Priming Christian Religious Concepts Increases Racial Prejudice

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Abstract

Positive correlations have been found between several self-report measures of religiousness and racial prejudice; however, no experiment has yet examined the direct effect of religion on racial attitudes. In the current studies, persons were subliminally primed with Christian or neutral words. Then covert racial prejudice (Study 1) and general negative affect toward African-Americans (Study 2) were assessed. Participants subliminally primed with Christian words displayed more covert racial prejudice against African-Americans (Study 1) and more general negative affect toward African-Americans (Study 2) than did persons primed with neutral words. The effects of priming on racial prejudice remained even when statistically controlling for pre-existing levels of religiousness and spirituality. Possible mechanisms for the observed effect of Christian religion on racial prejudice are discussed.

Keywords

priming, religion, prejudice/stereotyping, social cognition, racial attitudes

"The role of religion is paradoxical. It makes prejudice and it unmakes prejudice" (Allport, 1954, p. 444). Allport recognized something critical about the influence of religion on prejudice; however, it was not known in the 1950s, and remains unknown, whether religion makes or unmakes prejudice. Several studies show a positive relationship between various measures of religiosity and racial prejudice (Allport & Ross, 1967; for a review, see Batson, Schoenrade, & Ventis, 1993). Yet this relationship between religiosity and racial prejudice is complex. As shown in a recent meta-analytic review (see Hall, Matz, & Wood, in press), some dimensions of religion positively correlate with racial prejudice (i.e., extrinsic religiosity, fundamentalism) whereas others negatively correlate with racial prejudice (i.e., intrinsic and quest religiosity).

Even these complicated relationships are not clear. For instance, the positive correlation between fundamentalism and prejudice disappears after controlling for authoritarianism (Hall et al., in press). However, this effect may exist only because the fundamentalism construct is present in the conventionalism cluster of right-wing authoritarianism (RWA; Mavor, Macleod, Boal, & Louis, 2009). Fundamentalism's positive correlation with prejudice remained when controlling for RWA with this component of RWA removed. In addition, intrinsic religiosity correlates negatively only with *direct* measures of prejudice—not *indirect* measures—because social desirability influences intrinsics' views toward minorities (Batson, Flink, Schoenrade, Fultz, & Pych, 1986; Batson, Naifeh, & Pate, 1978; cf. Hall et al., in press). Despite a multitude of studies that have examined this relationship between religion and

prejudice, no previous experiments exist (to our knowledge) in which some aspect of religiousness was manipulated and racial prejudice was then measured. As such, it remains experimentally untested whether exposure to religious concepts may contribute to racial prejudice.

In the current experiments, we used priming methods to activate mental representations of Christian religion in some participants but not in others; we then assessed subtle and overt racial attitudes. We questioned whether priming Christian concepts would lead to increases in both racial prejudice and general negative affect toward African Americans. Christian concepts were chosen as primes because Christianity is the most prominent religion in America, making up approximately 76.5% of the population (based on a weighted sample; Kosmin, Mayer, & Keysar, 2001). African Americans were selected as the target group in part because they are a historically disadvantaged social group in the United States. Early research indicated that a higher percentage of Christians reported more negative attitudes toward African Americans than did Jews or those with no religious affiliation (Allport & Kramer, 1946). Although much progress has been made in the United States with regard to equal rights and social justice, some negative

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sentiment toward African Americans still persists on a covert or implicit level (Greenwald & Banaji, 1995). Hall et al. (in press) suggest that because religion is often practiced within one's own racial group, religious individuals may view those outside their own racial group as out-group members. Questionnaire items were used to assess overt racial attitudes. A subtle measure of racial attitudes was also used because some people report more positive racial attitudes than they actually hold (Dovidio & Gaertner, 2004; Greenwald & Banaji, 1995; McConahay & Hough, 1976).

Priming Social Concepts and Religion

To date, most of the research on religion and prejudice has been correlational. Priming methods (Bargh & Chartrand, 2000) provide one fairly simple way to manipulate experimentally an aspect of religion (i.e., a cognitive component of religion) and determine its effect on racial prejudice. Priming involves "the temporary activation of an individual's mental representation by the environment and the effect of this activation on various psychological phenomena" (Bargh, 2007, p. 256). Multiple aspects of the environment have been shown to prime various concepts and behaviors. As detailed in *Science*, for example, people who briefly held a cup of hot coffee perceived a target person to be more warm (i.e., generous or caring) than those who briefly held a cup of ice-cold coffee (Williams & Bargh, 2008). People primed to be "polite" interrupted less than people primed to be "rude" (Bargh, Chen, & Burrows, 1996). People primed with egoism-related words helped less than people primed with altruism-related words (Walther, Müller, & Schott, 2001). People who voted in a school building were more likely to support a school funding project than were people who voted in other locations (Berger, Meredith, & Wheeler, 2008).

