

God as a White Man: A Psychological Barrier to Conceptualizing Black People and Women as Leadership Worthy

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In the United States, God is commonly conceptualized as the omnipotent and omniscient entity that created the universe, and as a White man. We questioned whether the extent to which God is conceptualized as a White man predicts the extent to which White men are perceived as particularly fit for leadership. We found support for this across 7 studies. In Study 1, we created 2 measures to examine the extent to which U.S. Christians conceptualized God as a White man, and in Study 2 we found that, controlling for multiple covariates (e.g., racist and sexist attitudes, religiosity, political attitudes), responses on these measures predicted perceiving White male job candidates as particularly fit for leadership, among both Black and White, male and female, Christians. In Study 3, we found that U.S. Christian children, both White and racial minority, conceptualized God as more White than Black (and more male than female), which predicted perceiving White people as particularly boss-like. We next found evidence to suggest that this phenomenon is rooted in broader intuitions that extend beyond Christianity. That is, in a novel context with novel groups and a novel god, U.S. Christian adults (Studies 4 and 6), atheist adults (Study 5), and agnostic preschoolers (Study 7), used a god's identity to infer which groups were best fit for leadership. Collectively, our data reveal a clear and consistent pattern: Attributing a social identity to God predicts perceiving individuals who share that identity as more fit for leadership.

Keywords: God, intergroup cognition, development, religion, social hierarchy


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"Everyone must submit to governing authorities. For all authority comes from God, and those in positions of authority have been placed there by God"

—Romans 13:1

Most people are religious (Pew Research Center, 2012; Zuckerman, 2007), and a large body of classic and contemporary research suggests that *why* and *where* people practice their religion can have hierarchy-enhancing consequences (Hall, Matz, & Wood, 2010). Regarding the *why*, people who are religious for extrinsic reasons (e.g., tradition, social pressure), compared with those who

are religious for intrinsic reasons (e.g., personal values, search for meaning), tend to be more fundamentalist and authoritarian, which promotes the worldview that social hierarchies are fair and just (Allport & Ross, 1967; Federico & Sidanius, 2002; Jost et al., 2014; Kay, Gaucher, Napier, Callan, & Laurin, 2008; Marx, 1967; Rosenblith, 1949). Regarding the *where*, people mostly attend church with members of their own race, which can increase in-group biases (Chaves & Anderson, 2014; Dougherty & Huyser, 2008; Dunham, 2018; Scheitle & Dougherty, 2010; Tajfel, 1970). We propose that the hierarchy-enhancing consequences of religi-

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osity stem not only from *why* or *where* people practice their beliefs, but also, from *who* people believe in. This may be particularly the case for monotheistic faiths that espouse a singular supreme being. Our research was therefore conducted within the monotheistic context of U.S. Christianity.

According to The Bible, God, “determines the number of the stars; he gives to all of them their names. Great is our Lord, and abundant in power; his understanding is beyond measure” (Psalm 147:4–5). Indirectly, even, the metaphors commonly used to describe God (e.g., “The Lord is high over all nations, and his glory is higher than the heavens”; Psalm 113:4), represent the conception of God as occupying a high vertical space; a conceptual position of power (Meier, Hauser, Robinson, Friesen, & Schjeldahl, 2007). Indeed, across a variety of religious and social contexts, (e.g., Christianity, Islam, the Tyva Republic), people report believing in God(s) capable of doing all that can be done and knowing all that can be known (Barrett, 1999; Bering & Johnson, 2005; Gray, Gray, & Wegner, 2007; Heiphetz, Lane, Waytz, & Young, 2016; Luhrmann, 2012; Purzycki, 2013).

In addition to believing that God is omnipotent and omniscient, U.S. Christians often conceptualize God as a White man (Jackson, Hester, & Gray, 2018). Jackson et al. (2018) presented U.S. Christians with pairs of subtly distinct human faces and asked them to select which face best characterized what they imagined God looked like. They then averaged across the selected faces to generate a single composite face, and what emerged was the face of a White man. Notably, this was the case for Black and White participants, men and women (for our own replication, see Study S1 in the online supplemental materials), which is unsurprising given that The Bible clearly refers to God as The Father and with male pronouns, and given that in U.S. society, art, literature, and media have typically depicted God and Jesus as White men. For example, in 2003, the U.S. film, *Bruce Almighty*, made headlines for counternormatively presenting God as a Black man, played by Morgan Freeman (Freedman, 2003). In 2018, we analyzed Google search engine results for the word “God” and found that out of all of the images that portrayed God in human form, 72% depicted a White man (6% depicted Morgan Freeman).¹ Moreover, *The Head of Christ*, a 1940 portrait of Jesus by American artist Warner Sallman, which has been printed more than 500 million times, depicts Jesus as a White man (Blum & Harvey, 2012). Notably, Jesus is portrayed more commonly than God, though Jesus is often interpreted as God in human form, thereby associating Godliness with Whiteness and maleness.

Historians have long argued that in the United States, the depiction of God as a White man has been used as a tool to empower White men and disempower Black people and women (Williams, 1987). In their seminal work, Blum and Harvey (2012) argued that after the U.S. Civil War, which granted full U.S. citizenship to Black people and fractured White nationalism across the Northern and Southern borders, White people feared that the formerly enslaved Black people would seek retribution for the atrocities experienced during slavery. To unify White people and associate Whiteness with forgiveness, and to pacify Black people out of militancy, images of a forgiving White savior were mass-produced, which eventually led to White and Black Americans conceptualizing God as White (Blum & Harvey, 2012). As one infamous example, Johnson (2015) reports that, when in 1898 the prominent Black minister, Henry McNeal Turner, declared that

“God is a Negro,” many of his fellow members of the African Methodist Episcopal Church refused to believe him.

Regardless of whether the *depiction* of God as a White man was in fact used in the United States as a tool to reinforce social hierarchy, empirical research suggests that the *conception* of God as a White man may indeed do so, even among Black people and women. In a series of seminal studies, social psychologist Simon Howard found that exposure to White religious iconography (e.g., White Jesus) increased Black Americans’ pro-White attitudes, and that this effect was predicted by exposure to White Jesus, rather than exposure to White men more broadly, suggesting that attributing a race to a supernatural entity uniquely predicted racial prejudice (Howard & Sommers, 2015, 2017, 2019; see also Johnson, Rowatt, & LaBouff, 2010). Relatedly, Howard, Oswald, and Kirkman (2018) found that individuals who conceptualized God as male (i.e., most of their participants) reported higher levels of fundamentalism and authoritarianism, which are known predictors of pro-White and promale attitudes (Sherkat, 2017; Sibley & Duckitt, 2008). These past studies provide useful insights though several questions remain unanswered. That is, although exposure to religious iconography might predict prejudice, what remains unclear is whether this stems from subsequent increases in fundamentalism, or more specifically from attributing a social identity to God. What also remains unclear is whether attributing a social identity to God licenses inferences about who is fit to lead, which would establish a more direct link between religious ideology and the reinforcement of social hierarchy, and whether this is the case outside of the Christian context, which would pinpoint a broader mechanism by which these effects emerge. The present research tested these and other questions.

We theorized that the extent to which people conceptualize God as a White man would predict the extent to which they perceive White men as more fit for leadership than Black people and women. Our theorizing was as follows. Humans, like many other primates, are highly efficient at recognizing social hierarchies (Gülğöz & Gelman, 2017; Horwitz, Shutts, & Olson, 2014; Olson, Shutts, Kinzler, & Weisman, 2012; Pun, Birch, & Baron, 2017; Roberts, Ho, Gülğöz, Berka, & Gelman, 2019; Thomas, Thomsen, Lukowski, Abramyan, & Sarnecka, 2018; Thomsen, Frankenhuys, Ingold-Smith, & Carey, 2011). After a hierarchy is encoded, it is often attributed to dispositions (e.g., high-status individuals are naturally ambitious, brilliant, and dominant, whereas low-status individuals are naturally lazy, dumb, and submissive), and not to social systems (e.g., high-status individuals are systematically supported and prevented from becoming low-status, whereas low-status individuals are systematically oppressed and prevented from becoming high-status), which motivates hierarchy-reinforcing behaviors (e.g., people try to affiliate, learn, and share resources with

¹ We searched “God” in Google Images and downloaded the first 864 images that populated. Two research assistants filtered out images that were irrelevant to religion or Christianity (e.g., pictures related to the video game God of War, Morgan Freeman), and then among the remaining pictures, coded for those that depicted a humanized God. In particular, they coded for race (Black, White, other, unspecified) and gender (male, female, unspecified). All discrepancies were resolved through discussion. We found that among the 94 images that were both relevant to religion or Christianity and depicted a humanized God, 87.5% depicted a White person (77 White, two Black, nine unspecified), 73.9% depicted a male (65 male, four female, 19 unspecified), and 71.6% depicted a White male.

high-status individuals; Bian, Leslie, & Cimpian, 2017; Bian, Leslie, & Cimpian, 2018; Charafeddine et al., 2016; Dovidio & Gaertner, 2000; Jost & Hunyady, 2005; Pauker, Xu, Williams, & Biddle, 2016; Thomas et al., 2018). These processes have been shown to motivate hierarchy-enhancing behaviors among both high-status and low-status groups (Jost & Hunyady, 2005; Sidanius & Pratto, 1999). For instance, high-status individuals (as a function of race, gender, or experimental manipulations) often prefer their high-status ingroup, whereas low-status individuals less often prefer their low-status ingroup, reasoning that high-status outgroups are more competent, good, and likable (Bian et al., 2017; Clark & Clark, 1947; Newheiser & Olson, 2012; Roberts et al., 2019). We propose that beliefs about God's identity operate in a similar manner: Conceptualizing God as a White man might license the inference that White men are best fit to lead, among White and Black Christians, men and women, adults and even young children.

Overview of Studies

In Study 1, we created two measures to examine the extent to which U.S. Christians conceptualize God as having a race and a gender: one relatively indirect measure and one relatively direct measure (see below). In Study 2, we recruited Black, White, male, and female U.S. Christians to examine the extent to which individual differences on these measures predicted participants' evaluations of Black, White, male, and female job candidates (while controlling for several covariates, including religiosity, conservatism, racial prejudice, and sexist attitudes). In Study 3, we recruited a diverse sample of U.S. Christian children (ages 4 to 12) to examine whether they attributed a race and a gender to God, and whether doing so predicted conceptions of who was boss-like. Notably, in Studies 1–3, we were particularly interested in the conception of God as a White man, given that God is most commonly depicted as such in the United States. In Studies 4–7, we widened our scope beyond the context of the Judeo-Christian God. Specifically, we introduced U.S. Christian adults (Study 4) and U.S. atheists (Study 5) to an unfamiliar god from an unfamiliar context who created unfamiliar groups, and we tested whether manipulating beliefs about that god's identity shaped subsequent beliefs about leadership. We then tested the reverse pathway: whether U.S. Christian adults (Study 6) and U.S. agnostic preschoolers (Study 7) used a god's identity to infer who is in leadership, and whether they additionally used who is in leadership to infer a god's identity. Collectively, these studies shed new light on how beliefs about heaven shape beliefs about earth (and vice versa). For all studies, we report only the significant effects of interest in the main text (e.g., we do not report effects yielded by the covariates), but all model outputs are presented either in the article's tables or in the [online supplemental materials](#). All studies received IRB approval. Data, code, materials, and preregistrations are available via the Open Science Framework (i.e., OSF): osf.io/cdn69/?view_only=33b1eef350234021a56afe30063b6dac.

Study 1

The primary purpose of Study 1 was to establish two individual difference measures that assessed the degree to which participants attributed a social identity to God, with a particular interest in the

extent to which participants conceptualized God as an old White man. Although concepts of God's race and gender were of primary interest, to gain a fuller understanding of participants' beliefs, we also assessed beliefs about God's age (another marker of authority). In one measure, participants were indirectly asked about God's age, race, and gender via a forced-choice task (i.e., indirect measure). In a second measure, participants were directly asked about God's age, race, and gender via survey items (i.e., direct measure). Both measures were relatively direct, compared with the more indirect measures employed in past research (Jackson et al., 2018), but were so to varying degrees (i.e., our indirect measure was less direct than our direct measure).

We used two distinct measures for three reasons. First, we questioned whether responses would vary across indirect and direct measures. That is, past work suggests that U.S. Christians represent God as a White man (i.e., as measured by a reverse correlation task; Jackson et al., 2018), though an untested question is whether U.S. Christians actually believe this to be true. In the domain of race concepts, conceptual representations need not be endorsed (Banaji & Greenwald, 2013), and endorsed beliefs are particularly predictive of the most vicious forms of intergroup biases and conflict (Kteily & Bruneau, 2017). In the domain of God concepts, people may conceptually represent God as more White than Black, by virtue of U.S. imagery (Jackson et al., 2018), though they may not actually believe this to be true; in fact, they may resist it. Second, our goal was to establish two distinct measures for use in subsequent studies (e.g., whether they predict perceptions of leadership), in which we wanted to ensure that our findings generalized across measures. Third, we wanted to establish a sensitive measure for children (Study 3). That is, we did not want to directly ask children about their beliefs about God (e.g., "Do you think that God is White?") because we did not want to teach children to associate God with race or to upset parents and ministers by doing so. Instead, our goal was to establish generalizability across our indirect and direct measures with adults, and then rely on the indirect measure when working with children.

