coefficients that became significant, both related to legal cynicism, implied suppressor effect of religiousness, specifically, congregational participation, religiosity, and negative religious coping. That is, the variables of religiousness had suppressed differences between inmates with a disengaged (Critical and Distant) God and their atheist counterparts, in which the latter tended show lower levels of legal cynicism than the former, until controlling for variables of religiousness.



having less positive views of other inmates (i.e., collective efficacy) than those with an Authoritative God (- .109; see Table 2) was due to the latter being more likely to be religious as well as having the image of a forgiving God than the former (- .061 and - .039; see Supplemental Table 1). In addition, atheist inmates being less likely to assume moral responsibility for crimes they committed than inmates with a Critical God (- .164; see Table 2), though the two groups of inmates were hypothesized to be no different, was attributable to the atheists being less likely to be religious, use positive religious coping, and have the image of a forgiving God (- .054, - .043, and - .037; see Supplemental Table 1). 15

Discussion and Conclusion

Despite headlines claiming growing secularization and the rise of the "nones," nearly 95% of Americans express belief in God. This belief has public significance even for the agnostic and irreligious because one's image of God influences his or her beliefs, attitudes, and actions. Froese and Bader (2010) documented this prevalence of belief and proposed a typology for understanding "America's four Gods" along axes of God's engagement and judgment using national survey data. While other studies have reached similar conclusions using different general population datasets, no research to date has applied Froese and Bader's schema to an incarcerated population. Understanding how images of God shape inmates' cognition and behavior not only contributes to the literature but also has potential implication for policy.

This study addresses the research gap by testing the images of God typology among inmates at a maximum-security penitentiary. First, we found that the distribution of God-images in our prison sample closely resembled that in national samples as inmates with the image of an Authoritative God were the largest group, followed by those with a Distant, a Benevolent, a Critical God, and inmates having an image of No God (who did not believe God or were agnostic) being the smallest. Second, the data generally supported our hypotheses regarding the association between inmates' images of God and their beliefs and attitudes. With a few exceptions, inmates who believed in an engaged God demonstrated less cynical or negative attitudes towards the law and legitimacy of punishment than those who believed in a disengaged God or no God. Believers in an engaged God tended to

¹⁵ As a supplemental analysis, we estimated our models, replacing the image-of-God dummy variables with the scales of God's engagement and judgment. We found God's engagement was related inversely to legal cynicism and illegitimacy of punishment and positively to collective efficacy, existential belief, and moral responsibility, while God's judgment was related positively only to legal cynicism and moral responsibility. God's engagement was also related to all five mediators, inversely to negative religious coping and positively to the others as anticipated, whereas God's judgment was associated with all but one (positive religious coping) mediators, being associated positively with a forgiving God and negative religious coping and inversely with congregational participation and religiosity. Our test of mediation revealed that 28% (14) of 50 (2 images of God × 5 mediators × 5 ultimate endogenous variables) indirect effects via the variables of religiousness (12 of 14) and the image of a forgiving God (2 of 14) were significant. Five (35.7%) of the 14 were the effects of God's judgment mediated, whereas nine (64.3%) were those of God's engagement. Complete results are available upon request.



have not only positive views on other inmates and life's meaning and purpose but also a sense of moral responsibility for crimes they committed compared to those who believed in a disengaged God. The engaged-God believers were also more likely to perceive God as forgiving than the disengaged-God believers, who were comparable to those who do not believe in God as hypothesized.

However, it is worth noting that almost half (48%, 12) of comparisons that failed to receive empirical support were between atheist and God-believing inmates. While being hypothesized to be no different in the worldviews examined, they were more likely to be different than not with atheist inmates being cynical toward the law, perceiving their punishment to be illegitimate, assuming no moral responsibility for their past offenses, seeing other inmates as unwilling to help other people and untrustworthy, and not believing in the ultimate meaning and purpose in life compared to God-believing inmates, regardless of their image of God. These results are more consistent with the view of atheist philosophers that, if God does not exist, there is no basis of objective morality and ultimate meaning in life as well as that of theists that God is the only source of both than that of those who argue that God is not necessary for either objective morality or the existential belief.

