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On Sin and Sacrifice: How Intrinsic Religiosity and Sexual Guilt Predict Martyrdom

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Abstract

The affective, behavioral, and cognitive influence of sexual sin is investigated in this research. In Study 1, we demonstrated that religious people watching erotic (vs. neutral) images reported greater sexual guilt, which in turn increased their willingness to self-sacrifice for a cause. Extending these results, in Study 2 we demonstrated that when recalling a time when they had committed a sexual sin (vs. no sin), people with an intrinsic religious orientation believe in a more punishing view of God (akin to the Old Testament), which in turn predicts the extent to which they engaged in painful sacrificial behavior. Overall, these results suggest that sexual sins motivate self-sacrifice to repent, especially among those with an intrinsic (vs. extrinsic) religious orientation.

Keywords

Martyrdom, Religious orientation, Self-sacrifice, Sexual Guilt, and Sin

"The LORD is slow to anger and great in power, And the LORD will by no means leave the guilty unpunished. In whirlwind and storm is His way, And clouds are the dust beneath His feet."

-Nahum 1:3

ne central feature of Christianity is the notion of sin—a theme tragically depicted in the book of Genesis when Adam and Eve disobey God by consuming the forbidden fruit from the tree of knowledge in Eden. But what does it mean to sin? According to Christian belief, to sin involves (1) transgressing the boundaries delineated by the divine and (2) "missing the mark" (translated from the Greek archery term, hamartia), or failing to measure up to a standard. To sin then, means not acting forthrightly in the

divine and (2) "missing the slated from the Greek archery term, failing to measure up to a standard. Bélanger, Caouette, Sharvit, & Dugas, 2014) as revealed by traditional practices such as bodily penance (e.g., self-flagellation) and mortification

kneeling).

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Given the serious consequences associated with sinning, one would expect that most, if not all, religious individuals would readily experience guilt and repair their wrongdoings when

of the flesh (e.g., fasting, abstinence, and pious

world and straying from the path prescribed by

God, which happens by committing one of the

Bible's seven cardinal sins: Lust, gluttony,

greed, sloth, wrath, envy, and pride. In his fa-

mous poem, Purgatory, Dante (1308-1321/1937) proposes that all sins arise from love. Lust, glut-

tony, and greed are related to excessive love,

sloth is defective love, whereas wrath, envy, and

nal damnation, the idea of absolution is another

fundamental tenet of Christianity. To walk with

God again, one must confess his or her sin(s),

experience the pang of regret, and repent—an

As sinning involves the possibility of eter-

pride are love directed toward others' harm.

they sin. Interestingly, however, social psychologists have found that not all religious individuals share the same thoughts and behaviors: Religious individuals with an *intrinsic religious orientation* (i.e., those that find their primary motive in religion) are more prone to experiencing guilt and more likely to confess their wrongdoings than those with an extrinsic religious orientation (i.e., those for their religion is a means to other ends). Although these findings shed light on the role of motivation in religious morality, several questions remain unanswered.

Beyond experiencing guilt and confessing, the first question is whether believers are motivated to engage in costly self-sacrifices after committing a sin. From a rational actor perspective, it could be argued that sinners would like to do as little as possible to avoid the consequences of their moral transgressions. In that regard, perhaps confessing is psychologically sufficient to feel "off the hook," thereby alleviating the need to engage in future reparative behavior. This is an empirical question that has been skirted in previous research. Yet, revealing such dynamics would significantly improve our comprehension of how religion and emotion regulation are interconnected.

The second question pertains to the psychological mechanism explaining the relationship between religious orientation and repairing one's wrongdoing in the context of sinning. Specifically, are there cognitive processes that foster the need to repent after committing a sin? If so, do they affect people's cognitive representation of God? Research suggests that people's concept of God is relatively stable (Kirkpatrick, 1992), yet social cognitive research has found, with a high degree of consistency, that individual differences also vary across momentary situations depending on the presence of environmental cues (Bélanger, Schumpe, & Nisa, 2019; Higgins, 2008; Kruglanski & Sheveland, 2012). This suggests that, like other mental representations, the concept of God is potentially amenable to change under powerful situations. Substantiating this proposition would be a meaningful contribution to the scientific literature on religious motivation.