Method

Participants. We recruited four groups of U.S. Christians ($N = 444$): 96 White men ($M_{\text{age}} = 52.39$, $SD = 13.71$, bachelor's degree or higher = 33%), 122 White women ($M_{\text{age}} = 47.48$, $SD = 16.48$, bachelor's degree or higher = 34%), 110 Black men ($M_{\text{age}} = 41.9$, $SD = 14.56$, bachelor's degree or higher = 33%), and 116 Black women ($M_{\text{age}} = 34.48$, $SD = 11.87$, bachelor's degree or higher = 29%). We targeted roughly 100 participants per participant group. Post hoc power analyses confirmed that our sample was sufficiently powered to detect small effects ($\alpha \leq .05$, $1 - \beta \geq .80$, $OR \geq 1.40$, $f^2 \geq .02$).² Across all studies, adult participants were recruited via TurkPrime Prime Panels, which is an online crowdsourcing platform. Participants who participated in any study were tagged and prevented from completing in subsequent studies. Moreover, participants who did not meet our sampling criteria were excluded from the final dataset (e.g., in Studies

² Power analyses were conducted via G*Power (Faul, Erdfelder, Buchner, & Lang, 2009). Chen, Cohen, and Chen (2010) suggest $OR = 1.70$ is a small effect for logistic regression models, and Cohen (1988) suggests $f^2 = .02$ is a small effect for linear regression models.

1, 2, 4, and 6, participants who did not believe in God or who were not Black or White were excluded from the dataset).

Materials and procedure.

Conceptions of God. After providing information about their demographic and religious backgrounds, participants completed two measures that we developed. First, participants completed an indirect measure in which they were shown pairs of faces that differed in age (e.g., White boy vs. White man), race (e.g., White woman vs. Black woman), or gender (e.g., Black man vs. Black woman) and asked to select which face within each pair looked more like God. There were 12 pairs of faces, four within each domain (i.e., race, gender, age), presented one at a time. Across participants, pairs of faces were presented in random order and the left-right positions of the faces within each pair were counterbalanced. For each pair, participants were asked, "Which person do you think looks most like God?" Faces were drawn from the CAFE (Lobue & Thrasher, 2015) and NimStim (Tottenham et al., 2009) stimulus sets, and equated for perceived race, gender, age, and attractiveness. Second, participants completed a direct measure in which they were asked (in random order), "Do you think God is . . . (a) old or young, (b) White or Black, and (c) male or female" (1 = *most likely [old]/[White]/[male]*, 4 = *neither [old]/[White]/[male] nor [young]/[Black]/[female]*, 7 = *most likely [young]/[Black]/[female]*). Responses were reverse-coded such that higher scores reflected the belief that God is an old White man.

Covariates. Participants also completed additional measures that were included as covariates: a two-item feeling thermometer that assessed racial prejudice ("Please rate how cold/warm your feelings are toward the following group:" Black people/White people, 1 = *very cold*, 7 = *very warm*, $M = -.18$, $SE = .06$),³ a 22-item measure of hostile and benevolent sexism (e.g., "Most women interpret innocent remarks or acts as being sexist"; "Women should be cherished and protected by men"; 1 = *strongly agree*, 7 = *strongly disagree*; Glick & Fiske, 1997; $M = 3.98$, $SE = .04$), and a two-item measure of political attitudes (i.e., "In terms of [economic/social] issues, how would you describe your political attitudes and beliefs?" 1 = *very liberal*, 7 = *very conservative*, $M = 3.95$, $SE = .08$).

Data analyses. First, we analyzed the responses on the indirect measure by conducting a series of mixed-effects logistic regression models in which participant race (White, Black; effect-coded with Black = -1), gender (male, female; effect-coded with female = -1), and an interaction between race and gender were our primary fixed-effects of interest, participant age, education, religiosity, church attendance, racial prejudice, sexist attitudes, and political attitudes were additional fixed-effect covariates (all standardized), with random intercepts by participant ID and stimulus item. The dependent measures for these analyses were participants' trial-by-trial indication that God looked more like the image of the old person (0 = young, 1 = old), the White person (0 = Black, 1 = White), or the male person (0 = female, 1 = male) on the forced-choice items (four trials per participant, per analysis). Second, we analyzed the responses on the direct measure by conducting a series of linear regression models with the same fixed-effect structure, but no random intercepts. The dependent variables for these analyses were participants' Likert-scale responses to questions about whether God was young versus old (1 = *young*, 7 = *old*), Black versus White (1 = *Black*, 7 = *White*), or female versus male (1 = *female*, 7 = *male*) on the direct

questions. Additional one-sample t tests were conducted to compare responses across questions to chance (i.e., .5 on the indirect measure) or to the midpoint (i.e., 4 on the direct measure) to examine whether participants reported God to be older versus younger, White versus Black, and male versus female.

Results

God's age. Participants reported that God was more old than young on both the indirect measure ($M = .59$, $SE = .02$, $t = 3.66$, $p < .001$, 95% CI [.54, .63], Cohen's $d = .35$) and direct measure ($M = 4.52$, $SE = .06$, $t = 8.70$, $p < .001$, 95% CI [4.39, 4.63], Cohen's $d = .83$). On the direct measure, a significant effect of participant race revealed that White participants were more likely than Black participants to report that God was old ($B = .16$, $SE = .07$, $t = 2.05$, $p = .03$, 95% CI [.02, .31]), though both values were above the midpoint (White participants: $M = 4.62$, $SE = .09$, $t = 7.32$, $p < .001$, 95% CI [4.46, 4.79], Cohen's $d = .99$; Black participants: $M = 4.41$, $SE = .08$, $t = 5.01$, $p < .001$, 95% CI [4.25, 4.57], Cohen's $d = .67$; see Figure 1 and Table 1).

God's race. There was a significant effect of participant race on both the indirect measure ($B = .72$, $SE = .12$, $z = 5.87$, $p < .001$, 95% CI [.48, .96]) and the direct measure ($B = .38$, $SE = .07$, $t = 5.35$, $p < .001$, 95% CI [.24, .51]). White participants reported that God was more White than Black; their ratings were significantly *above* the midpoint on the indirect measure ($M = .60$, $SE = .03$, $t = 2.97$, $p = .003$, 95% CI [.53, .66], Cohen's $d = .40$) and direct measure ($M = 4.54$, $SE = .08$, $t = 6.81$, $p < .001$, 95% CI [4.38, 4.69], Cohen's $d = .93$). In contrast, Black participants reported that God was more Black than White; their ratings were significantly *below* the midpoint on the indirect measure ($M = .23$, $SE = .03$, $t = -9.39$, $p < .001$, 95% CI [.17, .29], Cohen's $d = -1.25$) and direct measure ($M = 3.62$, $SE = .08$, $t = -4.61$, $p < .001$, 95% CI [3.46, 3.78], Cohen's $d = -.61$; see Figure 1 and Table 2).

God's gender. Overall, participants reported that God was more male than female on both the indirect measure ($M = .70$, $SE = .02$, $t = 9.09$, $p < .001$, 95% CI [.66, .74], Cohen's $d = .86$) and the direct measure ($M = 5.32$, $SE = .07$, $t = 18.65$, $p < .001$, 95% CI [5.17, 5.46], Cohen's $d = .51$; see Figure 1 and Table 3).

Discussion

U.S. Christians, on two distinct measures, conceptualized God as more male than female, which aligns with the Biblical depiction of God, as well as more subtle representations of God (Jackson et al., 2018). Conceptions of God's race, however, differed across the participant groups. White Christians conceptualized God as more White than Black, which aligns with the common depiction of God, whereas Black Christians conceptualized God as more Black than White, which counters the common depiction of God. As stated previously, Jackson et al. (2018) found that Black Christians conceptually represented God as White on a reverse correlation task (see also our own data in the [online supplemental materials](#)). Potential differences between Black Christians' more indirect rep-

³ Across all studies, means for how warmly participants felt toward Black people were subtracted from means for how warmly participants felt toward White people. Thus, positive scores indicated a relatively negative sentiment toward Black people.

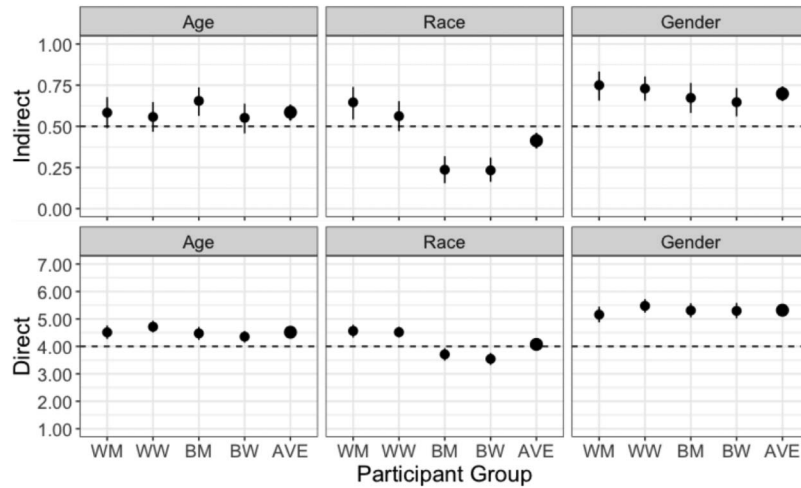


Figure 1. Study 1. Mean ratings of conceptions of God's age, race, and gender. Ratings provided by each group (i.e., WM = White men; WW = White women; BM = Black men; BW = Black women; AVE = average across groups) on the indirect measure (scores could range from 0 to 1) and the direct measures (scores could range from 1 to 7). Higher scores reflect the belief that God is an older White man. Lower scores reflect the belief that God is a younger Black woman. Error bars represent within-subjects 95% confidence intervals.

representations of God as White (detected by Jackson et al., 2018) and the more direct representations of God as Black (detected in Study 1 of the current research) align with research on racial prejudice. On relatively indirect measures, compared with more direct measures, Black Americans are more likely than White Americans to harbor attitudes that favor the outgroup, likely because Whiteness

is often portrayed more favorably than Blackness (Banaji & Greenwald, 2013). Similarly, Black Christians may on more indirect measures represent God as relatively White, which is sensible given the widespread depiction of God as White [in the U.S.]. In contrast, Black Christians may on more direct measures represent God as relatively Black, which is also sensible given that it resists

Table 1
Studies 1 and 2: Covariates and Fixed Effects Predicting Ratings of God's Age on the Indirect and Direct Measures

Study	Indirect measure				Direct measure			
	<i>B</i> (<i>SE</i>)	<i>z</i>	<i>p</i>	[95% CI]	<i>B</i> (<i>SE</i>)	<i>t</i>	<i>p</i>	[95% CI]
Study 1								
Education	.11 (.11)	.92	.36	[−.13, .34]	.13 (.06)	2.04	.04	[.01, .25]
Religiosity	−.11 (.13)	−.86	.39	[−.39, .15]	−.04 (.07)	−.61	.54	[−.18, .10]
Church freq.	.06 (.13)	.45	.65	[−.21, .34]	−.12 (.07)	−1.68	.09	[−.27, .02]
Sexism	.18 (.12)	1.47	.14	[−.07, .43]	.14 (.07)	2.11	.04	[.01, .27]
Race prejudice	−.03 (.13)	−.23	.82	[−.29, .22]	−.07 (.07)	−1.08	.28	[−.21, .06]
Conservatism	−.18 (.12)	−1.47	.14	[−.44, .07]	.01 (.07)	.22	.82	[−.12, .14]
Age	−.22 (.12)	−1.76	.08	[−.48, .03]	−.11 (.07)	−1.62	.10	[−.24, .03]
Race	.23 (.14)	1.68	.09	[−.05, .51]	.16 (.07)	2.19	.03	[.02, .31]
Gender	.15 (.12)	1.33	.18	[.08, .39]	−.02 (.06)	−.39	.69	[−.15, .10]
Race × Gender	−.16 (.11)	−1.42	.15	[−.39, .06]	−.09 (.06)	−1.48	.14	[−.21, .03]
Study 2								
Education	−.04 (.08)	−.48	.63	[−.20, .12]	.03 (.04)	.65	.52	[−.05, .11]
Religiosity	−.09 (.06)	1.53	.13	[−.02, .20]	.03 (.04)	.73	.47	[−.06, .13]
Church freq.	−.13 (.09)	−1.36	.18	[−.31, .06]	−.10 (.05)	−2.04	.04	[−.19, −.01]
Sexism	−.19 (.08)	−2.22	.03	[−.35, −.02]	−.02 (.04)	−.48	.62	[−.10, .06]
Race prejudice	−.05 (.09)	−.56	.58	[−.22, .12]	−.05 (.04)	−1.03	.30	[−.13, .04]
Conservatism	−.04 (.09)	.47	.63	[−.14, .23]	.01 (.05)	.05	.96	[−.09, .10]
Age	−.02 (.09)	−.29	.77	[−.19, .14]	−.05 (.04)	−1.24	.21	[−.14, .03]
Race	.11 (.10)	1.10	.27	[−.09, .31]	.11 (.05)	2.03	.04	[.01, .21]
Gender	.11 (.08)	1.40	.16	[−.05, .27]	.04 (.04)	1.03	.30	[−.04, .12]
Race × Gender	.02 (.08)	.22	.83	[−.14, .17]	.07 (.04)	1.83	.07	[−.01, .15]

Note. Across all models, continuous variables were standardized and all categorical variables were effect-coded (−1 = Black/racial minority; 1 = White; −1 = female; 1 = male).