Third, tests for the mediation effects of religiousness yielded partial support for our hypothesis. Religiousness and perception of a forgiving God tended to be associated positively with collective efficacy, moral responsibility, and existential belief and inversely with legal cynicism, illegitimacy of punishment, and negative religious coping. The inclusion of all but one of the religiousness variables generally tempered differences in beliefs and attitudes toward the law, other inmates, moral responsibility, and existential belief among inmates with different images of God, while controlling for perception of a forgiving God, which we also found was a significant mediator. The exception was congregational participation, which was not a significant mediator due in part to its being related only to one of five beliefs and attitudes (inversely to legal cynicism), ¹⁶ although we found significant differences in congregational participation among inmates with different images of God.

Individual religiousness's significant mediation of the relationship between image of God and personal beliefs and attitudes speaks to the complexity of the relationship between religious belief and practice. Our findings indicate that cognitive belief about God is indeed important but also that the belief influences religious practice. Both religious belief and practice are formative for one's attitudes toward the self, others, and social norms and institutions. Further research should elucidate the nature of this interplay between religious cognition and practice within the prison environment. In what ways does one's image of God direct his or her religious activity, and vice versa? How and why does belief in an engaged God tend toward a more engaged religious adherent?

¹⁶ Our interviews with inmates suggested a potential explanation for the limited association. One interviewee, for example, attributed some inmates' congregational participation to their desire for material benefits, like food or clothing, offered to congregations by outside religious volunteers. Mixed, extrinsic (i.e., *using* religion for safety, material comfort, access to outsiders, and inmate relations) as well as intrinsic (i.e., *living* religion) motivations for religious involvement among prison inmates have been recognized (Clear et al. 2000).



The correspondence between inmate religiousness, belief in a God actively engaged with the world, and prosocial qualities like positive views and trust of other inmates, a sense of moral responsibility, and a belief in life's meaning and purpose has important policy implications. Religious belief, especially belief in an engaged God, has not only personal spiritual significance for the adherent but potential rehabilitative value tending toward both a safer prison environment for staff and inmates alike and a safer society as former inmates return to freedom. Combined with the inverse relationships between belief in an engaged God and religiousness on the one hand and the antisocial attributes of legal cynicism, perceived illegitimacy of punishment, and negative religious coping strategies on the other, this rehabilitative value grows.

While both image of God and religious practice are highly personal choices and rightly protected by constitutional provisions even within the prison setting, our findings suggest that allowing inmates opportunity for religious practice and expression may serve a powerful public good. For those who freely choose to participate, religiousness may contribute to prosocial patterns of rehabilitation, especially when combined with the image of an engaged God of any religion. This public good of rehabilitation should inform policy deliberation regarding the future of inmates' access to religious programs and services, particularly as these opportunities face elimination due to both fiscal retrenchment (Grissom 2011; Kever 2011) and constitutional challenge (Fields 2005; Hallett et al. in press; Sullivan 2009). Rightful resistance to government endorsement or establishment of faith must not override inmates' constitutional right to free exercise of religion, whether on fiscal or ideological grounds. Within the confines of prison, inmates depend on the state to allow access to religious instruction and expression, whether through public chaplains or private volunteers. Such opportunities may take a variety of forms depending on the local resources available and the religious interests of the inmate population, including but not limited to volunteer-facilitated studies or services, chaplaincy programs, faith-based dorm units, or religious studies degree programs. The present research demonstrates that preserving this access not only honors inmates' legal and human rights but also fosters the public goods of prison safety and prisoner rehabilitation.

Few correctional environments have allowed religious participation to the extent that Angola, the site of the present study, has. With an on-site seminary program and over two-dozen inmate-led religious congregations, Angola is unique within American corrections (Hallett et al. 2016). Religious expression has a disproportionate influence at Angola relative to most if not all other American prisons. Angola is also exceptional in other respects including its relatively high average age, disproportionate number of inmates serving life without parole, and its physical situation as an 18,000-acre working prison farm. These distinctions all render Angola a uniquely valuable research site but also temper generalization of findings there. Further research should replicate the present study at more conventional prisons for comparison.



A key methodological limitation of the present study is its use of cross-sectional data in studying causal relationships, which did not allow us to address either the issue of temporal order between variables or their reciprocity. For example, inmates with an engaged God were more likely to use positive religious coping than those with a disengaged God, but the use of positive coping might have also strengthened their belief in an engaged God. Future research needs to examine these issues based on longitudinal data. Another limitation was a result of our decision to keep the scope of this study manageable: that is, we did not examine contrasts between inmates from differing faith traditions. Further analysis should disaggregate responses by religious preference (in the case of Angola, primarily Roman Catholic, Protestant, and Muslim) to test for differences between religious groups. Finally, given that our sample was from Angola's exclusively male inmates, replication of our study with female inmates would yield valuable comparisons.