The third question pertains to whether sinning translates into actual behavior. So far, research has focused exclusively on self-report and cross-sectional data to measure the relation-

ship between religious orientations, guilt, and repenting. However, these methodologies do not permit making causal inferences, nor do they show that people actually engage in costly self-sacrifice after committing a sin.

The purpose of this research is to address these questions using experimental designs, mediation analyses, and a mixture of self-report and behavioral measures. We propose that for Christian believers with an intrinsic (vs. extrinsic) religious orientation, committing a sin produces emotional turmoil and a shift in how God is cognitively represented, which then motivates costly self-sacrifices to further a political or religious cause. Throughout this research, our focus will be on the sin of lust, defined as sexual pleasure "sought for itself, isolated from its procreative and unitive purposes" (Catechism of the Catholic Church, #2351). The association between lust and guilt, and the degree to which it influences self-sacrificial behavior, is relevant to urban studies given that advertisers rely to a large degree on sex appeal (e.g., provocatively dressed models and sexual behavior) when targeting young audiences (Reichert, 2003), and that such advertising is especially prevalent in urban areas where marketers assume their audience to be more diverse and less conservative than in rural areas (Dogra & Ghuman, 2010). Understanding believers' reactions to sexual thoughts as it relates to self-sacrifice could shed light on findings suggesting that urban areas are associated with a greater risk for radicalization and perpetration of terrorist attacks than rural areas (Pedahzur, 2005; Smith & Morgan, 1994).

The Experience of Sin and Guilt

Psychological research indicates that religious involvement is positively associated with the experience of guilt (Luyten, Corveleyn, & Fontaine, 1998; Nelsen & Kroliczak, 1984)—an emotion aroused by transgressing religious moral values and norms (i.e., committing a sin). According to Tangney (1990; Tangney, Wagner, Gramzow, 1992), guilt prompts people to repair their wrongdoings and avoid harming others in the future. From that standpoint, guilt is adaptive as it promotes harmonious interpersonal relationships. However, Gunderson and McCary (1979) have also shown that the more people attend church, the more they experience sexual

more accessible than when these feelings do not exist. If this is true, then intrinsic should feel more motivated to find a way to repent and restore their personal sanctity. In Christianity, experiencing pain and sacrificing oneself to further a cause, akin to the crucifixion of Jesus Christ, is the archetypical method of repenting for one's sins. Consequently, we would expect that "sinners" who believe that God is ruthless, compared to those who believe in a compassionate God, should be more determined to find a way out of their predicament. As a result, we should observe greater (1) willingness to self-sacrifice to further a cause and (2) sacrificial behavior to achieve that end.

The Present Research

The purpose of the present research was to test the relationship between religious orientation (intrinsic vs. extrinsic) and self-sacrifice in the context of sexual sin. Two studies were conducted to shed light on this phenomenon. In Study 1, we predicted that Christians exposed to sexual images (vs. neutral images) would feel sexually guilty and, as a result, would be more prone to redeem themselves by expressing a greater willingness to self-sacrifice for a cause that is personally important (but not necessarily a religious cause). In Study 2, we predicted that when feeling sexually guilty (vs. non-guilty), intrinsic (vs. extrinsic) would perceive God as ruthless (vs. kind), which in turn, would predict the number of painful sacrificial behaviors they would be willing to engage in to further a cause.

Study 1

The purpose of Study 1 was to test the hypothesis that exposing religious individuals to sexual (vs. neutral) images would induce the feeling of sexual guilt, which in turn would result in a stronger desire to repent, as measured by an increased willingness to self-sacrifice for an important cause.