Using priming methodology, researchers have also temporarily activated religious mental representations and observed changes in some cognitions and behaviors. When asked to list the three greatest events in the history of the world, people primed with Christian words more often listed Biblical events than those primed with neutral words (Wenger, 2003). When primed with the word *God*, people showed a decrease in feelings of authorship—but only for believers (Dijksterhuis, Preston, Wegner, & Aarts, 2007)—and an increase in out-group cooperation (Preston & Ritter, 2009). If primed with the word *religion*, however, individuals demonstrated an increase in in-group cooperation (Preston & Ritter, 2009). Being primed with salience of religious attendance (as opposed to no prime or prayer salience conditions) led to greater support for suicide attacks (Ginges, Hansen, & Norenzayan, 2009). Thus, priming certain aspects of religion may lead to support for violent acts against a religious out-group.

When primed with religious words, people also volunteered to distribute more pamphlets for a charity (Pichon, Boccato, & Saroglou, 2007), allocated more money to anonymous strangers (Shariff & Norenzayan, 2007), allocated more money to religious in-group members than religious out-group members (Shariff, 2009), cheated less (Randolph-Seng & Nielsen, 2007), solved more anagrams (Uhlmann, Poehlman, & Bargh, 2009), favored more "virtuous" choices (only for those who held a positive image of God; Newton & McIntosh, 2009), and displayed decreased moral hypocrisy (only among intrinsically religious people; Carpenter & Marshall, 2009). This indicates that priming religion leads to prosocial behaviors and attitudes as well.

What effect might activation of Christian mental representations have on racial attitudes, if any? If religion causes prosociality (cf. Pichon et al., 2007) or tolerance as some religions teach, priming religion could engender liking or acceptance of others. However, there appears to be a possible link between priming religion and anti-Black attitudes. Uhlmann et al. (2009) suggested that priming religion increases the core American value of Protestant Puritanism (of which Protestant work ethic [PWE] is a component) because Americans primed with religion words (e.g., *heaven, salvation, God*) worked significantly harder on an anagram task than those primed with neutral words. In earlier work, Katz and Hass (1988) found that priming Protestant ethic increased anti-Black attitudes. If priming religion activates Protestant ethic values in Americans and increased Protestant ethic causes racial prejudice, then priming Christian religious concepts in Americans could cause a negative shift in attitudes toward African Americans (i.e., racial prejudice). Coupled with findings that religiousness positively correlates with racial prejudice (cf. Batson et al., 1993; Hall et al., in press) and that priming "religion" leads to in-group cooperation but not out-group cooperation (Preston & Ritter, 2009), it is conceivable that religion could cause out-group derogation or a degree of racial prejudice.

The general theory tested was that activation of Christian concepts in Americans increases racial prejudice. This is referred to as the *Christian-racial-prejudice hypothesis*. It was predicted that people subliminally primed with Christian words would report more covert and overt negative attitudes toward African Americans than those primed with neutral words.

Experiment 1

In this experiment, Christian and neutral concepts were primed subliminally (Bargh & Chartrand, 2000). After being primed, people's attitudes toward African Americans were assessed using subtle (covert) and overt measures. To determine if both experimental groups were equivalent in their degree of religiousness–spirituality, measures of these constructs were administered a few days before the priming experiment. Religiousness and spirituality were also measured so that they could be statistically controlled when analyzing the effect of priming Christian concepts on racial prejudice. Again, it was predicted that participants primed with Christian words would self-report more racial prejudice than participants primed with neutral words, even when controlling for the effects of preexisting levels of religiousness and spirituality.

Method

Participants. A total of 73 college students (57 women and 16 men; $M = 19.6$ years) were recruited from introductory psychology classes to participate in a personality and language usage study. Participants were somewhat ethnically diverse (37 Whites, 13 Asians or Pacific Islanders, 13 Hispanics, and 10 African Americans) but predominantly Protestant or Catholic ($n = 43$, $n = 17$, respectively). A few participants were of other religions (Muslim $n = 1$, Buddhist $n = 1$, "other" religion $n = 8$) or had no religious group at all ($n = 3$).[1] Each person received course credit in exchange for his or her participation.