Belief in a God of some kind is prevalent throughout American society. One's image of God is a personal conviction with public consequences, and thus how one understands God's judgment and engagement with the world shapes a variety of beliefs and values. Prison inmates are no exception. Greater understanding and awareness of the relationships between images of God, individual and corporate religious practice, and worldview may contribute to the cultivation of more prosocial correctional environments. Allowing inmates to explore, develop, and respond to their personal images of God honors their full human dignity while also furthering rehabilitative aims.

Appendix A

See Table 5.

Table 5 Items used in analysis

Variable	Survey items (response categories)	Loading (a)
	Based on your personal understanding, what do you think God is like?	(.852)
	(1 = Strongly disagree, 2 = Disagree, 3 = Agree, 4 = Strongly agree)	
God's	Concerned with the well-being of the world	.768
engagement	Directly involved in what happens in the world	.689
	Concerned with my personal well-being	.840
	Directly involved in what happens to me	.799



Table 5 continued

Variable	Survey items (response categories)	Loadin	g (α)
		(.834)	
God's judgment	Angered by my sins	.856	
	Angered by human sins	.846	
	How well do you feel that each of the following words <i>describe God</i> in your opinion?		(.808.)
	Critical		.622
	Punishing		.788
	Wrathful		.781
	Severe		.669
Personal beliefs	Which statement comes closest to your personal beliefs about God?		
about God	(1 = I have no doubt that God exists, $2 = I$ believe in God, but with some doubts, $3 = I$ sometimes believe in God, $4 = I$ believe in a higher power or cosmic force, $5 = I$ don't know and there is no way to find out, $6 = I$ do not believe in God, $7 = I$ have no opinion, $8 = N$ one of these)		
Religiosity	How often do you <i>currently</i> attend religious services at a place of worship?	(.801) .685	
	(1 = never, 2 = less than once a year, 3 = once or twice a year, 4 = several times a year, 5 = once a month, 6 = 2 - 3 times a month, 7 = about weekly, 8 = several times a week)		
	About how often do you <i>currently</i> pray outside of religious services?	.742	
	(1 = never, 2 = only on certain occasions, 3 = once a week or less, 4 = a few times a week, 5 = once a day, 6 = several times a day)		
	Outside of attending religious services, about how often do you <i>currently</i> spend private time reading the Bible, Koran, Torah, or other sacred book?	.792	
	(1 = never, 2 = less than once a year, 3 = once or several times a year, 4 = once a month, 5 = 2 - 3 times a month, 6 = about weekly, 7 = several times a week, 8 = everyday)		
	How close do you feel to God most of time?	.638	
	(1 = not close at all, 2 = not very close, 3 = somewhat close, 4 = pretty close, 5 = extremely close)		
	In general, how important is religion to you?	.642	
	(1 = Not at all, 2 = Somewhat, 3 = Fairly, 4 = Very, 5 = Extremely)		
Religious coping	When you think about your current situation and problems in your life, to what extent does each of the following statements apply to you?	(.861)	
	(1 = not at all, 2 = somewhat, 3 = quite a bit, 4 = a great deal)		



Table 5 continued

Variable	Survey items (response categories)	Loading (a)
Positive	I look for a stronger connection with God	.831
	I see God's love and care	.854
	I seek help from God in letting go of my anger	.667
	I try to see how God might be trying to strengthen me in this situation	.758
	I try to put my plans into action together with God	.676
	I ask forgiveness for my sins	.751
	I focus on religion to stop worrying about my problems	.382
		(.851)
Negative	I wonder whether God has abandoned me	.755
	I feel punished by God for my lack of devotion	.613
	I wonder what I did for God to punish me	.725
	I question God's love for me	.818
	I wonder whether my faith community (e.g., church) has abandoned me	.644
	I question the power of God	.652
Legal cynicism	How strongly do you agree or disagree with the following statements?	(.756)
	(1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree)	
	It's okay to do anything you want as long as you don't hurt anyone.	.621
	To make money, there are no right and wrong ways anymore, only easy ways and hard ways.	.739
	Fighting with someone in your family is nobody's business	.588
	Nowadays a person has to live pretty much for today and let tomorrow take care of itself	.548
	Laws are made to be broken	.628
Illegitimacy of punishment	Please indicate whether each of the following statements is true or false	(.621)
	(1 = false, 2 = true)	
	I am doing more time than I really deserve	.672
	I am serving time for a crime I didn't commit	.455
	I have been treated unfairly by the criminal justice system	.745
Collective efficacy	Inmates here at Main Prison?	(.752)
	(1 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree)	
Cohesion & trust	are willing to help others	.722
	can be trusted	.612
	share my moral values	.606
	help a friend having trouble or struggling	.692