Method

Participants. Ninety-six male Christian undergraduate students aged between 18 and 35 (M_{age} = 19.40, SD_{age} = 2.04) participated in the study in exchange for monetary payment. Written con-

sent was obtained from participants. Participants were invited to participate in a study on "Religion and Modern Issues."

Procedure and measures. Upon arrival at the lab, participants were ushered to a private room to ensure the privacy of their responses. Participants were told they would engage in a perceptual task in which they would be shown different advertisement pictures. A computer randomly assigned participants to one of two conditions. In the sexual images' condition (n = 43), 30 pictures of attractive, seductive women in swimwear were presented. In the neutral images' condition (n = 53), 30 images of household appliances (i.e., dishwashers, toasters, and washing machines) were presented.

In both conditions, each picture was shown for 25 seconds. During the last five seconds, a small black "X" appeared on the image and participants were instructed to report the color of the image behind that stimulus. This strategy was implemented to ensure that participants paid attention to the images. All participants reported appropriate colors more than 95% of the time. A pre-test was conducted on 20 males. For each picture, they rated the extent to which they thought they were "sexually arousing" and "provoked sexual thoughts" on a scale ranging from 1 (not at all) to 7 (extremely). We conducted ANOVA tests to compare responses to sexual vs. neutral images. Results indicated that the sexual images were more arousing F(2, 17) =155.76, p < .001 and provoked more sexual thoughts F(2, 17) = 159.04, p < .001, compared to the neutral images.

Following the perceptual task, participants completed the Revised Mosher Sexual Guilt Inventory (Mosher, 1998). This instrument consists of 50 items arranged in pairs. Each pair (e.g., "I sometimes wake up feeling excited" and "I try to forget them") is preceded by a statement related to sexuality such as "When I have sexual dreams...." Participants rated each item on a seven-point scale ranging from 0 (*not at all true for me*) to 6 (*extremely true for me*). Each pair of responses contained one favorable and one unfavorable item. Favorable items were reverse-scored, and all responses were summed to create a sexual guilt score. The scale was internally reliable (Cronbach's $\alpha = .94$).

Participants then completed the self-sacrifice

guilt and, therefore, hold more conservative sexual attitudes, exhibit restricted sexual behavior, and give credence to inaccurate sexual information. The latter is a concern from a public health perspective given that inaccurate sexual education correlates positively with the prevalence of sexually transmitted infections (Westheimer, 2005) and inadequate use of contraception (Haggstrom, Hanson, & Tyden, 2002; Van den Brink, Boersma, Meyboom-de Jong, & de Bruijn 2011).

Effect of Religious Orientation on the Experience of Religious Guilt

One important factor related to the experience of religious guilt is the distinction between intrinsic and extrinsic orientation toward religion (Allport & Ross, 1967). People with an extrinsic religious orientation (hereafter referred to as "extrinsic") tend to conceive of religion as a means to self-serving ends (e.g., friends, comfort, and good fortune), whereas intrinsically oriented individuals (hereafter referred to as "intrinsic") tend to see religion as an end in itself—the path toward spiritual enlightenment and a meaningful relationship with God (Hills, Francis, Argyle, & Jackson, 2004; Hunter & Merrill, 2013).

In research with college students, Richards (1991) found that intrinsic (vs. extrinsic) tend to experience guilt regularly—a phenomenon that has been attributed to intrinsic' (vs. extrinsic) stronger beliefs in self-forgiveness and forgiveness from God, which prevent the psychologically devastating and unbearable burden of guilt (Meek, Albright, and McMinn, 1995). In support of that proposition, a host of empirical research has shown that intrinsic are more psychologically well-adjusted than extrinsic (Bergin, 1991; Bergin, Masters, & Richards, 1987; Donahue, 1985; Watson, Morris, Foster, & Hood, 1987; Watson, Hood, & Morris, 1985). For example, intrinsic (vs. extrinsic) religious orientation positively correlates with measures of sociability, well-being, responsibility, and tolerance (Bergin, 1991). This is a surprising finding given that one would intuitively assume that selfcondemning thoughts and emotional disturbance would go hand in hand. This study aims to reconcile these findings: How can guilt-prone individuals experience greater psychological well-being than those that do not experience this negative emotion?