Table 2

Studies 1 and 2: Covariates and Fixed Effects Predicting Ratings of God's Race on the Indirect and Direct Measures

Study	Indirect measure				Direct measure			
	<i>B</i> (<i>SE</i>)	<i>z</i>	<i>p</i>	[95% <i>CI</i>]	<i>B</i> (<i>SE</i>)	<i>t</i>	<i>p</i>	[95% <i>CI</i>]
Study 1								
Education	-.29 (.10)	-2.89	.004	[-.50, -.10]	-.05 (.06)	-.87	.38	[-.10, .04]
Religiosity	-.04 (.12)	-.30	.76	[-.27, .20]	-.14 (.07)	-1.99	.05	[-.16, -.01]
Church freq.	.12 (.12)	1.04	.30	[-.11, .36]	.08 (.07)	1.09	.27	[-.03, .10]
Sexism	.28 (.11)	2.60	.01	[.07, .50]	.08 (.06)	1.28	.20	[-.06, .27]
Race prejudice	.87 (.13)	6.77	<.001	[.62, 1.12]	.25 (.06)	3.86	<.001	[.09, .27]
Conservatism	.05 (.11)	.45	.65	[-.16, .26]	.05 (.06)	.74	.46	[-.04, .10]
Age	-.30 (.11)	-2.82	.005	[-.52, -.09]	-.11 (.06)	-1.66	.10	[-.01, .01]
Race	.72 (.12)	5.91	<.001	[.48, .96]	.38 (.07)	5.35	<.001	[.24, .51]
Gender	.02 (.10)	.19	.85	[-.18, .22]	.01 (.06)	.16	.87	[-.11, .13]
Race × Gender	-.01 (.10)	-.05	.96	[-.20, .19]	-.05 (.06)	-.94	.35	[-.17, .06]
Study 2								
Education	-.08 (.07)	-1.06	.29	[-.22, .07]	-.01 (.04)	-.33	.74	[-.09, .06]
Religiosity	-.07 (.05)	-1.30	.19	[-.17, .03]	-.05 (.05)	-1.06	.29	[-.14, .04]
Church freq.	-.07 (.05)	-.67	.50	[-.22, .11]	-.02 (.05)	-.54	.59	[-.11, .06]
Sexism	.31 (.08)	4.08	<.001	[.16, .46]	.04 (.04)	1.07	.29	[-.04, .12]
Race prejudice	.56 (.09)	6.46	<.001	[.39, .73]	.26 (.04)	6.05	<.001	[.17, .34]
Conservatism	.01 (.08)	.16	.88	[-.15, .18]	.04 (.05)	.09	.93	[-.09, .09]
Age	-.18 (.08)	-2.29	.02	[-.33, -.03]	-.10 (.04)	-2.39	.02	[-.18, -.02]
Race	.74 (.09)	7.93	<.001	[.56, .92]	.31 (.05)	6.13	<.001	[.21, .40]
Gender	-.03 (.07)	-.35	.73	[-.17, .12]	-.03 (.04)	-.74	.46	[-.11, .05]
Race × Gender	.02 (.07)	.26	.79	[-.12, .16]	.06 (.04)	1.57	.12	[-.02, .14]

the notion that the ingroup is unlike and distant from God. Indeed, for White Christians, the representation of God as White may reinforce the notion that the ingroup is relatively God-like. An important question for research is to examine why representations of God as White come to diverge across measures. For now, Study 1 established two measures on which White Christians reported God to be more White than Black, whereas Black Christians reported God to be more Black than White.

Study 2

We next examined whether conceptualizing God as a White man predicted the belief that White male job candidates are best fit to lead. Past research left unclear whether the link between religiosity and prejudice stemmed from beliefs about God's identity, above and beyond confounding ideologies (e.g., conservatism), and whether this link holds across diverse samples (e.g., Hall et al., 2010; Howard & Sommers, 2017, 2019; Johnson et al., 2010). We directly measured participants' beliefs about God's identity, examined whether those beliefs predicted conceptions of leadership, even after controlling for competing ideologies (e.g., religiosity, conservatism, racist and sexist attitudes), and included Black and White Christians, men and women. We were primarily interested in whether individual differences in conceptualizing God as White and male—the most common U.S. representation of God—predicted increases in the conceptualized leadership worthiness of White men relative to White women, Black men, and Black women. Notably, Study 2 originally consisted of two studies; an initial study and a preregistered replication. Given that both studies had the exact same methodology, we present them here together via an integrative analysis, which has several advantages over presenting individual studies with the same methodology (e.g.,

increasing the stability of model estimation and statistical power, minimizing between-study heterogeneity, reducing the proportion of extreme responses, Curran & Hussong, 2009). Nevertheless, model statistics and visual depictions of the data from the independent studies are presented in the online supplemental materials (Tables S1–S8 and Figures S1–S4).

Method

Participants. Study 2 consisted of a new sample of U.S. Christian adults ($N = 1,012$): 283 White men ($M_{\text{age}} = 54.62$, $SD = 15.70$, bachelor's degree or higher = 47%), 263 White women ($M_{\text{age}} = 46.51$, $SD = 16.32$, bachelor's degree or higher = 27%), 224 Black men ($M_{\text{age}} = 37.75$, $SD = 14.05$, bachelor's degree or higher = 31%), and 242 Black women ($M_{\text{age}} = 39.17$, $SD = 15.46$, bachelor's degree or higher = 32%). Our a priori goal was to have roughly 120 participants per participant group, resulting in roughly 240 per participant group in the combined sample of Study 2. Post hoc power analyses confirmed that our sample was sufficiently powered to detect small effects ($\alpha \leq .05$, $1 - \beta \geq .80$, $OR \geq 1.40$, $f^2 \geq .02$).

Materials and procedure.

Conceptions of God. Participants first completed the indirect and direct measures that were created in Study 1.

Conceptions of leadership. Next, participants completed a distractor task (i.e., read and responded to a brief vignette about the world's first Ferris wheel) and were then instructed to imagine that they were working for a company that was looking for a new supervisor. They were then shown faces of 32 job candidates (eight White men, eight White women, eight Black men, eight Black women) in random order and asked to rate how well each candidate would fit the position (0 = *not at all*, 100 = *perfectly*). The candidate images were

Table 3
Studies 1 and 2: Covariates and Fixed Effects Predicting Ratings of God's Gender on the Indirect and Direct Measures

Study	Indirect measure				Direct measure			
	<i>B</i> (<i>SE</i>)	<i>z</i>	<i>p</i>	[95% <i>CI</i>]	<i>B</i> (<i>SE</i>)	<i>t</i>	<i>p</i>	[95% <i>CI</i>]
Study 1								
Education	-.02 (.10)	-.26	.80	[-.13, .10]	-.16 (.07)	-2.26	.02	[-.19, -.01]
Religiosity	.26 (.11)	2.33	.02	[.03, .29]	.13 (.08)	1.52	.13	[-.02, .17]
Church freq.	-.11 (.12)	-.93	.35	[-.15, .05]	-.05 (.08)	-.58	.56	[-.10, .05]
Sexism	.23 (.11)	2.22	.03	[.04, .58]	.30 (.08)	3.99	<.001	[.20, .60]
Race prejudice	.18 (.11)	1.62	.10	[-.03, .29]	-.06 (.08)	-.71	.48	[-.15, .07]
Conservatism	.08 (.11)	.77	.44	[-.07, .17]	.01 (.08)	.07	.94	[-.08, .09]
Age	-.25 (.11)	-2.35	.02	[-.03, -.01]	-.21 (.07)	-2.77	.006	[-.02, -.01]
Race	.19 (.12)	1.66	.10	[-.03, .43]	.16 (.09)	1.86	.06	[-.01, .33]
Gender	.08 (.10)	.81	.42	[-.12, .28]	.09 (.07)	-1.22	.22	[-.23, .05]
Race × Gender	-.01 (.10)	-.14	.89	[-.20, .17]	-.12 (.07)	-1.69	.09	[-.25, .02]
Study 2								
Education	-.06 (.07)	-.84	.40	[-.18, -.07]	-.11 (.05)	-2.29	.02	[-.21, -.02]
Religiosity	.04 (.07)	.53	.59	[-.11, .19]	.16 (.06)	2.75	.006	[.04, .27]
Church freq.	-.01 (.08)	-.14	.89	[-.16, .14]	-.03 (.06)	-.48	.63	[-.14, .08]
Sexism	.06 (.07)	.86	.39	[-.08, .19]	.07 (.05)	1.38	.17	[-.03, .17]
Race prejudice	.06 (.07)	-.32	.75	[-.16, .12]	.10 (.05)	1.89	.06	[-.01, .21]
Conservatism	-.02 (.07)	.12	.91	[-.14, .16]	.10 (.06)	1.66	.10	[-.02, .21]
Age	-.16 (.07)	-2.25	.02	[-.29, -.02]	-.15 (.05)	-2.94	<.003	[-.26, -.05]
Race	.30 (.09)	3.59	<.001	[.14, .46]	-.03 (.06)	-.46	.64	[-.15, .09]
Gender	.02 (.07)	.28	.78	[-.11, .15]	-.07 (.05)	-1.46	.45	[-.17, .03]
Race × Gender	.06 (.06)	.93	.35	[-.07, .19]	-.01 (.05)	-.19	.85	[-.10, .09]

taken from the Chicago Face Database (Ma, Correll, & Wittenbrink, 2015), with all candidates depicting happy expressions and having been equated for perceived age and attractiveness.

Covariates. As in Study 1, participants completed additional measures of racial prejudice ($M = -.19$, $SE = .05$, $r = .42$), hostile and benevolent sexism ($M = 4.02$, $SE = .02$, $\alpha = .79$), and political attitudes ($M = 3.52$, $SE = .06$, $r = .92$).

Data analyses.

Conceptions of God. The analyses were identical to those in Study 1.

Conceptions of God predicting conceptions of leadership.

First, we report two preregistered sets of analyses, one focusing on individual differences in the conception of God's race and whether they predicted ratings of White and Black candidates (and whether this varied as a function of participant race), and another focusing on individual differences in the conception of God's gender, and whether they predicted ratings of male and female candidates (and whether this varied as a function of participant gender). The first set consisted of two mixed-effects linear regression models in which conceptions of God's race (as measured by either the indirect measure or the direct measure; standardized), participant race (White, Black; effect-coded with Black = -1), and candidate race (White, Black, effect-coded with Black = -1) were our primary fixed-effects of interest, as well as two- and three-way interactions among these three variables. Participant age, education, religiosity, church attendance, racial prejudice, sexist attitudes, and political attitudes were included as covariates (all standardized). We included random intercepts by participant ID, individual candidate, study, and candidate race by participant ID. The dependent variable was participants' ratings of how well the candidates fit the supervisor position (0 = *not at all*, 100 = *perfectly*). Here, our primary interest involved beliefs about God's

race, participant race, and candidate race, so we did not include beliefs about God's gender, participant gender, or candidate gender in the models (but see below). The second set consisted of two mixed-effects linear regression models in which the conception of God's gender (as measured by either the indirect measure or the direct measure; standardized), participant gender (male, female; effect-coded with female = -1), and candidate gender (male, female, effect-coded with female = -1) were our primary fixed-effects of interest, as well as two- and three-way interactions among these three variables. Participant age, education, religiosity, church attendance, racial prejudice, sexist attitudes, and political attitudes were included as covariates (all standardized). We included random intercepts by participant ID, individual candidate, study, and candidate gender by participant ID. The dependent variable was participants' ratings of how well the candidates fit the supervisor position (0 = *not at all*, 100 = *perfectly*). Here, our primary interest involved beliefs about God's gender, participant gender, and candidate gender, so we did not include beliefs about God's race, participant race, or candidate race in the models (but see below).

Second, we report an additional set of analyses that were recommended during peer review (i.e., whether conceptions of God's race and gender predicted candidate ratings). Specifically, we conducted two mixed-effects linear regression models in which the conception of God's race (as measured by either the indirect measure or the direct measure; standardized), the conception of God's gender (as measured by either the indirect measure or the direct measure; standardized), candidate race (White, Black, effect-coded with Black = -1), candidate gender (male, female, effect-coded with female = -1), and the two-, three-, and four-way interactions among these variables were our primary fixed-effects of interest. Participant age, education, religiosity, church

attendance, racial prejudice, sexist attitudes, political attitudes, race, and gender were included as covariates (all standardized). Having tested in the analyses above for effects of participant race and participant gender, and to reduce the number of parameters in the model, we also included participant race and gender as covariates. We included random intercepts by participant ID, individual candidate, study, and candidate race and gender by participant ID. The dependent variable was participants' ratings of how well the candidates fit the supervisor position (0 = *not at all*, 100 = *perfectly*). We focused on the critical four-way interaction involving the belief that God is White, the belief that God is male, candidate race, and candidate gender.

Results

Conceptions of God.

God's age. Participants reported that God was more old than young on both the indirect measure ($M = .58$, $SE = .02$, $t = 5.22$, $p < .001$, 95% CI [.55, .61], Cohen's $d = .33$) and direct measure ($M = 4.50$, $SE = .04$, $t = 101.06$, $p < .001$, 95% CI [4.43, 4.58], Cohen's $d = 6.30$). As in Study 1, on the direct measure, a significant effect of participant race revealed that White participants were more likely than Black participants to report that God was more old than young ($B = .11$, $SE = .05$, $t = 2.03$, $p = .042$, 95% CI [.01, .21]), though values for both groups were above the midpoint (White participants: $M = 4.57$, $SE = .05$, $t = 10.85$, $p < .001$, 95% CI [4.47, 4.68], Cohen's $d = .93$; Black participants: $M = 4.41$, $SE = .06$, $t = 7.15$, $p < .001$, 95% CI [4.31, 4.54], Cohen's $d = .67$; see Figure 2 and Table 1).