Materials and Procedures. An online research participation scheduling program was used to recruit participants and to administer a brief online survey. The online survey included a one-item measure to control for religiousness (i.e., "To what extent do you consider yourself a religious person?"; $1 = not at all$, $7 = very much$). A six-item measure of daily spiritual experiences measured spirituality (e.g., "I feel God's love for me, directly or through others"; $1 = many times a day$, $6 = never or almost never$; Fetzer Institute/National Institute on Aging, 1999; $\alpha = .89$).

Lexical decision task (LDT). Prior to arrival at the lab, participants were randomly assigned to either the Christian or the neutral prime condition. On arrival, each participant (run individually) was situated in a lab room with a desk and a personal computer. Participants then completed a LDT designed to subliminally prime Christian or neutral concepts. The LDT was run using Inquisit (Version 3.0.3) software.[2] In the LDT, each participant was instructed that a string of letters would appear on the screen and that he or she needed to decide if the letter string was a word (e.g., *shirt, butter, switch*) or a nonword (e.g., *tureb, gribe, bift*) and to press a "word" key ("A") or a "nonword" key ("5") to indicate his or her lexical decision (see Wittenbrink, Judd, & Park, 1997).

During this LDT, half of the participants were subliminally primed with Christian words and the other half with neutral words. Participants completed 5 blocks with 16 trials each (i.e., 80 trials). In each LDT trial, participants focused on a fixation point (+) for 1 s, followed by a premask (XXXXXXX XXX) for 70 ms, a prime word for 35 ms, and a postmask (XXXXXXXXXX) for another 70 ms (see Dijksterhuis et al., 2007). Immediately after the masks and prime, people focused on a blank screen for 395 ms, at which point a letter string appeared on the screen; they were instructed to choose if this string of letters was a word or nonword. The following words were used to prime Christian religion: *Bible, faith, Christ, church, gospel, heaven, Jesus, Messiah, prayer*, and *sermon* (Wenger, 2003). Other words were used as neutral primes and as words for the "word" letter string (e.g., *shirt, butter, switch, hammer*; see Pichon et al., 2007).

Measures of prejudice. Immediately after being primed, a series of thermometer items was administered that assessed feelings toward African Americans and other social groups (i.e., $0 = cold$, $10 = warm$). Responses were reverse coded such
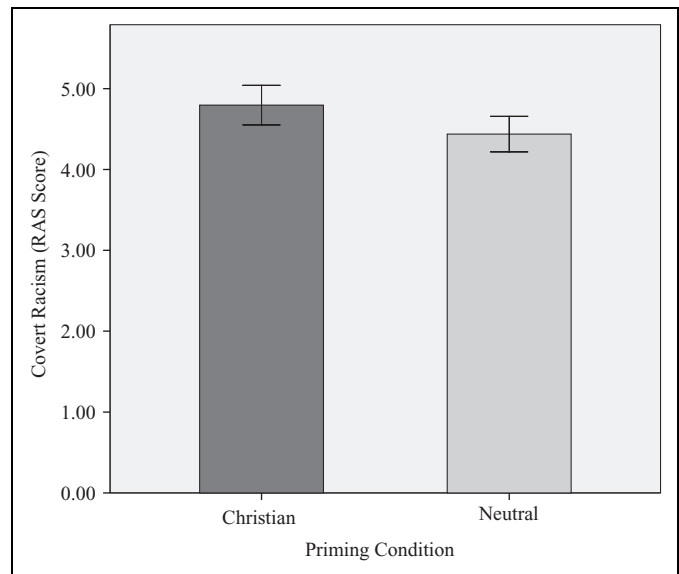
Figure 1. Mean scores on covert racism measure (Racial Argument Scale; RAS) for each priming condition (Christian or neutral) for Experiment 1 ($n = 73$)

that a higher number indicated a higher level of overt racial prejudice (i.e., $0 = warm$, $10 = cold$). Next, participants completed a subtle measure of racism, the Racial Argument Scale (RAS; Saucier & Miller, 2003). On the RAS, participants read 13 brief paragraphs, each followed by a conclusion that was either positive or negative toward African Americans. Participants rated how well the conclusion supported the argument on a 5-point scale ($1 = not at all$, $5 = very much$). This scale covertly measured racism by asking individuals to evaluate to what degree they believed arguments were supported by the conclusions rather than if they agreed with the arguments and conclusions themselves. The RAS was scored using Saucier and Miller's (2003) criteria. Higher scores indicated higher levels of subtle racism. Scores could range from 1 to 5, with 5 being the highest level of racial prejudice.