Distinguishing between guilt and shame, researchers have suggested that guilt-proneness is, in fact, unrelated to psychological maladjustment, whereas shame is detrimental to life satisfaction (Gramzow & Tangney, 1992; Tangney, 1991; Tangney et al., 1992). One hypothesis to explain this phenomenon is that, unlike shameprone individuals, guilt-prone individuals transcend their negative emotions by engaging in reparative behavior to redress their wrongdoings, which enables them to attain a sense of personal significance (Kruglanski et al., 2013, 2014). Providing partial evidence for this hypothesis, Dugas et al. (2016) found that, compared to a control condition, individuals who experienced a loss of self-importance (e.g., feeling rejected or incompetent) were more willing to self-sacrifice for a cause. In the same vein, Meek et al. (1995) found that, although people showing an intrinsic religious orientation were more likely to experience guilt in response to hypothetical scenarios, they were also more likely to confess their wrongdoings to make amends. The latter finding illustrates that intrinsic deal constructively with guilt and potentially move from "being a sinner to becoming a saint."

God the Punisher

In addition to the religious guilt that "sinners" may experience after transgressing, an intriguing possibility is that people's representation of God may change to reflect their emotional state. In Christianity, God is often represented in two contrasting ways. In the Old Testament, God is painted as an angry vengeful being with a powerful will to obliterate those that offend Him, while in the New Testament, God is infinitely kind, loving, and merciful. Although for obvious reasons, people tend to prefer God as represented in the New Testament, our hypothesis suggests that one's conceptualization of God may suddenly shift to the Old Testament representation for the intrinsic who feel that they have sinned. To our knowledge, no previous research has investigated this hypothesis.

We propose that, if intrinsic (vs. extrinsic) tend to feel guilty after sinning, then the negative characteristics associated with God (e.g., wrathful, punishing, etc.) could be rendered

scale (Bélanger et al., 2014) by listing a cause that is important to them and rating 10 items measuring willingness to suffer and die for this cause. For example, "I would be ready to give my life for a cause that is extremely dear to me" and "I would be prepared to endure intense suffering if it meant defending an important cause" (see Appendix A for all items). Participants rated each item on a seven-point scale ranging from 1 (do not agree at all) to 7 (completely agree). The scale was internally reliable (Cronbach's $\alpha = .70$).

Results and Discussion

Path analyses were conducted to investigate the influence of the experimental manipulation of lust (sexual vs. neutral images) on sexual guilt and self-sacrifice. The model was tested using Amos software in SPSS (IBM; Arbuckle, 2007) using maximum likelihood estimation procedures. We display means, standard deviations, and correlations for all measures in Table 1.

Table 1. Means, standard deviations, and correlations for all variables from Study 1 (n = 96)

	М	SD	SG	SS
1. Experimental condition a	.44	.49	.20*	06
2. Sexual guilt (SG)	97.09	50.57		.22*
3. Self-sacrifice (SS)	3.93	.91		

Note. ^a 0 = Neutral image; 1 = Sexual images M = mean, SD = Standard deviation * p < .05; *** p < .01; **** p < .001

Results revealed that the hypothesized model fit the data well: $\chi 2$ (df = 1, n = 96) = 1.40, p = .23, GFI = .99, CFI = .94, IFI = .95, RMSEA = .06, AIC = 11.41. As shown in Figure 1, the experimental manipulation of lust (coded 0 for neutral images and 1 for sexual images) was positively related to sexual guilt (B = 21.06, SE = 10.15, t = 2.07, p = .03; 95% CI = [.90, 41.21]), which in turn was positively related to self-sacrifice (B = .004, SE = 0.002, t = 2.27, p = .02; 95% CI = [.00003, .007]).