God's race. As in Study 1, there were significant effects of participant race on both the indirect measure ($B = .74$, $SE = .09$, $z = 7.93$, $p < .001$, 95% CI [.56, .92]) and the direct measure ($B = .31$, $SE = .05$, $t = 6.13$, $p < .001$, 95% CI [.21, .40]). White participants reported that God was more White than Black; their ratings were marginally *above* the midpoint on the indirect mea-

sure ($M = .54$, $SE = .02$, $t = 1.80$, $p = .077$, 95% CI [.50, .58], Cohen's $d = .15$) and significantly *above* the midpoint on the direct measure ($M = 4.34$, $SE = .05$, $t = 82.92$, $p < .001$, 95% CI [4.25, 4.43], Cohen's $d = 7.10$). In contrast, Black participants reported that God was more Black than White; their ratings were significantly *below* the midpoint on the indirect measure ($M = .23$, $SE = .03$, $t = -13.56$, $p < .001$, 95% [.19, .27], Cohen's $d = -1.25$) and direct measure ($M = 3.56$, $SE = .06$, $t = 48.4$, $p < .001$, 95% [3.43, 3.69], Cohen's $d = 4.49$; see Figure 2 and Table 2).

God's gender. Overall, participants reported that God was more male than female on both the indirect measure ($M = .66$, $SE = .01$, $t = 10.45$, $p < .001$, 95% CI [.63, .69], Cohen's $d = .66$) and the direct measure ($M = 5.30$, $SE = .05$, $t = 99.75$, $p < .001$, 95% CI [5.21, 5.39], Cohen's $d = 6.23$). On the indirect question, a significant effect of participant race revealed that White participants were more likely than Black participants to report that God was male ($B = .30$, $SE = .09$, $z = 3.59$, $p < .001$, 95% CI [.14, .46]), though values for both groups were above the midpoint (White participants: $M = .69$, $SE = .02$, $t = 9.51$, $p < .001$, 95% CI [.65, .73], Cohen's $d = .81$; Black participants: $M = .62$, $SE = .02$, $t = 5.23$, $p < .001$, 95% CI [.57, .66], Cohen's $d = .49$; see Figure 2 and Table 3).

Thus, replicating Study 1, for both the indirect and direct measures, White Christians conceptualized God as an old White man, whereas Black Christians conceptualized God as an old Black man. We next turned to our primary research question: whether conceptualizing God as a White man—the most common depiction of God in the United States—predicted conceptions of who is fit to lead.

Conceptions of God and conceptions of leadership.

Conceptions of God's race and conceptions of White versus Black candidates. As predicted, there was an interaction involving conceptions of God's race and candidate race, on both the

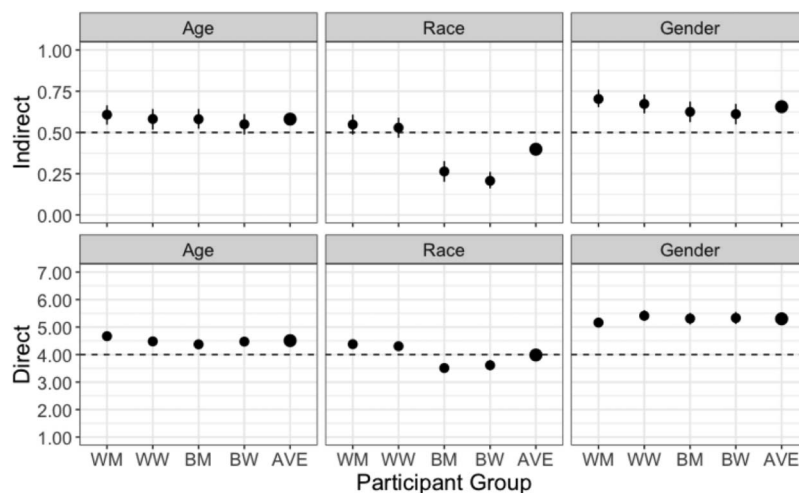


Figure 2. Study 2. Mean ratings of conceptions of God's age, race, and gender. Ratings provided by each group (i.e., WM = White men; WW = White women; BM = Black men; BW = Black women; AVE = average across groups) on the indirect measure (scores could range from 0 to 1) and the direct measures (scores could range from 1 to 7). Higher scores reflect the belief that God is an older White man. Lower scores reflect the belief that God is a younger Black woman. Error bars represent within-subjects 95% confidence intervals.

indirect measure ($B = 1.74, SE = .19, t = 9.03, p < .001, 95\% CI [1.36, 2.11]$) and on the direct measure ($B = 1.48, SE = .19, t = 7.75, p = .001, 95\% CI [1.11, 1.86]$), revealing that the more participants conceptualized God as White, the higher they rated White candidates relative to Black candidates (see Table 4 and Figure 3). Notably, the effect yielded by the indirect measure interacted further with participant race ($B = -.51, SE = .19, t = -2.63, p = .009, 95\% CI [-.89, -.13]$), revealing that although the effect was significant among both participant groups, it was stronger among Black participants ($B = 4.14, SE = .27, t = 15.33, p < .001, 95\% CI [3.61, 4.67]$) than among White participants ($B = 2.41, SE = .19, t = 12.44, p < .001, 95\% CI [2.03, 2.79]$).

Conceptions of God's gender and conceptions of male versus female candidates. As predicted, there was an interaction involving conceptions of God's gender and candidate gender, on both the indirect measure ($B = .85, SE = .13, t = 6.32, p < .001, 95\% CI [.59, 1.11]$) and on the direct measure ($B = .48, SE = .14, t = 3.53, p < .001, 95\% CI [.21, .75]$), revealing that the more participants conceptualized God as male, the more highly they rated male candidates relative to female candidates (see Table 5 and Figure 3). These effects were not qualified further by participant gender.

Conceptions of God's race and gender and conceptions of White male candidates. On the direct measure, but not on the indirect measure, we found the critical four-way interaction involving the conceptions of God's race, conceptions of God's gender, candidate race, and candidate gender ($B = -.21, SE = .07, t = -2.85, p = .004, 95\% CI [-.35, -.07]$). Slope comparisons revealed that the more participants conceptualized God as White and male, the more highly they rated White male candidates relative to White female candidates ($B = .83, SE = .37, t = 2.25, p = .024, 95\% CI [.11, 1.56]$), Black male candidates ($B = 1.59, SE = .37, t = 4.27, p < .001, 95\% CI [.86, 2.31]$), and Black female candidates ($B = 1.59, SE = .19, t = 4.28, p < .001, 95\% CI [.86, 2.31]$), and the more highly they rated White female candidates relative to Black male candidates ($B = .75, SE = .37, t = 2.03, p = .04, 95\% CI [.03,$

$1.48]$), and Black female candidates ($B = .76, SE = .37, t = 2.04, p = .04, 95\% CI [.03, 1.48]$; conceptualizing God as White and male predicted no significant differences in rating Black male candidates compared with Black female candidates; see Table S1 in the online supplemental materials).

Discussion

Historians have argued that in the United States, the depiction of God as White was used to reinforce beliefs about White superiority (Blum & Harvey, 2012; Williams, 1987). Study 2, using two distinct measures, reveals that in the 21st century, the extent to which God is *believed* to be a White man does indeed predict the conception of White men as more fit for leadership, among both White and Black, male and female Christians. Critically, these relationships held even after controlling for a variety of individual difference measures known to predict fundamentalist and authoritarian values (e.g., religiosity, conservatism), and even after directly controlling for racist and sexist attitudes, suggesting that the degree to which God is conceptualized as having a particular social identity contributes unique variance to the conception that individuals who share that identity are leaders.

Critically, it is worth highlighting that, at baseline, Black participants conceptualized God as more Black than White, and that this conception predicted increased ratings of Black candidates relative to White candidates (see Figure 3). In a sense, then, these data suggest that conceptualizing God as relatively Black—a challenge to the dominant U.S. depiction of God as White—can be hierarchy-attenuating (i.e., believing that the creator of the universe is Black predicts more favorable conceptions of Black candidates). Nevertheless, the extent to which God is conceptualized as White, which may be a deeply rooted intuition (Jackson et al., 2018) predicted increased ratings of White candidates, even among Black Christians (and the relation was stronger among Black Christians than among White Christians). Thus, the extent to which Black Christians endorse the dominant U.S. depiction of God predicts the extent to which Black people may be disadvan-

Table 4
Study 2: Conceptions of God's Race Predicting Candidate Ratings as a Function of Candidate Race

Variable	Indirect measure				Direct measure			
	<i>B</i> (<i>SE</i>)	<i>z</i>	<i>p</i>	[95% <i>CI</i>]	<i>B</i> (<i>SE</i>)	<i>t</i>	<i>p</i>	[95% <i>CI</i>]
Education	.67 (.61)	1.11	.27	[-.52, 1.86]	.72 (.61)	1.17	.24	[-.48, 1.92]
Religiosity	.83 (.70)	1.18	.23	[-.55, 2.20]	.86 (.70)	1.21	.23	[-.53, 2.23]
Church freq.	1.30 (.71)	1.85	.06	[-.08, 2.69]	1.43 (.71)	2.02	.04	[-.04, 2.81]
Sexism	-1.52 (.62)	-2.45	.01	[-2.74, -.30]	-1.62 (.62)	-2.62	.009	[-2.84, -.40]
Race prejudice	.27 (.68)	.39	.68	[-1.06, 1.59]	.02 (.68)	.03	.98	[-1.32, 1.35]
Conservatism	-.81 (.71)	-1.14	.25	[-2.19, .58]	-.89 (.71)	-1.25	.21	[-2.29, .51]
Age	.62 (.64)	.96	.34	[-.64, 1.88]	.58 (.64)	.89	.37	[-.68, 1.85]
Participant race (PR)	1.64 (.81)	2.04	.04	[.06, 3.21]	1.46 (.80)	1.83	.07	[-.11, 3.02]
Candidate race (CR)	-.25 (.74)	-.34	.74	[-1.69, 1.19]	-.41 (.74)	-.56	.58	[-1.86, 1.03]
God's race (GR)	-1.33 (.65)	-2.03	.04	[-2.61, -.04]	-.16 (.64)	-.24	.81	[-1.42, 1.10]
PR × CR	.26 (.19)	1.34	.18	[-.12, .63]	.47 (.19)	2.49	.01	[.10, .85]
PR × GR	-1.57 (.64)	-2.45	.01	[-2.82, -.31]	-.95 (.63)	-1.49	.13	[-2.18, .29]
CR × GR	1.74 (.19)	9.03	<.001	[1.36, 2.11]	1.48 (.19)	7.75	.001	[1.11, 1.86]
PR × CR × GR	-.51 (.19)	-2.63	.009	[-.89, -.13]	-.23 (.19)	-1.18	.24	[-.60, .15]

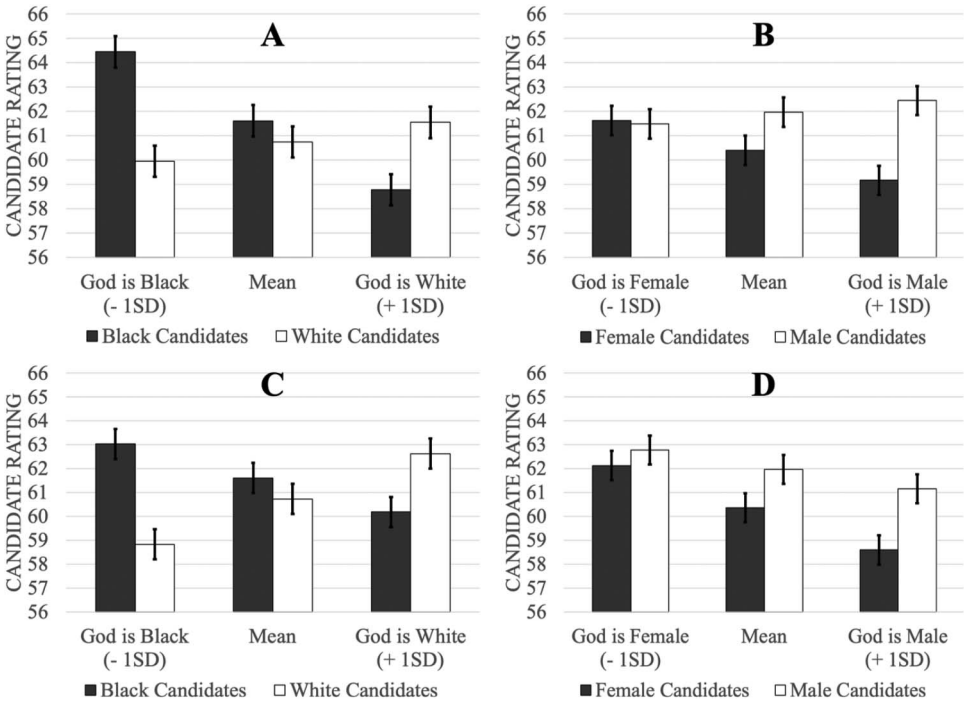


Figure 3. Study 2. Truncated scales. Conceptions of God’s race predicting rating of Black/White job candidates on the indirect measure (A) and direct measure (C). Conceptions of God’s gender predicting ratings of female/male job candidates on the indirect measure (B) and direct measure (D). For each panel, God is Black/Female represents one standard deviation below the mean on the indirect or direct measure, and God is White/Male represents one standard deviation above the mean. Error bars depict standard errors of the standardized beta coefficient.

tagged by it. As stated previously, additional research is needed to understand precisely how and why Black Christians come to resist this dominant depiction.