Awareness check and debriefing. After participants completed the racial attitude measures, they were debriefed using a funneled debriefing method (see Chartrand & Bargh, 1996). Although some limitations are inherent in this form of debriefing (see Pleyers, Corneille, Luminet, & Yzerbyt, 2007), it remains widely used and is one of the few methods available to check for awareness of subliminal prime words (for examples, see Chartrand, van Baaren, & Bargh, 2006; Kay, Wheeler, Bargh, & Ross, 2004). During debriefing, participants were asked what they thought of the two tasks, if they thought the tasks were related, and if they remembered any of the words in the computer task (LDT). All participants passed the awareness check (i.e., no one indicated awareness of the Christian prime words).

Results and Discussion

An ANOVA was used to examine the effect of priming (Christian vs. neutral) on RAS scores. Consistent with the

Christian-racial-prejudice hypothesis, people who were subliminally primed with Christian words reported significantly more covert racial prejudice ($M = 4.82$, $SD = 0.72$) than did people primed with neutral words ($M = 4.43$, $SD = 0.68$), $F(1, 72) = 5.46$, $p = .02$, partial $\eta^2 = .07$ (see Figure 1). Participants subliminally primed with Christian words did not self-report more cold feelings toward African Americans on the thermometer item than did people primed with neutral words.

When religiousness and daily spiritual experiences were statistically controlled using an ANCOVA, participants subliminally primed with Christian words reported more covert racial prejudice (adjusted $M = 4.82$, $SE = 0.12$) than did those primed with neutral words (adjusted $M = 4.43$, $SE = 0.11$), $F(1, 72) = 5.43$, $p = .02$, partial $\eta^2 = .07$.

This experiment reveals an influence of Christian religion on subtle racial prejudice. Priming Christian concepts in American college students caused a slight (but significant) negative shift in attitudes toward African Americans on a covert measure. This effect remained when controlling for preexisting levels of religiosity and spirituality. Although priming religion may cause some prosociality (Pichon et al., 2007; Randolph-Seng & Nielsen, 2007) and less hostility (Rothschild, Abdollahi, & Pyszczynski, 2007), it appears that priming Christian concepts also causes a negative shift in attitudes toward African Americans.

Experiment 2

The purpose of Experiment 2 was to replicate and expand the effects of priming Christian concepts on racial prejudice found in Experiment 1. In Experiment 2, multi-item measures of overt racial prejudice were used in place of the single-item measure used in Experiment 1. Subliminal priming methods were again used to activate Christian or neutral concepts. As in Experiment 1, following subliminal priming, participants were asked to complete some measures of racial attitudes. Participants were asked to complete measures of general negative affect and specific negative emotions (i.e., fear and disgust; see Cottrell & Neuberg, 2005; Phelps et al., 2000) toward African Americans. Including these measures allowed us to determine whether the slight but significant increase in covert racial prejudice observed in Experiment 1 was because of a change in a specific affective or emotional response.

Specific negative emotions such as fear and disgust underlie some forms of prejudice (Cottrell & Neuberg, 2005). For example, European Americans reported more fear of African Americans relative to European Americans, and this fear was linked to a perceived threat to safety. European Americans, however, did not express more disgust toward African Americans relative to European Americans. We wondered if the effect of priming Christian concepts on prejudice caused a general negative evaluation or a specific fear response. To test these possibilities, we included items to measure general negative affect, fear, and disgust toward African Americans (Cottrell & Neuberg, 2005). As in Experiment 1, it was hypothesized that priming Christian concepts would increase racial prejudice. It was predicted that participants primed with Christian words would report more general negative evaluations of African Americans than those primed with neutral words.

Method

Participants. A total of 43 college students (26 women, 16 men, 1 unspecified gender; $M = 18.88$ years) were recruited from introductory psychology courses. This sample was somewhat diverse with regard to ethnicity (26 Whites, 8 Hispanics, 5 African Americans, 3 missing values, and 1 Asian or Pacific Islander) but less diverse with regard to religion (28 Protestant, 11 Catholic, 1 Muslim, 1 "none," and 2 missing values).[3] Each participant received course credit for his or her participation in the experiment.