Indirect effects were investigated to further test the mediating role of sexual guilt between the experimental condition and self-sacrifice. Bootstrapped confidence interval estimates of the indirect effect were calculated to confirm the significance of mediation. In the present study, the 95% confidence interval of the indirect effects was obtained with 5000 bootstraps resamples (Preacher & Hayes, 2008). Results confirmed the hypothesized mediation (B = .08, SE = .06; 95% CI = [.001, .27]).

Results from Study 1 provide initial evidence that sexual (vs. neutral) images increase sexual guilt among religious individuals, which in turn increases people's willingness to suffer and die for an important cause. These findings are consistent with our reasoning that sexual images can produce sexual guilt, which in turn increases people's willingness to self-sacrifice for a cause.

Study 2

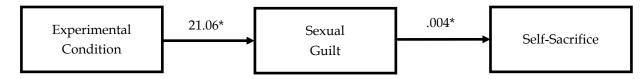
The purpose of Study 2 was to extend the results of Study 1 using a behavioral measure of selfsacrifice. We also wanted to demonstrate that the effect of sexual guilt on self-sacrifice is moderated by religious orientation and mediated by how people cognitively construe God. We expected that after recalling a sexual sin (vs. neutral condition), intrinsic (vs. extrinsic) will view God as punitive and ruthless (as in the Old Testament) as opposed to kind and benevolent (as in the New Testament; Spilka, Armatas, & Nussbaum, 1964). We also predicted that the greater the tendency to see God as punitive, the more likely intrinsic (vs. extrinsic) would be motivated to further an important cause, even if it means undergoing a painful physical experience.

Method

Participants. One hundred and fifty Christian undergraduate psychology students aged between 18 and 38 (Mage = 20.57, SDage = 2.77; 59 women) participated in exchange for monetary payment. Written consent was obtained from participants.

Procedure and measures. Participants were asked to write down a cause that is important to them (e.g., animal rights, reducing poverty, etc.). Participants then completed the Religious Motivation Scale (Allport & Ross, 1967). The Religious Motivation Scale is composed of 20 items measuring extrinsic and intrinsic motivation toward religion. Participants rated each item on a

Figure 1. Results from path analysis (Study 1)



Note. p < .05; **p < .01*, ***p < .001

seven-point scale ranging from 1 (*do not agree at all*) to 7 (*completely agree*). The intrinsic motivation subscale included items such as "It is important for me to spend periods of time in private religious thought and meditation" (Cronbach's α = .93), whereas the extrinsic motivation subscale included items such as "I pray chiefly because I have been taught to pray" (Cronbach's α = .75).

Participants were then randomly assigned to one of two experimental conditions. To induce sexual guilt (n = 75), participants were asked to recall and write about the following event without any time constraints:

"Describe an incident in which you felt sexually guilty or regretful afterwards. That is, describe an occurrence in which you felt bad about your behavior or thoughts related to sex and felt you did something wrong. Nearly everyone has experienced such things more than once; please choose an especially important and memorable event, preferably from the past two or three years. Please be as thorough as possible. Describe the background, the incident itself, and the consequences—the full story."

This manipulation was adapted from Baumeister, Stillwell, & Heatherton's (1995) work on guilt. The instructions for the neutral condition (n = 75) were the same, but the word "felt" was replaced by "did not feel."

Participants were then presented with a list of 10 adjectives to describe God taken from Spil-ka et al. (1964). They indicated on a scale from 1 (not agree at all) to 7 (completely agree) the extent to which they agreed that these words represent God. Five adjectives represented God as kind (i.e., charitable, comforting, forgiving, kind, loving; Cronbach's α = .96) and five adjectives represented God as ruthless (i.e., wrathful, punishing, damning, restrictive, critical; Cronbach's α = .85).