It is also worth highlighting that at baseline, both female and male participants conceptualized God as more male than female (see also Howard et al., 2018; Jackson et al., 2018), which predicted increased ratings of male candidates (see Figure 3). Never-

theless, the extent to which participants conceptualized God as female attenuated this promale bias (i.e., conceptualizing God as more female than male predicted rating female and male candidates as comparably fit for a supervisor position). Interestingly, then, these data suggest that conceptualizing God as relatively female—a challenge to the dominant depiction of God as male—can be hierarchy-attenuating (though note that conceptualizing

Table 5
Study 2: Conceptions of God’s Gender Predicting Candidate Ratings as a Function of Candidate Gender

Variable	Indirect measure				Direct measure			
	<i>B</i> (<i>SE</i>)	<i>z</i>	<i>p</i>	[95% <i>CI</i>]	<i>B</i> (<i>SE</i>)	<i>t</i>	<i>p</i>	[95% <i>CI</i>]
Education	.68 (.61)	1.10	.27	[−.52, 1.88]	.59 (.61)	.97	.33	[−.61, 1.80]
Religiosity	.78 (.70)	1.11	.27	[−.60, 2.16]	.91 (.71)	1.29	.20	[−.47, 2.29]
Church freq.	1.34 (.70)	1.91	.06	[−.04, 2.72]	1.33 (.70)	1.89	.06	[−.05, 2.71]
Sexism	−1.84 (.63)	−2.93	.004	[−3.07, −.61]	−1.79 (.63)	−2.87	.004	[−3.03, −.57]
Race prejudice	.19 (.63)	.30	.76	[−1.05, 1.42]	.25 (.63)	.40	.69	[−.99, 1.49]
Conservatism	−.13 (.63)	−.21	.83	[−1.38, 1.11]	−.09 (.64)	−.14	.89	[−1.33, 1.16]
Age	1.10 (.62)	1.77	.08	[−.12, 2.32]	.97 (.63)	1.55	.12	[−.25, 2.20]
Participant gender (PG)	.53 (.62)	.86	.39	[−.68, 1.74]	.47 (.62)	.76	.45	[−.74, 1.68]
Candidate gender (CG)	.78 (.71)	1.10	.28	[−.61, 2.18]	.80 (.71)	1.12	.27	[−.60, 2.20]
God’s gender (GG)	−.37 (.59)	−.63	.53	[−1.53, .79]	−1.26 (.60)	−2.08	.04	[−2.44, −.07]
PG × CG	.08 (.13)	.59	.55	[−.18, .34]	.12 (.14)	.91	.36	[−.14, .39]
PG × GG	−.35 (.59)	.59	.56	[−1.51, .81]	−.20 (.60)	−.33	.74	[−1.36, .97]
CG × GG	.85 (.13)	6.32	.001	[.59, .81]	.48 (.14)	3.53	<.001	[.21, .75]
PG × CG × GG	.07 (.13)	.51	.61	[−.20, 1.12]	−.03 (.14)	−.26	.79	[−.30, .23]

God as relatively female did not completely reverse the promale bias to a profemale bias).

Study 3

We next took a developmental perspective to examine how U.S. Christian children of diverse racial backgrounds conceptualize God's social identity, and the extent to which those conceptions predicted conceptions of leadership worthiness. In addition to developing beliefs about the social and natural worlds, children also develop beliefs about the *supernatural world*—a world that cannot be directly seen, heard, or touched (Piaget, 1929). For many years, developmental psychologists dedicated little attention to children's religious beliefs and practices, in part because the topic can be considered taboo (Bloom, 2007). In recent years, however, children's beliefs about God's properties and powers (especially beliefs about God's mind) have received considerable empirical attention (for reviews, see Heiphetz et al., 2016; Lane & Harris, 2014). For example, research demonstrates that by 5 years children raised in more religious contexts attribute extraordinary abilities (e.g., special knowledge) to God more than to ordinary humans (Giménez-Dasí, Guerrero, & Harris, 2005; Knight, 2008; Lane, Evans, Brink, & Wellman, 2016; Lane, Wellman, & Evans, 2010, 2012; Makris & Pnevmatikos, 2007; Moriguchi, Takahashi, Nakamata, & Todo, 2019; Nyhof & Johnson, 2017; Richert & Barrett, 2005; Richert, Saide, Lesage, & Shaman, 2017; although developing an understanding of omniscience is a much more protracted developmental process; Lane, Wellman, & Evans, 2014).

To the best of our knowledge, no formal research has examined children's beliefs about God's social identity, specifically God's race and gender (but there are informal collections of children's drawings of God; e.g., Parker, 2016). Moreover, research on children's beliefs about God have focused mostly on White samples (but see Moriguchi et al., 2019), thereby leaving unclear racial minority children's beliefs (for a broader commentary on the lack of diverse samples in developmental research, see Rowley & Camacho, 2015). Intriguing questions can be addressed with such data: For instance, to what extent do young Black girls conceptualize God as an old White man, and does this conception predict conceptions of leadership? One possibility is that children conceptualize God's identity in egocentric ways (e.g., Black girls conceptualize God as a Black women). An alternative possibility is that children conceptualize God in accordance with the common representation of God (e.g., Black girls conceptualize God as a White man). We expected to find support for the latter, given that children learn their religious beliefs from their environment (Harris & Koenig, 2006; Lanman & Buhrmester, 2017; Sherkat, 2003). Also, The Bible clearly refers to God as "The Father" and with male pronouns; and our own content analysis of Amazon.com's most highly rated children's books about God (as of 2018) revealed that 50% depicted God as male, 46% depicted God without a gender, 2% depicted God as male and female, and only 2% depicted God as female.⁴ None of those books depicted God as White or Black (8% depicted God as racially ambiguous, and 92% did not provide any kind of racial information). Nevertheless, because God (and Jesus) is often portrayed as White in religious imagery (e.g., on Google, see [online supplemental materials](#)), and is often conceptualized as White at an intuitive level (Jackson et al., 2018), we expected that U.S. Christian children of diverse

racial backgrounds would conceptualize God as more White than Black, which would diverge from the adult conceptions in Study 1. If true, this would suggest that adults may not necessarily intentionally conceptualize God as a White man (though this is not unlikely), but rather, that this conception is ingrained early in childhood and persists into adulthood as an intuition (Jackson et al., 2018). If even young racial minority children conceptualize God as more White than Black, this could explain why racial minority adults might represent God as White on very indirect measures (Jackson et al., 2018), but not on more direct measures (Studies 1 and 2 in the present article). That is, young children are less likely than adults to sugar-coat their race-related beliefs (Baron & Banaji, 2006; Clark & Clark, 1947; Olson et al., 2012), whereas older children, who have often learned to be politically correct, are more likely to do so (Apfelbaum, Pauker, Ambady, Sommers, & Norton, 2008; Baron & Banaji, 2006). Thus, young racial minority children may directly report that God is White, which may persist into adulthood as a deeper intuition only to be concealed and resisted when directly asked.

To measure children's conception of God's identity, we had them complete the same indirect measure used with adults in Studies 1 and 2, and we also had them draw a picture of God (see Method). Drawings provide rich insight into children's understanding of the world, are quite sophisticated during the sampled age range (Long, Fan, & Frank, 2018), and provide responses that move beyond self-reports and questionnaires (Baumeister, Vohs, & Funder, 2007).

Study 3 also tested whether children's conception of God's race and gender predicted whom they conceptualize as boss-like, which was important for revealing whether the relations detected in Study 2 emerge only after many years of experience in U.S. society, or whether they are even present early in development. If, for instance, the extent to which children conceptualize God as White predicts perceiving White men as more boss-like, this could motivate a plethora of downstream inferences, including beliefs about who is more likable and in control of resources, and who can achieve their goals and give others commands (Gülgöz & Gelman, 2017). Simply put, we tested whether children's conception of God's identity predicted their conceptions of who is God-like.

Method

Participants. We recruited U.S. Christian children (ages 4 to 12 years) during Sunday school in their home churches ($N = 176$): 35 White boys ($M_{\text{age}} = 7.07$, $SD = 2.39$), 50 White girls ($M_{\text{age}} = 7.98$, $SD = 2.01$), 46 racial minority boys ($M_{\text{age}} = 7.17$, $SD = 2.21$, of which 16 were Black/African American, nine were Asian/Asian American, 8 were Hispanic/Latino, nine were Multiracial,

⁴ To evaluate whether God is often portrayed in children's books as human-like, and if so, whether God is associated with a certain race or gender, we searched "Children's Christian Books" on Amazon.com, sorted them by their customer ratings, and purchased the top 50. Two books were excluded from the final set because they were longer devotional bibles without images. The remaining 48 books were reviewed by 5,338 Amazon customers and received an average rating of 4.61/5 (i.e., they were popular). Research assistants who were blind to the study's hypotheses coded the remaining books for the depiction of God's gender (female, male, other, unspecified) and race (Black, White, other, unspecified). Discrepancies were resolved through discussion. The books and their codes are available in the [online supplemental materials](#).

and 4 were of another race), and 45 racial minority girls ($M_{\text{age}} = 7.84$, $SD = 2.75$, of which eight were Black/African American, seven were Asian/Asian American, 21 were Hispanic/Latino, eight were Multiracial, and one was of another race). Children were recruited from five churches in Northern California ($n = 128$) and three churches in North Carolina ($n = 49$). We were unable to recruit a large enough sample of Black children and therefore focused more broadly on U.S. racial minority children, given that they are not White yet live in a society that commonly depicts God as White. An additional 224 adults: 57 White men ($M_{\text{age}} = 39.10$, $SD = 12.89$, bachelor's degree or higher = 35%), 55 White women ($M_{\text{age}} = 46.71$, $SD = 15.11$, bachelor's degree or higher = 33%), 56 Black men ($M_{\text{age}} = 51.77$, $SD = 16.15$, bachelor's degree or higher = 23%), and 56 Black women ($M_{\text{age}} = 43.33$, $SD = 15.84$, bachelor's degree or higher = 21%) participated in the rating of children's drawings (see below). Post hoc power analyses confirmed that our sample was sufficiently powered to detect medium effects ($\alpha \leq .05$, $1 - \beta \geq .80$, $OR \geq 1.80$).

Materials and procedure. Children completed the following tasks, in fixed order.

Conceptions of God. First, children were asked to draw a picture of God. Because of time and administrative constraints, drawings were only obtained at a subset of the churches and we therefore only collected drawings from a subset of the sample ($n = 100$, 20 White boys, 21 White girls, 30 racial minority boys, 29 racial minority girls). Children were given a blank piece of paper and 14 Crayola crayons taken from both standard and multicultural sets of Crayola crayons that included a variety of colors and skin tones (i.e., red, orange, yellow, green, blue, purple, white, black, apricot, peach, tan, mahogany, sepia, and burnt sienna). Each drawing was collected, digitized, and edited to remove writing and religious imagery so that it was unclear whether the drawing was intended to depict God. A sample of adults ($n = 224$) then rated each image for perceived age, race, and gender (i.e., Do you think this drawing is of an old person/a White person/a male or a young person/a Black person/a female; 1 = *Definitely old/White/male*, 4 = *neither*, 7 = *Definitely young/Black/female*; responses were reverse coded). Adults were asked at the end of the survey what they thought the drawings represented. Sixteen adults mentioned God or religious imagery and were excluded from the analyses. This was to ensure that adults' own representations of God did not affect their ratings of the drawings. All drawings are made publicly available online via the OSF.

Second (or first if the drawing task was not administered), children were asked several questions to ensure that they were familiar with the idea of God (e.g., "Have you ever heard about God?", "What can you tell me about God?"). One child said s/he had never heard about God and was therefore not questioned further. All other children expressed familiarity with God and were then given the same indirect measure administered to adults in Studies 1 and 2.

Conceptions of leadership. Third, children were shown an array of 12 faces (three Black men, three Black women, three White men, three White women) and told, "There are lots and lots of people at the place where I work. But only three of them are bosses. Which three do you think are bosses?" The 12 faces were drawn from the Chicago Face Database (Ma et al., 2015) and equated for perceived age and attractiveness. The faces were presented in random order across participants. Children also com-

pleted several measures that we created that assessed their own racial and gender prejudice ("Do you like [people with light skin/people with dark skin/boys/girls]?") as well as their beliefs about God's racial and gender prejudice ("Does God like [people with light skin/people with dark skin/boys/girls]?") We counter-balanced which domain we assessed first (gender or race) and which target we assessed first (themselves, God). If children answered yes to any of the questions, they were then asked to specify the degree to which they liked the particular group on a three-point scale (*a teeny tiny bit*, *a little bit*, *a lot*).⁵ Our primary research question was whether children's conceptions of God's race and gender (as measured by adults' ratings of children's drawings and children's responses on the indirect measure) predicted which faces they selected as bosses.

Data analyses.

Conceptions of God. First, we focused on children's conception of God as measured by the drawing task. We conducted three mixed-effects regression models in which participant race (White, racial minority; effect-coded with racial minority = -1), gender (male, female; effect-coded with female = -1), age (standardized), and the three-way interaction among these three variables were our primary fixed-effects of interest, participant self-reported racial prejudice (their own and God's) were included as covariates (all standardized), with random intercepts by participant ID, stimulus, experimenter, and recruitment site. Dependent measures were adults' ratings of children's drawings as depicting a person who was young versus old, Black versus White, female versus male (1 = *young/Black/female*, 4 = *neither*, 7 = *old/White/male*). One-sample *t* tests were conducted to compare responses across questions to the midpoint (i.e., 4). Second, we focused on children's conception of God as measured by the indirect measure. We conducted three mixed-effects logistic regression models with the same structure as the first models, with the exception that the dependent measures were children's trial-by-trial indication that God looked more like the image of the old person, the White person, or male person (0 = *young/Black/female*, 1 = *old/White/male*) on the indirect measure (four trials per participant, per analysis). Additional one-sample *t* tests were conducted to compare responses across questions to chance (i.e., .5).