Materials and Procedures. As in Experiment 1, the department's research participation Web site was used to recruit participants and to administer a brief online survey before people arrived in the lab. The online survey included the same one-item measure of religiousness and six-item measure of daily spiritual experiences used in Experiment 1 to control for these variables. A one-item measure of spirituality (i.e., "To what extent do you consider yourself a spiritual person?"; $1 = not$ at all, $7 = very$ $much$) was also used to measure spirituality.

LDT. Prior to arrival at the lab, participants were randomly assigned to the Christian or neutral prime condition. On arrival at the lab, each participant (run individually) was situated in a lab room with a desk and a personal computer. Participants then completed an LDT designed to subliminally prime Christian or neutral concepts. The LDT was run as described in Experiment 1. Half of the participants were subliminally primed with Christian words and the other half with neutral words.

Measures of negative emotion and general negative sentiment. After being primed, each participant completed Cottrell and Neuberg's (2005) measures of negative emotions and general negative sentiment toward African Americans. The emotion measures included two fear items (*frightened, afraid*) and three disgust items (*physically disgusted, grossed out, physically sickened*). An example item read, "How *afraid* are you of African Americans, as a group?" General negative evaluation was assessed with two items (i.e., "How *negative* do you feel towards African Americans, as a group?" and "How much do you *dislike* African Americans, as a group?"). All items appeared on the same page and were rated on a 9-point scale ($1 = not$ at all, $9 = extremely$).

Awareness check and debriefing. The same funneled debriefing procedure described in Experiment 1 was used to check for awareness or suspicion. No participants included in the analyses reported being aware of the primes or suspicious about the purpose of the experiment.[4]

Results and Discussion

Data reduction. Following scoring instructions detailed by Cottrell and Neuberg (2005), we summed the two fear items,
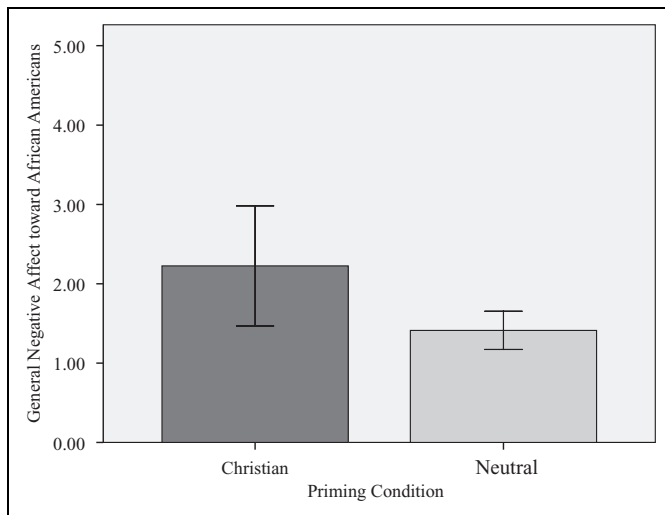
Figure 2. Mean scores on general negative affect toward African Americans for each priming condition (Christian or neutral) for Experiment 2 (*n* = 43)

the three disgust items, and the two general negative evaluation items to create composite variables (i.e., fear African Americans, disgust African Americans, etc.). Higher scores on each composite variable indicate more negative attitudes toward African Americans.

The effect of priming Christian concepts on prejudice. An ANOVA was computed to test the effect of the prime (Christian vs. neutral) on racial group evaluation. People primed with Christian words reported more general negative affect toward African Americans ($M = 2.23$, $SD = 1.62$) than those primed with control words ($M = 1.41$, $SD = 0.56$), $F(1, 42) = 5.11$, $p = .03$, partial $\eta^2 = .11$ (see Figure 2).

As in Experiment 1, we examined the effect of the prime when controlling for self-reported religiosity and spirituality using an ANCOVA. Participants subliminally primed with Christian words reported more general negative affect toward African Americans (adjusted $M = 2.22$, $SE = 0.27$) than those primed with neutral words (adjusted $M = 1.33$, $SE = 0.24$) when religiousness and spirituality were statistically controlled using the one-item measures of religiosity and spirituality, $F(1, 40) = 6.04$, $p < .05$, partial $\eta^2 = .14$.[5] This trend remained when using the six-item daily spiritual experiences measure to control for spirituality.