Next, participants were ushered to a different room to participate in a second, but allegedly, unrelated experiment. The experimenter explained that the second experiment was a study on pain, which would be inflicted using hot sauce. The experimenter mentioned that for each teaspoon of hot sauce they could eat, \$1 would be given to a charity of their choice. Each teaspoon contained three milliliters of Tabasco sauce. Participants were also told that they could leave the study whenever they felt like it. During the study, the total number of teaspoons participants ate was displayed to them in realtime on a computer screen. In the end, the experimenter recorded the total number of teaspoons of hot sauce the participants ate-this was the dependent variable of the study. The more teaspoons of hot sauce that participants ate, the higher they were rated as [willing to undergo a painful experience/self-sacrificing].

Results and Discussion

Path analyses were conducted to investigate the influence of experimental condition, and religious orientation, on people's perception of God and self-sacrificial behavior. The model was tested using Amos software in SPSS (IBM; Arbuckle, 2007) using maximum likelihood estimation procedures. We display means, standard deviations, and correlations for all measures in Table 2.

Results revealed that the hypothesized model fit the data well: X^2 (df = 1, n = 150) = 1.04, p = .30, GFI = .99, CFI = .99, IFI = .99, RMSEA = .01, AIC = 55.04. As shown in Figure 2, none of the predictors, except intrinsic motivation predicted the perception of God as a kind being (B = 1.29, SE = .11, t = 10.85, p = .001; 95% CI = [1.07, 1.50]). All paths related to extrinsic motivation and its interaction term with the experi-

Table 2. Means, standard deviations, and correlations for all variables from Study 2 ($n = 150$	Table 2. Means, standar	d deviations, and	d correlations fo	or all variables	from Study 2 ($n = 150$)
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	Μ	SD	IM	EM	KG	RG	HS
1. Experimental condition ^a	0.50	.50	.07	.06	.001	.05	.09
2. Intrinsic motivation (IM)	3.26	1.67		.36***	.69***	.10	03
3. Extrinsic motivation (EM)	3.04	.98			.32***	.08	.11
4. Kind God (KG)	2.99	1.50				.06	03
5. Ruthless God (RG)	5.27	1.90					.20**
6. Teaspoons of hot sauce (HS)	3.82	4.49					

Note. a 0 = neutral; 1 = sexual guilt. M = mean, SD = Standard deviation. * p < .05; ** p < .01; *** p < .001

mental condition were nonsignificant (all ps > .12). However, most importantly, the interaction between the experimental manipulation (coded 0 for neutral and 1 for sexual guilt) and intrinsic motivation was significantly and positively related to God's perceived ruthlessness (B = .26, SE = .13, t = 2.05, p = .04; 95% CI = [.003, .51]).

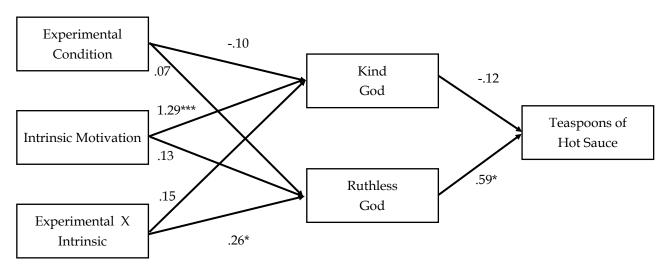
To probe the nature of the interaction, we computed the conditional effects of experimental condition on God's image as ruthless for low (1 SD below the mean) versus high (1 SD above the mean) levels of intrinsic motivation. Results showed that the effect was significant for high levels of intrinsic motivation (B = .40, 95% CI [.02 .78], t(148) = 2.08, p = .03), but not for low levels of intrinsic motivation (B = -.12, 95% CI [.48 .22], t(148) = -.72, p = .46; See Figure 3).

Lastly, we tested the b-path in the model.

Results indicated that the association between God as ruthless and the number of teaspoons people ate was significant (B = .59, SE = .24, t = 2.43, p = .01; 95% CI = [.11, 1.06]). Indirect effects were investigated to further test the mediating role of God's image between the experimental condition and teaspoons of hot sauce. Consequently, bootstrapped confidence interval estimates of the indirect effect were calculated to confirm the significance of mediation. In the present study, the 95% confidence interval of the indirect effects was obtained with 5000 bootstraps resamples (Preacher & Hayes, 2008). Results confirmed the mediation hypothesis (B = .16, SE = .11; 95% CI = [.01, .47]).