Conceptions of God predicting conceptions of leadership. We next examined whether children's conception of God (as measured by adults' ratings of children's drawings and children's responses on the indirect measure) predicted their conceptions of leadership. We initially ran two separate models, one focusing on

⁵ Means for how warmly children felt toward Black people were subtracted from means for how warmly they felt toward White people ($M = .42$, $SE = .10$), and means for how warmly children felt toward girls were subtracted from how warmly they felt toward boys ($M = -.17$, $SE = .11$). Also, means for how warmly children believed God felt toward Black people were subtracted from means for how warmly they believed God felt toward White people ($M = .13$, $SE = .05$), and means for how warmly children believed God felt toward girls were subtracted from how warmly they believed God felt toward boys ($M = .03$, $SE = .05$). Thus, positive scores indicated a relatively negative evaluation of Black people and of girls. Notably, children's self-report of their own racial bias was significantly higher than their self-report of God's racial prejudice, $t = 2.82$, $p = .005$, 95% CI [.09, .50], Cohen's $d = .43$, suggesting that they thought of themselves as more prejudiced than God. No significant differences were found with respect to children's reports of their own and God's gender bias ($p = .08$).

race (i.e., whether conceptualizing God as White predicted a greater selection of White candidates relative to Black candidates, and whether this varied as a function of participant race) and another focusing on gender (i.e., whether conceptualizing God as male predicted a greater selection of male candidates relative to female candidates, and whether this varied as a function of participant gender). Because these models yielded no effects of participant age, race, or gender, we instead report two single linear mixed-effects regression models in which these variables were included simply as covariates, which reduced the number of parameters in the models. The first model, focusing on children's drawings, was a linear mixed-effects regression model in which adults' ratings of the race and gender of children's drawings (standardized), candidate race (White, racial minority; effect-coded with racial minority = -1), and candidate gender (male, female; effect-coded with female = -1) were fixed-effects, as well as the three- and four-way interactions among these variables. Participants' self-reports of their race and gender prejudice (their own and God's), age, race, and gender were included as covariates (standardized), and child ID, experimenter, and recruitment site were included as random intercepts. The dependent variable was how many of each candidate type (e.g., White men) were selected as bosses (scores could range from 0 to 3). The second model, focusing on children's responses on the indirect measure, was a linear mixed-effects regression model with the same structure as the previous model, with the exception that participants' conception of God's race and gender as measured by the indirect measure was a fixed-effect instead of adults' ratings of the children's drawings.

Results

Conceptions of God. Focusing on children's drawings, we found that overall, children's drawings were rated as more young than old ($M = 3.71$, $SE = .06$, $t = -5.32$, $p < .001$, 95% CI [3.60, 3.82], Cohen's $d = -1.07$),⁶ more White than Black ($M = 4.29$, $SE = .07$, $t = 3.99$, $p < .001$, 95% CI [4.14, 4.42], Cohen's $d = .80$), and more male than female ($M = 4.28$, $SE = .11$, $t = 2.62$, $p = .01$, 95% CI [4.07, 4.50], Cohen's $d = .53$), suggesting that children drew God as a young White man (see Figure 4 for sample drawings). Focusing on children's categorizations on the indirect measure, we found that overall, children indicated that God was more old than young ($M = .67$, $SE = .02$, $t = 7.60$, $p < .001$, 95% CI [.62, .72], Cohen's $d = 1.16$),⁷ more White than Black ($M = .59$, $SE = .02$, $t = 3.57$, $p < .001$, 95% CI [.54, .64], Cohen's $d = .54$), and more male than female ($M = .72$, $SE = .02$, $t = 9.64$, $p < .001$, Cohen's $d = 1.47$).⁸ Thus, paralleling the concepts of White adults, and in accordance with the dominant U.S. depiction of God, young U.S. children conceptualized God as a White man (see Figure 5, and Tables 6 and 7 for the full model outputs).

Conceptions of God and conceptions of leadership. Consistent with the adult data, we found that children's conception of God as White, as measured by the adult ratings of their drawings ($B = .26$, $SE = .10$, $t = 2.51$, $p = .013$, 95% CI [.13, 1.19]) as well as their own responses on the indirect measure ($B = .25$, $SE = .07$, $t = 3.15$, $p = .001$, 95% CI [.10, .41]) predicted selecting more White people as bosses than Black people. Inconsistent with the adult data, however, conceptualizing God as male, on either measure, did not significantly predict selecting more men as bosses

than women. Moreover, conceptualizing God as White *and* male, on either measure, did not predict a greater selection of White men relative to the other candidates (see Tables 8 and 9 for the full model outputs).

Discussion

Study 3 provided several novel insights. Using a drawing task and our indirect measure, thereby using more than just self-reports and questionnaire ratings (Baumeister et al., 2007), we found that young U.S. Christians, both racial majority and minority group members, conceptualized God as more White than Black and more male than female. These data suggest that this common U.S. depiction of God is learned early by U.S. children and explains why it might be intuitive in adulthood among majority and minority groups (Jackson et al., 2018). Indeed, racial minority children, unlike Black adults in Studies 1 and 2, did not report that God was more Black than White, suggesting that for racial minority groups, across development, a shift occurs by which the conception of God as White comes to be resisted. As mentioned previously, we speculate that this shift occurs because racial minority adults seek to resist the notion that their ingroup is conceptually distant from God, though future research is needed to test precisely why and how this shift takes place.

Study 3 also found that the extent to which children conceptualized God as White predicted their conceptions of White people as more boss-like than Black people, as measured both by adults' ratings of their drawings, as well as their own responses on our indirect measure, and even controlling for several other individual difference measures (e.g., children's own prejudice and beliefs about God's prejudice), suggesting that the hierarchy-reinforcing

⁶ There was an effect of participant age ($B = .13$, $SE = .06$, $t = 2.05$, $p = .04$, 95% CI [.01, .26]), indicating that adults rated the drawings of older children as depicting an older God, and an effect of child race and gender ($B = -.16$, $SE = .06$, $t = -2.79$, $p = .006$, 95% CI [-.26, -.05]), revealing adults rated the drawings of White girls at the midpoint ($M = 3.86$, $SE = .11$, $t = -1.28$, $p = .21$, 95% CI [3.62, 4.09], Cohen's $d = -.57$), and rated the drawings of White boys ($M = 3.52$, $SE = .11$, $t = -4.34$, $p < .001$, 95% CI [3.30, 3.76], Cohen's $d = -1.99$), racial minority boys ($M = 3.78$, $SE = .10$, $t = -2.16$, $p = .04$, 95% CI [3.57, 3.99], Cohen's $d = -.80$), and racial minority girls ($M = 3.64$, $SE = .11$, $t = -3.19$, $p = .003$, 95% CI [3.41, 3.87], Cohen's $d = -1.21$) below the midpoint (i.e., as more young than old). Importantly for the purposes of the present research, none of the drawings of each child group was rated as more old than young, counter to adult conceptions of God (see Studies 1 and 2).

⁷ There was an effect of participant race ($B = .33$, $SE = .12$, $t = 2.79$, $p = .005$, 95% CI [.09, .56]), indicating that, like adults in Studies 1 and 2, White children were more likely than racial minority children to indicate that God was more old than young, though responses among both were above the midpoint (White children: $M = .74$, $SE = .03$, $t[83] = 8.54$, $p < .001$, 95% CI [.68, .79], Cohen's $d = 1.87$; racial minority children: $M = .61$, $SE = .03$, $t = 3.17$, $p = .002$, 95% CI [.54, .67], Cohen's $d = .67$).

⁸ There was a three-way interaction involving age, participant race, and gender [race] ($B = .34$, $SE = .15$, $t = 2.22$, $p = .03$, 95% CI [.04, .65]), indicating that among racial minority girls, the conception of God as male increased with age ($B = .13$, $SE = .05$, $t = 2.29$, $p = .03$, 95% CI [.01, .08]), nevertheless, scores were above chance for each group: racial minority girls ($M = .73$, $SE = .05$, $t = 4.89$, $p < .001$, 95% CI [.64, .83], Cohen's $d = 4.89$), racial minority boys ($M = .70$, $SE = .05$, $t = 4.60$, $p < .001$, 95% CI [.61, .79], Cohen's $d = 1.37$), White girls ($M = .73$, $SE = .05$, $t = 4.89$, $p < .001$, 95% CI [.64, .83], Cohen's $d = 1.49$), and White boys ($M = .67$, $SE = .05$, $t = 3.25$, $p = .003$, 95% CI [.57, .79], Cohen's $d = 1.13$).



Figure 4. Study 3. Sample drawings generated by children. All drawings are available in the [online supplemental materials](#). See Study 3 for the coding scheme. See the online article for the color version of this figure.

relations detected in Study 2 emerge early in development. The finding that this relation was predicted by adults' ratings of children's drawings was particularly powerful, revealing that this relation existed beyond children's own self-reported responses (Baumeister et al., 2007). That is, adults were blind to the purposes of this research and to the fact that children's drawings depicted God, yet their independent ratings of the race of those drawings predicted the extent to which children conceptualized White people as boss-like. Most broadly, these data suggest that even a very indirect measure of children's conception of God's race can predict their conception of leadership. Notably, children's conception of God as male did not predict conceptions of men as more boss-like than women. One possible explanation for this is that the conception of God as male is so intuitive and taken for granted that

only with age does one associate it with a gender hierarchy. Indeed, we found that conceptualizing God as male increased with age (i.e., older children were more likely than younger children to conceptualize God as male). Although our work was conducted with a relatively wide age range, our sample was not large enough to systematically test for age differences in the relations of interest. Additional work with larger samples will provide further insight.

Another interesting insight, albeit one that was not expected or central to the current research, was that children thought of God as less prejudiced than themselves (see footnote 5). That is, when children were asked how much God liked people of various skin tones and genders, and how much they themselves liked people of various skin tones and genders, they reported that God liked people more than they did. These patterns reflect an interesting theory of

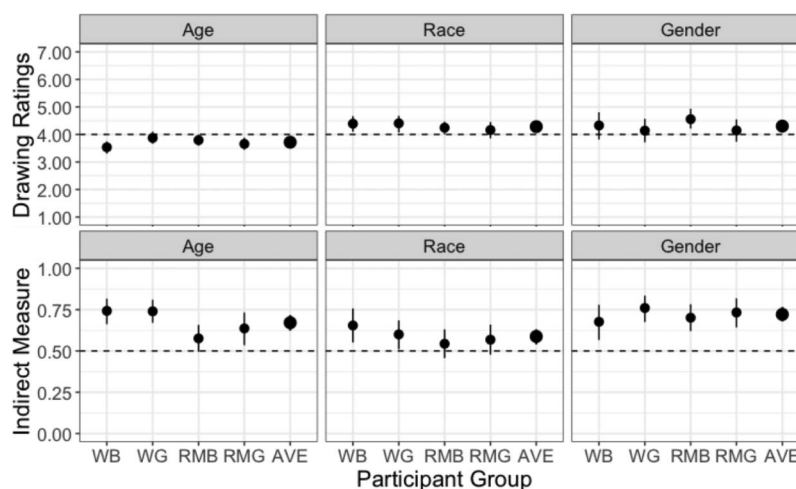


Figure 5. Study 3. Mean ratings of conceptions of God's age, race, and gender. Ratings provided by each group (i.e., WB = White boys; WG = White girls; RMB = racial minority boys; RMG = racial minority girls; AVE = average across groups) on ratings of children's drawings (scores could range from 1 to 7) and indirect responses (scores could range from 0 to 1). Higher scores reflect drawings of God and conceptions of God as an older White man. Error bars represent within-subjects 95% confidence intervals.