Finally, we examined whether people primed with Christian concepts expressed more fear or disgust toward African Americans than people primed with neutral words, and they did not. The increased racial prejudice caused by priming Christian concepts does not appear to be because of differential experiences of fear or disgust.

General Discussion

Taken together, results indicate that activation of Christian religious concepts increases subtle (Experiment 1) and overt (Experiment 2) prejudice toward a historically disadvantaged

racial group. However, priming Christian concepts did not appear to cause a shift in reported underlying emotion, such as fear or disgust toward African American. These priming effects persisted when controlling for preexisting levels of religiosity and spirituality.

Christian Concepts, Racial Prejudice, and Possible Mediators Between the Two

The current results add to paradoxes in the priming religion literature. Recall that priming religion leads to both positive and negative changes in attitudes and behaviors. For instance, priming religion increases prosociality (Pichon et al., 2007), generosity (Shariff & Norenzayan, 2007), cooperation (Preston & Ritter, 2009), honesty (Randolph-Seng & Nielsen, 2007), and problem-solving effort (Uhlmann et al., 2009) and decreases moral hypocrisy (Carpenter & Marshall, 2009). In contrast, priming religion also increases aggression (Bushman, Ridge, Das, Key, & Busath, 2007), submitting to requests for revenge (Saroglou, Corneille, & Van Cappellen, in press), support for terrorism (Ginges et al., 2009), and altruistic punishment among religious people (McKay, Efferson, & Fehr, 2009). Some experiments are paradoxes within themselves, demonstrating prosociality toward one group and discrimination toward others: Priming religion leads to allocating more money to in-group members than out-group members (Shariff, 2009) and helping religious individuals less than individuals whose group identity has been made more salient (Randolph-Seng, 2009). These findings suggest that "religious prosociality is not extended indiscriminately: the 'dark side' of within-group cooperation is between-group competition and conflict. The same mechanisms involved in in-group altruism may also facilitate out-group antagonism" (Norenzayan & Shariff, 2008, p. 62). But why does priming religion or Christian concepts lead to both negative attitudes or behaviors and prosociality?

One possibility is that activation of religious concepts spreads activation to related concepts, which increases the probability that the closely related concepts will be expressed. Bargh and Chartrand (2000) call these mental activations of related concepts "unintended processing effects" (p. 270). Thus, priming religion could activate both positive and negative concepts. For example, religion in America—especially Christianity—is strongly intertwined with core American values (e.g., Protestant Puritanism; Uhlmann et al., 2009). In examining different international groups (i.e., Americans and Canadians), only Americans primed with religion words worked significantly harder on an anagram task than did people primed with neutral words (Uhlmann et al., 2009). Because this effect was only seen for Americans, Uhlmann et al. (2009) interpret it as an effect of Puritanism in American moral cognition. They suggest that religion primes activate Protestant Puritanism concepts (of which Protestant ethic is a component) in American individuals. Protestant ethic, in turn, has been shown to activate anti-Black attitudes (Katz & Hass, 1988).

Other possible mediators or mechanisms exist. For example, priming Christian concepts could increase RWA, religious

fundamentalism, or political conservatism. Both RWA (Altemeyer, 1981; Laythe, Finkel, & Kirkpatrick, 2001) and religious fundamentalism (Altemeyer, 1992) are correlated with religiosity and prejudice, whereas political conservatism is related to justification of inequality (Jost, Glaser, Kruglanski, & Sulloway, 2003). Furthermore, associations between religiosity and racial prejudice are often attributable to authoritarianism and not necessarily to a component of religiousness (Laythe et al., 2001; Rowatt & Franklin, 2004), but this effect may exist because of the overlap between fundamentalism and the conventionalism component of RWA (Mavor et al., 2009). Similar effects are seen with fundamentalism. When controlling for fundamentalism, the relationship between religion and value-violating prejudices against out-groups such as homosexuals is not only eliminated but also reversed (Fulton, Gorsuch, & Maynard, 1999). Thus, either of these variables (i.e., RWA or religious fundamentalism), PWE, or political conservatism could mediate the relationship between priming Christian concepts and racial prejudice.