The results supported our hypothesis that when recalling a sexual sin, intrinsic (but not extrinsic) adopt a more negative image of God, which in turn predicts the extent to which intrin-

Figure 2. Results from path analysis (Study 2)



Note. p < .05; ** p < .01*, ***p < .001

Sexual Guilt Condition

Figure 3. Interaction between the experimental conditions and intrinsic motivation on God as ruthless (Study 2)

sic engage in painful sacrificial behavior for a charitable cause.

Neutral Condition

General Discussion

The present research supports the notion that sexual sin is related to greater self-sacrifice. In Study 1, we demonstrated that the underlying mechanism of this effect is sexual guilt, which confirms insights from previous research on an emotion that suggests that guilt is associated with reparative behavior (e.g., Tangney et al., 1992). In Study 2, we demonstrated that when recalling a sinful experience, people with intrinsic (as opposed to extrinsic) religious motivation adopted a more vengeful and ruthless cognitive representation of God. Furthermore, individuals with a negative representation of God were more likely to engage in a painful behavior for a charitable cause.

This work makes several contributions to our understanding of religion. First, we demonstrated that experimentally inducing sexual guilt increases (1) positive attitudes toward self-sacrifice and (2) sacrificial behaviors—these relationships have never been causally established in the psychological literature. Second, we demonstrated who is more likely to repent after sinning. Indeed, as Study 2 elucidated, intrinsic (vs. extrinsic) were more prone to repent after feeling guilty about a past sexual experience. Moreover, we provided evidence that this phenomenon was mediated by a shift in their per-

ception of God. As shown in Table 2, intrinsic and extrinsic religious orientations were both positively correlated with a benevolent representation of God. However, when intrinsic recalled having committed a sexual sin, their representation of God shifted to one wherein God is portrayed as ruthless and vengeful. This is the first time, to our knowledge, that laboratory evidence has demonstrated how people's representation of God is dynamic and can quickly change under the impact of situational demands.

The present research, however, is not impervious to methodological limitations. The sample in both studies were Christian undergraduate students. At this juncture, it is unclear whether our findings could be replicated with people from different religions and demographics. Future research could fruitfully probe these questions. Another potential question is whether the impact of sinning is fleeting or whether it has sustained psychological implications, such as influencing self-appraisal and future self-sacrificial behavior. Longitudinal research is necessary to shed light on these notions.

Conclusions

In Christianity, sinning involves the possibility of eternal damnation and the necessity to repent. In two studies, we found that feeling sexually guilty increases people's willingness to self-

sacrifice for a cause to atone for their sins. In addition to increasing their desire to repent through costly behaviors, we also found that when intrinsically religious individuals experience sexual guilt, their cognitive representation of God shifts to a more vengeful and ruthless one. These findings improve our comprehension of how religion, emotion regulation, and radicalization are dynamically interconnected.

Declaration of Conflicting Interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Appendix

The 10-item Self-Sacrifice Scale

Items

- 1. It is senseless to sacrifice one's life for a cause. (Reversed)
- 2. I would defend a cause to which I am truly committed even if my loved ones rejected me.
- 3. I would be prepared to endure intense suffering if it meant defending an important cause.
- 4. I would not risk my life for a highly important cause. (Reversed)
- 5. There is a limit to what one can sacrifice for an important cause. (Reversed)
- 6. My life is more important than any cause. (Reversed)
- 7. I would be ready to give my life for a cause that is extremely dear to me.
- 8. I would be willing to give away all my belongings to support an important cause.
- 9. I would not be ready to give my life away for an important cause. (Reversed)
- 10. I would be ready to give up all my personal wealth for a highly important cause