Table 5 continued

Variable	Survey items (response categories)	Loading (a)
Moral responsibility	How strongly do you agree or disagree with the following statements?	(.680)
	(1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree)	
	The behavior that sent me here was wrong	.471
	I feel disgusted by what I have done in the past	.773
	I'm morally responsible for offenses I committed	.685
Existential belief	How strongly do you agree or disagree with the following statements?	(.729)
	(1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree)	
	I believe in ultimate truth in life	.575
	It is useless to try to discover the purpose of my life*	.467
	It is important to have a significant philosophy of life	.435
	I know my purpose in life	.569
	My purpose is part of a much larger plan	.778
	I do not believe there is any ultimate meaning in life*	.545
Prior offending		(.709)
Arrest	In your whole life, how many times have you been arrested?	.738
	(1 = 1 - 2 times, 2 = 3 - 5 times, 3 = 6 - 10 times, 4 = 11 - 15 times, 5 = 16 - 20 times, 6 = 21 - 25 times, 7 = 26 + times)	
Incarceration	Before coming to Angola, how many times have you been incarcerated in an adult prison?	.820
	(1 = never, 2 = 1 - 2 times, 3 = 3 - 5 times, 4 = 6 - 10 times, 5 = 11 - 15 times, 6 = 16 - 25 times, 7 = 26 + times)	
Conviction	How many times have you been convicted of the following offenses?	.640
	(1 = never, 2 once, 3 = 2 - 3 times, 4 = 4 - 6 times, 5 = 7 - 10 times, 6 = 11 - 15 times, 7 = 16 + times)	
	A violent offense (e.g., assault, rape, robbery, manslaughter, or murder)	
	A property offense (e.g., burglary, larceny, author theft, fraud, or forgery)	
	A drug offense (such as possessing, selling or manufacturing drugs)	
Length of sentence	What is the length of the current sentence for which you are serving time? (1 = less than 10 years, $2 = 11 - 20$ years, $3 = 21 - 30$ years, $4 = 31 - 40$ years, $5 = 100$ years, $6 = 100$ years, $6 = 100$	
Non-religious program	Please indicate whether you have ever been or currently participate in each of the following programs for at least a month during your current prison term $(0 = no, 1 = yes)$	
	Education program (e.g., adult basic or high school education program)	
	Vocational program (skill or trade training)	



Table 5 continued

Variable	Survey items (response categories)	Loading (a)
Education	What is the highest level of education you have completed? (1 = never attended school, 2 = 8 th grade or less, 3 = 9 th -12 th grade [no high school diploma], 4 = high school graduate, 5 = some college [no college diploma], 6 = trade, technical, or vocational training, 7 = college graduate, 8 = postgraduate degree)	
Children	Do you have children? $(0 = no, 1 = yes)$	

Appendix B

See Table 6.