Religion's possible activation of other dimensions or core values (e.g., RWA, fundamentalism, political conservatism, or PWE) could lead to both hard work and in-group prosociality but also denigration of out-group members who are perceived as violating that particular core value. Denigration may occur because religion is often practiced as an in-group phenomenon, causing individuals to view racial minorities as out-group members who do not share their core values (Hall et al., in press). Our findings fit with this broader idea that religion facilitates both in-group prosociality and out-group antagonism. In fact, priming Christian religion leads to significant increases in negative attitudes toward other out-groups (e.g., gay men, Muslims, and atheists) relative to a Christian in-group (Johnson & Rowatt, 2009). This could explain the paradoxical relationship between priming religion and its effects on attitudes and behaviors. Future experiments are needed that prime religion and measure possible mediators to determine why religion causes increases in racial prejudice.

Caveats and Conclusions

Caveats. A few caveats and minor limits of our experiments merit comment. It should be noted that, in both experiments, the baseline level of covert racial prejudice was in the neutral range. Furthermore, the magnitude of effects in this study was small. Priming Christian concepts did not cause a large increase in racial prejudice, but it did lead to a small, significant increase. As such, we cannot conclude that priming Christian concepts causes racism per se; our data do not support this conclusion. However, we did find that priming Christian concepts causes a negative shift in existing racial attitudes and that the direction of the shift represents a slight but significant increase in racial prejudice.

Future research. Future research could examine whether the effects of priming religion exist in other cultures. Because certain concepts (e.g., PWE; see Uhlmann et al., 2009) are predominant in American culture, such effects may not be found in

cultures where PWE is not a core value. However, priming more general religious concepts in other cultures could cause derogation of out-group members who violate a religious value or worldview within that culture. To examine the effects of religion on prejudice across cultures and to generalize the current experiments' findings, future studies should examine the effect of more general religion primes on racial prejudice both within America and across cultures.

Future research could also examine the effect of priming Christian concepts on individuals in other religious groups (e.g., atheism, Islam, Judaism, Buddhism, etc.). Because of the limitations of our population (a southern Christian university), such analyses were not possible in the current experiments.

Finally, future research could also examine whether specific environments prime social evaluations or behaviors. For instance, if context primes lead to changes in individuals' behaviors—such as showing increases in voting for school projects when voting in a school building (Berger et al., 2008)—Christian context primes could cause increases in racial prejudice or other social processes. Being present in a Christian church or a cathedral could affect evaluations of historically disadvantaged social groups or those who have inconsistent worldviews. Hence, context priming of Christian concepts could lead to more negative attitudes toward atheists, gay men, lesbians, and others whose behavior is perceived to be inconsistent with a Christian worldview or who are perceived as lying outside the religious in-group. This effect would probably be less pronounced in people with an internal motivation to respond without prejudice (Devine, Plant, Amodio, Harmon-Jones, & Vance, 2002; Plant & Devine, 1998).

Conclusion. These experiments are the first to document that activation of Christian concepts by priming affects racial attitudes and provide some insight into the "paradoxical" relationship between religion and prejudice (Allport, 1954). This study represents the first experimental demonstration for the detrimental impact of religious priming on prejudice. What now remains to be demonstrated is what mechanisms underlie this relationship between religion and racial prejudice.

Notes

1. Some participants were excluded prior to analyses if they did not have online survey data ($n = 5$), had patterned responding (e.g., 9s or 10s toward all social groups on the thermometer items) on the attitude measures ($n = 10$), or were confused by the lexical decision task ($n = 2$).
2. See http://www.millisecond.com for software details.
3. Participants were excluded on the following criteria: (a) were suspicious ($n = 7$; indicated they saw the prime words), (b) had missing data on key variables ($n = 3$; e.g., affect items), (c) were inattentive ($n = 2$), or (d) had patterned responding on the affect measures ($n = 8$). We noticed that the frequency of patterned responding was sensitive to the time data were collected. Seven of eight patterned responding participants completed the experiment during the final 2 days of a semester. A one-sample chi-square test revealed that a higher proportion of the patterned responding occurred in the last 2 days of the semester ($p = .88$)

than earlier in the semester ($p = .12$), $\chi^2(1, N = 62) = 4.50$, $p = .03$. No other participants who completed the experiment in the final 2 days of the semester showed patterned responding or other signs of being fatigued or hurried; thus, they were included in the analyses.

4. See Note 3.

5. Two participants were dropped from the analyses controlling for religiosity and spirituality because they failed to answer the items related to these measures.

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Declaration of Conflicting Interests

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