Table 6
Study 3: Covariates and Fixed Effects Predicting Ratings of God's Age, Race, and Gender on Adults' Ratings of Children's Drawings

Variable	Indirect measure			
	<i>B</i> (<i>SE</i>)	<i>z</i>	<i>p</i>	[95% <i>CI</i>]
God's age				
Racial prejudice (Child)	-.02 (.06)	-.25	.80	[-.13, .10]
Racial prejudice (God)	-.01 (.09)	.04	.97	[-.17, .18]
Gender prejudice (Child)	.12 (.07)	1.63	.11	[-.02, .26]
Gender prejudice (God)	.02 (.08)	.27	.79	[-.13, .17]
Age	.13 (.07)	2.05	.044	[.01, .26]
Race	-.10 (.06)	-1.59	.12	[-.22, .02]
Gender	-.06 (.07)	-.88	.38	[-.20, .08]
Age × Race	-.07 (.06)	-1.23	.22	[-.19, .04]
Age × Gender	-.02 (.06)	-.29	.77	[-.13, .10]
Race × Gender	-.16 (.06)	-2.79	.001	[-.27, -.05]
Age × Race × Gender	-.09 (.06)	-1.56	.12	[-.21, .02]
God's race				
Racial prejudice (Child)	-.02 (.08)	.26	.80	[-.14, .18]
Racial prejudice (God)	-.01 (.12)	-.11	.92	[-.25, .22]
Gender prejudice (Child)	.08 (.10)	.82	.41	[-.11, .27]
Gender prejudice (God)	.06 (.10)	.61	.54	[-.14, .27]
Age	.08 (.09)	.86	.40	[-.10, .25]
Race	.04 (.09)	.43	.67	[-.13, .21]
Gender	.01 (.09)	.08	.94	[-.18, .19]
Age × Race	-.11 (.08)	-1.42	.16	[-.27, .04]
Age × Gender	.01 (.08)	.04	.97	[-.16, .16]
Race × Gender	-.02 (.08)	-.31	.76	[-.17, .13]
Age × Race × Gender	.09 (.08)	1.16	.25	[-.06, .25]
God's gender				
Racial prejudice (Child)	-.02 (.12)	-.19	.85	[-.27, .22]
Racial prejudice (God)	-.13 (.18)	-.69	.50	[-.49, .23]
Gender prejudice (Child)	.15 (.15)	.99	.32	[-.14, .44]
Gender prejudice (God)	.17 (.15)	1.08	.28	[-.14, .47]
Age	.18 (.13)	1.39	.17	[-.08, .44]
Race	-.15 (.13)	-1.21	.23	[-.40, .10]
Gender	.12 (.14)	.84	.41	[-.16, .39]
Age × Race	.07 (.12)	.60	.55	[-.17, .31]
Age × Gender	.23 (.12)	1.83	.07	[-.02, .47]
Race × Gender	-.05 (.12)	.41	.68	[-.27, .18]
Age × Race × Gender	-.18 (.12)	-1.52	.12	[-.42, .05]

God's mind, such that children may from an early age believe that God's perspective of others is different from their own, and they raise questions as to how children reconcile their belief that God is more tolerant of others than they are. We look forward to future research that examines this question more directly.

Study 4

In Studies 2 and 3, we controlled for multiple individual differences that were predicted to correlate with participant responses (e.g., racial prejudice, sexist attitudes, religiosity, political attitudes), yet the correlational design of those studies left open questions about causality (i.e., does conceptualizing God as having a social identity *influence* leadership judgments?). In Study 4, we examined whether attributing an identity to a god causally predicted conceptions of leadership. Notably, we conducted this study in a novel context with novel groups and a novel god, for three reasons.

First, beliefs about God are unfalsifiable (i.e., we could not provide participants with objective evidence about God's actual identity), and thus we would be unable to usher evidence sufficient to directly manipulate participants' beliefs about God's actual identity. Second, the belief that God is a White man is so pervasive in the United States that even young children endorse this conception (Study 3), and this conception is deeply engrained by adulthood (Jackson et al., 2018). Given that early emerging intuitions are difficult to override (Goldberg & Thompson-Schill, 2009; Shtulman & Valcarcel, 2012), the long-standing intuition that God is a White man would be extremely difficult to change, especially in the context of a brief experiment. Indeed, even U.S. atheists (i.e., persons who do not believe in the existence of a God) are aware of the common depiction of God as a White man (see Study S2 in the online supplemental materials). Third, given that the representation of God as a White man is so pervasive in U.S. society, we reasoned that exposing U.S. Christians to counter representations of God (e.g., as a Black woman) would likely elicit reference to the common representation of God (i.e., a White man),

Table 7
Study 3: Covariates and Fixed Effects Predicting Ratings of God's Age, Race, and Gender on Children's Responses on the Indirect Measure

Variable	Indirect measure			
	<i>B</i> (<i>SE</i>)	<i>z</i>	<i>p</i>	[95% <i>CI</i>]
God's age				
Racial prejudice (Child)	-.01 (.05)	-.09	.93	[-.25, .23]
Racial prejudice (God)	.01 (.12)	-.84	.40	[-.38, .15]
Gender prejudice (Child)	.08 (.05)	-.08	.93	[-.29, .27]
Gender prejudice (God)	.03 (.11)	.47	.64	[-.19, .32]
Age	.06 (.03)	1.97	.049	[.03, .55]
Race	-.10 (.06)	2.79	.005	[.09, .56]
Gender	-.06 (.07)	-.40	.69	[-.33, .21]
Age × Race	-.03 (.03)	-.77	.44	[-.35, .15]
Age × Gender	-.01 (.03)	-1.81	.07	[-.49, .02]
Race × Gender	.10 (.12)	.82	.41	[-.14, .33]
Age × Race × Gender	.01 (.13)	.05	.96	[-.24, .25]
God's race				
Racial prejudice (Child)	-.04 (.13)	-.29	.77	[-.29, .22]
Racial prejudice (God)	-.05 (.15)	.33	.74	[-.24, .34]
Gender prejudice (Child)	-.13 (.15)	-.86	.39	[-.43, .16]
Gender prejudice (God)	-.06 (.14)	-.40	.69	[-.33, .22]
Age	.21 (.14)	1.49	.14	[-.06, .47]
Race	.17 (.15)	1.24	.22	[-.12, .46]
Gender	.15 (.15)	1.09	.28	[-.13, .44]
Age × Race	.05 (.13)	.39	.70	[-.20, .30]
Age × Gender	-.02 (.13)	-.12	.90	[-.27, .24]
Race × Gender	.12 (.13)	.97	.33	[-.13, .37]
Age × Race × Gender	-.01 (.13)	-.03	.98	[-.25, .25]
God's gender				
Racial prejudice (Child)	-.06 (.16)	-.38	.71	[-.38, .26]
Racial prejudice (God)	-.09 (.17)	-.52	.60	[-.42, .25]
Gender prejudice (Child)	.26 (.18)	1.42	.16	[-.10, .62]
Gender prejudice (God)	.17 (.18)	.93	.35	[-.18, .51]
Age	.08 (.16)	.49	.62	[-.24, .40]
Race	.06 (.15)	.34	.73	[-.69, .02]
Gender	-.34 (.18)	-1.88	.06	[-.20, .40]
Age × Race	.10 (.15)	.84	.39	[-.41, .21]
Age × Gender	-.10 (.15)	-.54	.59	[-.34, .25]
Race × Gender	-.05 (.15)	-.32	.75	[-.34, .25]
Age × Race × Gender	.34 (.15)	2.22	.03	[.04, .65]

Table 8

Study 3: Covariates and Fixed Effects of Conceptualizing God as White and Male (as Measured by the Adult Ratings of Children's Drawings) Predicting Candidate Selection as a Function of Candidate Race and Gender

God's race/gender	Indirect measure			
	<i>B</i> (<i>SE</i>)	<i>z</i>	<i>p</i>	[95% <i>CI</i>]
Racial prejudice (Child)	.01 (.04)	.05	.96	[−.08, .09]
Racial prejudice (God)	.01 (.06)	.016	.99	[−.12, .13]
Gender prejudice (Child)	.01 (.05)	.07	.95	[−.10, .10]
Gender prejudice (God)	.01 (.04)	.01	.99	[−.10, .10]
Participant age (PA)	.01 (.04)	.07	.94	[−.08, .08]
Participant race (PR)	.01 (.04)	.03	.98	[−.08, .08]
Participant gender (PG)	.01 (.05)	.03	.97	[−.09, .10]
God's race (GR)	−.11 (.07)	−1.53	.13	[−.26, .03]
God's gender (GG)	.02 (.07)	.27	.79	[−.12, .17]
Candidate race (CR)	.06 (.10)	.60	.55	[−.14, .27]
Candidate gender (CG)	.19 (.10)	1.85	.06	[−.01, .40]
GR × GG	.03 (.06)	.51	.61	[−.09, .15]
GR × CR	.26 (.11)	2.50	.01	[.06, .47]
GG × CR	−.08 (.11)	−.71	.48	[−.28, .13]
GR × CG	.02 (.11)	.23	.82	[−.18, .23]
GG × CG	.07 (.11)	.66	.51	[−.14, .28]
CR × CG	.28 (.15)	1.95	.053	[−.01, .58]
GR × GG × CR	−.02 (.09)	−.29	.77	[−.19, .14]
GR × GG × CG	−.04 (.09)	−.45	.65	[−.21, .13]
GR × CR × CG	−.11 (.15)	−.72	.47	[−.39, .18]
GG × CR × CG	−.09 (.15)	−.59	.55	[−.38, .20]
GR × GG × CR × CG	.01 (.12)	.11	.92	[−.22, .25]

whereas exposing U.S. Christians to the common representation of God (i.e., a White man) would likely not elicit reference to counter representations (e.g., a Black woman). Simply put, any depiction of God as not a White man would likely cause people to think of God as a White man. To this point, in an additional study (see Study S3 in the online supplemental materials), we randomly assigned a new group of U.S. Christians to one of two conditions in which they reacted to a painting by the Italian artist Michelangelo, in which God is depicted as a White man (i.e., The Creation of Adam), or a painting by the Afro-Cuban artist Harmonia Rosales, in which God is depicted as a Black woman (i.e., The Creation of God). Following exposure to these different images, participants showed no differences in their conception of God's identity. Moreover, participants exposed to imagery depicting God as a White man rarely mentioned race and rarely expressed disbelief and/or negativity (e.g., "I really like this picture ∴ it shows the natural description of God"; "It is a classic"), whereas those exposed to imagery depicting God as a Black woman often referenced race and often expressed disbelief and/or negativity (e.g., "God isn't an old Black cow"; "I am disturbed. Greatly disturbed"). As one poignant example, one participant remarked:

The artist is challenging the notion that #1 God is a man, #2 God is White. If I were at an art gallery and saw this painting, I would walk by shaking my head as it is just one more politically correct recreation of who God is. Disgusting! Oh, and I say this as an African American woman.

For the three reasons outlined above, we introduced participants in Study 4 to a novel context (i.e., planet Zombot), with novel groups (i.e., Hibbles and Glerks), and a novel god (i.e., Liakbor the

Creator). Such methodologies are widely used in social, cognitive, and developmental psychology, as well as experimental philosophy, given that they allow researchers to directly examine and manipulate intuitions and psychological processes (e.g., Bear & Knobe, 2017; Białek, Turpin, & Fugelsang, 2019; Dunham, 2018; Rhodes, 2012; Roberts, Gelman, & Ho, 2017; Roberts et al., 2019; Van Bavel & Cunningham, 2009). As one classic example, Hoffman and Hurst (1990) tested whether gender stereotypes emerge from a post hoc rationalization of sexual divisions of labor (e.g., women are more likely to be child rearing, therefore women are gentle) rather than from beliefs about personality differences (e.g., women are gentle, therefore women are more likely to be child rearing). Hoffman and Hurst (1990) introduced participants to novel groups (Orinthians vs. Ackmians) who inhabited a distant planet and occupied distinct social roles (child raisers vs. city workers). All participants were told that the groups were not gendered and that any individual could mate with any other individual, no participants were told about group differences in personality traits, and some participants were told that the groups were cultural whereas others were told that the groups were biological. Thus, participants could not draw inferences on the basis of sex, sexuality, or personality, but they could draw inferences on the basis of occupation and group nature (cultural vs. biological). Indeed, participants used the group's occupation and nature to make inferences about personalities (e.g., child-raisers were presumed to be particularly patient, kind, and understanding, especially if they were a biological group). Thus, with this methodology, Hoffman and Hurst (1990) were able to test and reveal the theorized causal model. We make use of this approach in Study 4.

Table 9

Study 3: Covariates and Fixed Effects of Conceptualizing God as White and Male (as Measured by the Indirect Measure) Predicting Candidate Selection as a Function of Candidate Race and Gender

God's race/gender	Indirect measure			
	<i>B</i> (<i>SE</i>)	<i>z</i>	<i>p</i>	[95% <i>CI</i>]
Racial prejudice (Child)	.01 (.03)	.05	.96	[−.09, .09]
Racial prejudice (God)	−.01 (.03)	−.012	.99	[−.10, .11]
Gender prejudice (Child)	.01 (.03)	.05	.96	[−.11, .10]
Gender prejudice (God)	.01 (.03)	.01	.99	[−.10, .10]
Participant age (PA)	.01 (.03)	.02	.98	[−.09, .10]
Participant race (PR)	.01 (.03)	.03	.97	[−.09, .09]
Participant gender (PG)	.01 (.03)	.01	.99	[−.10, .11]
God's race (GR)	−.07 (.06)	−1.17	.24	[−.33, .09]
God's gender (GG)	−.03 (.06)	−.52	.60	[−.27, .15]
Candidate race (CR)	.15 (.08)	1.92	.054	[−.08, .49]
Candidate gender (CG)	.13 (.08)	1.59	.11	[−.12, .45]
GR × GG	−.04 (.06)	−.81	.42	[−.29, .11]
GR × CR	.25 (.08)	3.15	.002	[.13, .69]
GG × CR	.03 (.08)	.41	.68	[−.25, .31]
GR × CG	−.16 (.08)	−1.99	.05	[−.47, .08]
GG × CG	.07 (.08)	.82	.41	[−.19, .37]
CR × CG	.23 (.11)	2.07	.038	[−.09, .66]
GR × GG × CR	.13 (.08)	1.56	.12	[−.07, .51]
GR × GG × CG	−.02 (.08)	−.29	.77	[−.27, .29]
GR × CR × CG	.09 (.11)	.79	.43	[−.36, .39]
GG × CR × CG	−.08 (.11)	−.73	.47	[−.45, .29]
GR × GG × CR × CG	−.01 (.12)	−.10	.92	[−.48, .28]

Participants were told about a planet called Zombot, on which there lived two kinds of creatures: Hibbles and Glerks, who both prayed to Liakbor the Creator, whom they believed to be Hibble. Participants were then randomly assigned to one of three conditions, in which Liakbor the Creator was identified as Hibble, as Glerk, or as neither Hibble nor Glerk. In each condition, participants were then asked whom they thought rules over Zombot and whom they thought should rule over Zombot. We hypothesized that across conditions, participants would infer that Hibbles do in fact rule over Zombot given that both Hibbles and Glerks believe that the god is Hibble (i.e., Hibbles occupy the position of power). However, we hypothesized that participants would infer that Hibbles should rule when the god is Hibble (H1), that neither Hibbles nor Glerks should rule when the god is neither Hibble nor Glerk (H2), and that Glerks should rule when the god is Glerk (H3).