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Indicator ^a	Religiosity	osity	Positive religious coping	e 1S	Negative religious coping	'e IS	Legal cynicism	ш	Illegitimacy of	_	Collective efficacy	e ve	Moral responsibility	bility	Existential belief	tial	God's engagement	nent	God's judgement	ent
	β	S.E.	β	S.E.	β	S.E.	β	S.E.	β	S.E.	β	S.E.	β	S.E.	β	S.E.	β	S.E.	β	S.E.
(a)	.684*	.016	.828*	.014	.763*	.017	.632*	.021	.671*	.028	.724*	.022	.473*	.029	*675.	.024	.774*	.018	.401*	.035
(b)	.718*	.017	*448	.013	.630*	.022	.736*	.019	.519*	.026	.591*	.027	.722*	.025	.488*	.032	.640*	.021	.394*	.037
(c)	.724*	.015	.662*	.016	.730*	.018	.577*	.021	*269.	.028	.582*	.025	.725*	.025	.422*	.028	*978.	.011	.577*	.024
(p)	.683*	.019	.762*	.015	.816*	.017	.532*	.022			*902	.023			.566*	.025	*191	.017	.763*	.018
(e)	.704*	.018	.683*	.016	*059	.022	.627*	.023							.768*	.019			.785*	.017
(f)			.747*	.019	.662*	.027									.562*	.030			.628*	.023
(g)			.391*	.016																
Endogen. variable	variable	(1)	(1) Congrega	ational _j	egational participation	ion	(2) For	(2) Forgiving God		(3) Religiosity	giosity	(4)	(4) Positive religious coping	religiou	s coping		(5) Negative religious coping	ive relig	gious co	ping
		β			S.E.		β	S	S.E.	β	S.E.	β		S.E.	ri	 Β			S.E.	
(1)		1.000	00		ı.															
(2)		004	9		.024		1.000	١.												
(3)		.292*	*3		.026		.336*	Э.	.030	1.000	I,									
(4)		.131*	*		.021		.402*	٠.	.032	.653*	.026	1.000	00	I,						
(5)		028	28		.026		154*		.032	323*	.031	.032	63	.030	30	1.	1.000		ı.	
(9)																				
(7)																				
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Endogen. variable (6) Legal cynicism	(6) Legal c	ynicism	(7) Illegitimacy of punishment	punishment	(8) Collective efficacy	e efficacy	(9) Moral responsibility	ponsibility	(10) Existential belief	tial belief
	β	S.E.	β	S.E.	β	S.E.	β	S.E.	β	S.E.
(1)										
(2)										
(3)										
(4)										
(5)										
(9)	1.000	ı,								
(7)	.218*	.032	1.000	l,						
(8)	098*	.036	000.	.033	1.000	١.				
(6)	225*	.034	328*	.040	.120*	.037	1.000	I,		
(10)	164*	.040	.055	.037	.207*	.036	.151*	.037	1.000	I,

^aIndicators (a)–(g) correspond to items (a)–(g) in Table 1 and "Appendix A"

*p < .05 (two-tailed test)



References

- Applegate, Brandon K., Francis T. Cullen, Bonnie S. Fisher, and Thomas Vander Ven. 2000. Forgiveness and fundamentalism: Reconsidering the relationship between correctional attitudes and religion. *Criminology* 38 (3): 719–753.
- Bader, Christopher D., and Paul Froese. 2005. Images of God: The effect of personal theologies on moral attitudes, political affiliation, and religious behavior. *Interdisciplinary Journal of Research on Religion* 1 (11): 1–24.
- Bader, Christopher D., Scott A. Desmond, F. Carson Mencken, and Byron R. Johnson. 2010. Divine justice: The relationship between images of god and attitudes toward criminal punishment. *Criminal Justice Review* 35 (1): 90–106.
- Baraldi, Amanda N., and Craig K. Enders. 2010. An introduction to modern missing data analyses. *Journal of School Psychology* 48 (1): 5–37.
- Bollen, Kenneth A. 1989. Structural equations with latent variables. New York, NY: Wiley.
- Clear, Todd R., Patricia L. Hardyman, Bruce Stout, Karol Lucken, and Harry R. Dammer. 2000. The value of religion in prison an inmate perspective. *Journal of Contemporary Criminal Justice* 16 (1): 53–74.
- Evans, C. Stephen. 2013. God and moral obligation. Oxford: Oxford University Press.
- Fields, Richard R.W. 2005. Perks for prisoners who pray: Using the coercion test to decide establishment clause challenges to faith-based prison units. *University of Chicago Legal Forum* 2005 (1): 541–567.
- Froese, Paul, and Christopher Bader. 2008. Unraveling religious worldviews: The relationship between images of god and political ideology in a cross-cultural analysis. *The Sociological Quarterly* 49 (4): 689–718.
- Froese, Paul, Christopher Bader, and Buster Smith. 2008. Political tolerance and god's wrath in the United States. *Sociology of Religion* 69 (1): 29–44.
- Froese, Paul, and Christopher Bader. 2010. America's four gods: What we say about god-& what that says about us. New York: Oxford University Press.
- Graham, John W. 2009. Missing data analysis: Making it work in the real world. Annual Review of Psychology 60: 549–576.
- Grissom, Brandi. 2011. Prison Chaplains pray, plead for funds. Texas Tribune, February 17. https://www.texastribune.org/2011/02/17/texas-prison-chaplains-pray-plead-for-funds. Accessed 9 Dec 2017.
- Hallett, Michael, Byron R. Johnson, W. Joshua Hays, Sung Joon Jang, and Grant Duwe. in press. U.S. prison seminaries: Structural charity, religious establishment, and neoliberal corrections. *The Prison Journal*.
- Hinze, Wesley M., F. Carson Mencken, and Charles M. Tolbert. 2011. From Obama to Osama: Image of god and trust in Muslims among the highly religious in the United States. *Sociological Focus* 44 (1): 18–36.
- Hu, Li-tze, and Peter M. Bentler. 1999. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling* 6 (1): 1–55.
- Jang, Sung Joon. 2016. Existential spirituality, religiosity, and symptoms of anxiety-related disorders: A study of belief in ultimate truth and meaning in life. *Journal of Psychology and Theology* 44 (3): 213–229.
- Jang, Sung Joon, and Aaron B. Franzen. 2013. Is being "spiritual" enough without being religious? A study of violent and property crimes among emerging adults. *Criminology* 51 (3): 595–627.
- Johnson, Byron R. 2011. More god, less crime: Why faith matters and how it could matter more. West Conshohocken, PA: Templeton Press.
- Johnson, Kathryn A., Morris A. Okun, and Adam B. Cohen. 2015. The mind of the lord: Measuring authoritarian and benevolent god representations. Psychology of Religion and Spirituality 7 (3): 227.
- Kever, Jeannie. 2011. Effort to eliminate prison chaplains met with criticism. Houston Chronicle, March 4. http://www.chron.com/news/houston-texas/article/Effort-to-eliminate-prison-chaplains-met-with-1690930.php. Accessed 9 December 2017.
- Martin, Michael. 2002. Atheism, morality, and meaning. Amherst: Prometheus Books.
- Maruna, Shadd. 2001. Making good: How ex-convicts reform and rebuild their lives. Washington, D.C.: American Psychological Association.
- Mead, George H. 1934. Mind, self and society. Chicago: University of Chicago Press.
- Megill, Jason, and Daniel Linford. 2016. God, the meaning of life, and a new argument for atheism. *International Journal for Philosophy of Religion* 79 (1): 31–47.



- Mencken, F. Carson, Christopher Bader, and Elizabeth Embry. 2009. In god we trust: Images of god and trust in the United States among the highly religious. *Sociological Perspectives* 52 (1): 23–38.
- Mencken, F. Carson, and Brittany Fitz. 2013. Image of god and community volunteering among religious adherents in the United States. *Review of Religious Research* 55 (3): 491–508.
- Muthén, Bengt O. 1983. Latent variable structural equation modeling with categorical data. *Journal of Econometrics* 22 (1–2): 43–65.
- Muthén, Linda K., and Bengt O. Muthén. 1998–2012. Mplus user's guide. Los Angeles, CA: Muthén & Muthén.
- Pargament, Kenneth, Margaret Feuille, and Donna Burdzy. 2011. The brief RCOPE: Current psychometric status of a short measure of religious coping. *Religions* 2 (1): 51–76.
- Sampson, Robert J., and Dawn J. Bartusch. 1998. Legal cynicism and (subcultural?) tolerance of deviance: The neighborhood context of racial differences. Law & Society Review 32 (4): 777–804.
- Sampson, Robert J., Stephen W. Raudenbush, and Felton Earls. 1997. Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science* 277 (5328): 918–924.
- Schreiber, Judith A., and Jean Edward. 2015. Image of god, religion, spirituality, and life changes in breast cancer survivors: A qualitative approach. *Journal of Religion and Health* 54 (2): 612–622.
- Stroope, Samuel, Scott Draper, and Andrew L. Whitehead. 2013. Images of a loving god and sense of meaning in life. Social Indicators Research 111 (1): 25–44.
- Sullivan, Winnifred Fallers. 2009. *Prison religion: Faith-based reform and the constitution*. Princeton, NJ: Princeton University Press.
- Tyler, Tom R. 2003. Procedural justice, legitimacy, and the effective rule of law. *Crime and Justice* 30: 283–357.
- Unnever, James D., Francis T. Cullen, and John P. Bartkowski. 2006. Images of god and public support for capital punishment: Does a close relationship with a loving god matter? *Criminology* 44 (4): 835–866.
- Unnever, James D., Francis T. Cullen, and Brandon K. Applegate. 2005. Turning the other cheek: Reassessing the impact of religion on punitive ideology. *Justice Quarterly* 22 (3): 304–339.
- Whitehead, Andrew L. 2012. Gender ideology and religion: Does a masculine image of god matter? *Review of Religious Research* 54 (2): 139–156.
- Whitehead, Andrew L. 2014. Male and female he created them: Gender traditionalism, masculine images of god, and attitudes toward same-sex unions. *Journal for the Scientific Study of Religion* 53 (3): 479–496.