Study 4 was important for three reasons. First, it enabled us to directly test whether beliefs about a god's identity causally affect conceptions of leadership, without interference from participants' prior beliefs or expectations about God. Second, it enabled us to test whether the previously detected effects were specific to reasoning about the Christian God, or whether they extended to reasoning about any god by virtue of broader intuitions about status and identity. Third, it enabled us to test whether people privilege information about who is in fact in power over information about a god's identity, or whether people privilege information about a god's identity over information about who is in fact in power. That is, one conclusion that could be drawn from Studies 2 and 3 is that people simply expect powerful people to occupy powerful positions (i.e., White men are typically in power, so White men should be in power; see Kay et al., 2008; Roberts et al., 2017). If people privilege information about who is in power over information about a god's identity, they should infer across the three conditions that Hibbles *should* rule, regardless of a god's actual identity. However, if people privilege information about a god's identity over information about who is in leadership, their responses should vary across the conditions. Collectively, these findings would demonstrate that people use information about a god's identity to make inferences about who should be in leadership, regardless of who is actually in leadership.

Method

Participants. Study 4 (preregistered) included a new group of U.S. Christian adults ($N = 298$): 62 White men ($M_{\text{age}} = 47.79$, $SD = 15.03$, bachelor's degree or higher = 35%), 66 White women ($M_{\text{age}} = 49.78$, $SD = 15.97$, bachelor's degree or higher = 29%), 59 Black men ($M_{\text{age}} = 34.98$, $SD = 11.56$, bachelor's degree or higher = 34%), and 79 Black women ($M_{\text{age}} = 33.38$, $SD = 12.99$, bachelor's degree or higher = 32%). Our a priori goal was to have 50 participants within each group; however, because of a technical error, we slightly oversampled. A power analysis confirmed that our sample size was sufficiently powered to detect small-to-medium effects ($\alpha \leq .05$, $1 - \beta \geq .80$, $f^2 \geq .03$).

Materials and procedure. First, participants were introduced to the fictional planet of Zombot, and told that Zombot is inhabited by two kinds of creatures, Hibbles and Glerks, who believed in a particular god, Liakbor the Creator:

In a galaxy far, far away, there exists a planet called Zombot. On this planet, there are two kinds of creatures, Hibbles, who are [depicted] on the left, and Glerks, who are [depicted] on the right. Each day, both the Hibbles and the Glerks pray to Liakbor the Creator, who they believe created Zombot and everything on it, including the water and the lands, the grass and the trees, and all of the creatures that live on it. Both the Hibbles and the Glerks believe that Liakbor is Hibble.

Participants were then randomly assigned to one of three conditions, in which they were told and shown that (a) Liakbor is actually Hibble, (b) Liakbor is something else entirely (i.e., alien), or (c) Liakbor is actually Glerk. Participants were then told, "One group of creatures are the rulers of Zombot; they make the most major decisions, occupy the most positions of leadership, and possess the most resources," and asked two questions, in fixed-order: (a) Which group do you think rules over Zombot? and (b) Which group do you think should rule over Zombot (1 = *Definitely Glerks*, 4 = *Neither Hibbles nor Glerks*, 7 = *Definitely Hibbles*)? Lastly, participants provided information about their social and religious background, as well as a 2-item measure of political attitudes ($M = 3.43$, $SE = .11$, $r = .93$). We did not include measures of racial prejudice or sexism given that this study involved novel groups.

Each group consisted of three individuals located on either the left or the right side of the screen, and group membership was portrayed by clothing pattern (solid orange, solid green) and category labels (Hibbles, Glerks), counterbalanced across participants. Whether God was believed to be Hibble or Glerk was also counterbalanced across participants (though we refer here to the Hibbles as the reference group, for simplicity). Participants were also asked several comprehension questions throughout the study (i.e., Which group is the Hibbles/Glerks? Do the Hibbles/Glerks believe that Liakbor the Creator is Hibble, Glerk, or neither? Is Liakbor the Creator Hibble, Glerk, or neither?). Participants who failed *any* of these comprehension questions were excluded from the analyses ($n = 65$). For a sample trial, see the [online supplemental materials](#).

Data analyses. We conducted linear models in which participant race (White, Black; effect-coded with Black = -1), participant gender (male, female; effect-coded with female = -1), god's identity (Hibble, Glerk, Alien), and the interactions among these variables were our primary fixed-effects of interest. The three-level variable of god's identity was dummy coded so that god as Hibble or god as Alien were the reference groups. Participant age, education, religiosity, frequency of church attendance, and political attitudes were included as covariates (all standardized). The dependent measures were participants' beliefs about who does rule over Zombot (Model 1) and who should rule over Zombot (Model 2). Additional one-sample t tests were conducted to compare responses across questions to the midpoint (i.e., 4) to examine whether participants reported that Hibbles ruled/should rule (as evidenced by scores above the midpoint), or that Glerks ruled/should rule (as evidenced by scores below the midpoint).

Results

Who rules over Zombot? There were no effects of participant race or gender. As a reminder, all participants read that Hibbles and Glerks both believed god to be Hibble. Yet responses varied as a function of God's identity. Specifically, U.S. Christians

were most likely to infer that Hibbles ruled when the god was Hibble ($M = 5.65$, $SE = .19$), followed by when the god was Alien ($M = 4.61$, $SE = .15$), followed by when the god was Glerk ($M = 3.95$, $SE = .22$; mean comparisons: God as Hibble vs. God as Alien: $B = -.97$, $SE = .27$, $t = -3.68$, $p < .001$, 95% CI $[-1.49, -.45]$, God as Hibble vs. God as Glerk: $B = -1.60$, $SE = .27$, $t = -5.75$, $p < .001$, 95% CI $[-2.15, -1.05]$, God as Alien vs. God as Glerk: $B = -.63$, $SE = .25$, $t = -2.38$, $p < .001$, 95% CI $[-1.15, -.11]$). Indeed, U.S. Christians inferred that Hibbles ruled when the god was Hibble (i.e., their scores were significantly above the midpoint; $t = 8.85$, $p < .001$, 95% CI $[5.27, 6.02]$, Cohen's $d = 1.93$) and when the god was Alien ($t = 4.14$, $p < .001$, 95% CI $[4.32, 4.90]$, Cohen's $d = .84$), although unexpectedly, they inferred that neither Hibbles nor Glerks ruled when god was Glerk ($t = -.21$, $p = .83$, 95% CI $[3.51, 4.39]$, Cohen's $d = -.05$; see Discussion).

Who should rule over Zombot? There were no significant effects involving participant race or gender, although there were again significant effects as a function of the god's identity. That is, U.S. Christians inferred that Hibbles should rule when the god was Hibble ($M = 4.92$, $SE = .17$), followed by when the god was

neither Hibble nor Glerk ($M = 4.14$, $SE = .14$), followed by when the god was Glerk ($M = 3.54$, $SE = .15$; mean comparisons: God as Hibble vs. God as Alien: $B = -.76$, $SE = .22$, $t = -3.52$, $p < .001$, 95% CI $[-1.20, -.33]$, God as Hibble vs. God as Glerk: $B = -1.42$, $SE = .23$, $t = -6.13$, $p < .001$, 95% CI $[-1.87, -.96]$, God as Alien vs. God as Glerk: $B = -.65$, $SE = .22$, $t = -2.95$, $p = .003$, 95% CI $[-1.08, -.22]$). Critically, U.S. Christians inferred that Hibbles should rule when the god was Hibble (i.e., H1; $t = 5.25$, $p < .001$, 95% CI $[4.57, 5.27]$, Cohen's $d = 1.14$), that neither group should rule when the god was Alien (i.e., H2; $t = 1.02$, $p = .31$, 95% CI $[3.87, 4.42]$, Cohen's $d = .21$), and that Glerks should rule when the god was Glerk (i.e., H3; $t = -2.96$, $p = .004$, 95% CI $[3.24, 3.85]$, Cohen's $d = -.65$; see Figure 6).

Discussion

Recall that all participants were told that both novel groups *believed* that the god was Hibble, but were randomly assigned conditions in which the god's *actual* identity varied. We found that participants were more likely to report that Hibbles do and should

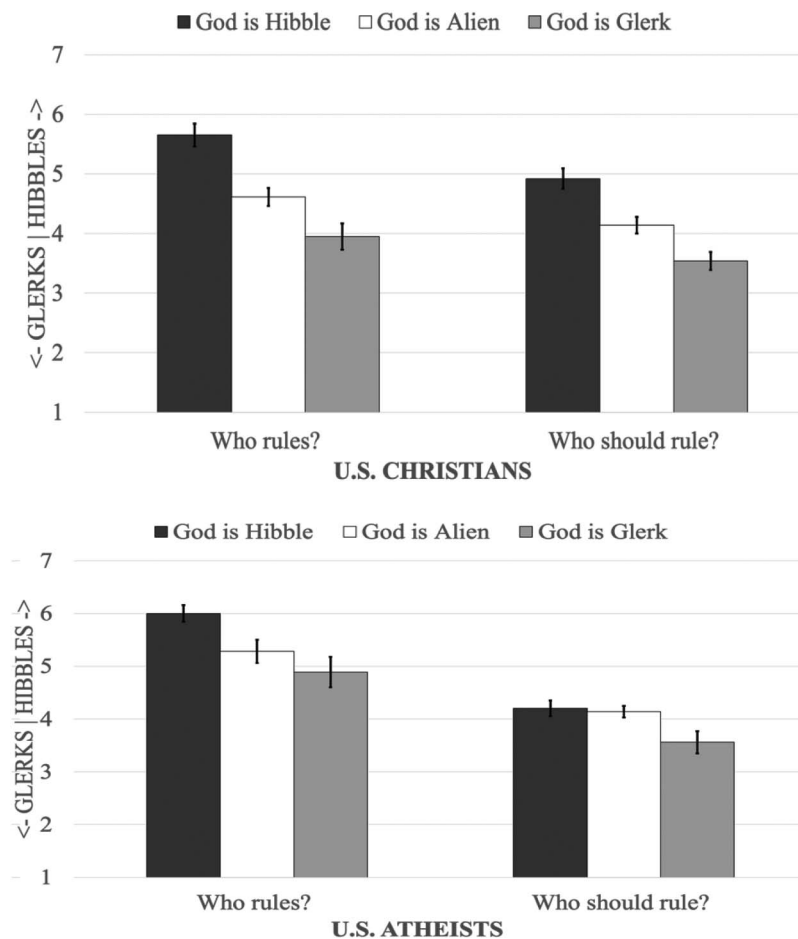


Figure 6. Studies 4 (top) and 5 (bottom). Mean inferences about who does (left) and should (right) rule over Zombot, across conditions. Scores could range from 1 to 7. Error bars depict standard errors of the standardized beta coefficient.

rule when the god was actually Hibble, followed by when the god was actually Alien, followed by when the god was actually Glerk. Interestingly, these data suggest that beliefs about a god's identity are powerful enough to even override intuitions about who occupies the position of power, which was unexpected. Importantly, and as predicted, midpoint comparisons revealed that when asked who should be in power, U.S. Christians indicated that Hibbles should rule when the god was Hibble, that neither group should rule when the god was Alien, and that Glerks should rule when the god was Glerk (as evidenced by the extent to which their scores deviated from the midpoint). Ultimately, our data reveal that even in a novel context with novel groups and a novel God, U.S. Christians used information about a god's identity to make inferences about who is and should be in leadership.

Study 5

Study 4 was conducted in a novel context to test whether intuitions about a god's identity predict conceptions of leadership, irrespective of beliefs about who is in fact in power, and whether this occurs outside of the Christian context. Nevertheless, Study 4 was conducted with U.S. Christians, who may have been influenced by their subscription to Christianity. Thus, we conducted a preregistered replication of Study 4 with a sample that did not subscribe to Christian ideology: U.S. Atheists. Because Study 4 yielded no participant race differences, and because few Black Americans identify as atheist (Pew Research Center, 2009), we recruited atheists regardless of their racial background.

Method

Participants. Study 5 (preregistered) included U.S. atheists ($N = 134$, female = 51%, male = 49%, $M_{\text{age}} = 37.35$, $SD = 15.88$, bachelor's degree or higher = 49%, of which 85% were White, 7% were Latinx, 6% were Asian, 1% were Black, and 1% identified with another race). All participants self-identified as not believing in God and as atheist. A power analysis suggested that a sample size of at least 100 would be sufficiently powered to detect medium effects ($\alpha \leq .05$, $1 - \beta \geq .80$, $f^2 = .10$).

Materials and procedure. The materials and procedure were identical to those in Study 4.

Data analyses. The data analyses were identical to those in Study 4, with the exception that participant race was not included in the model.⁹

Results

Who Rules Over Zombot? There were no effects of participants gender. As in Study 4, all participants read that Hibbles and Glerks both believed god to be Hibble, and again, responses varied as a function of the god's identity. Specifically, U.S. atheists were most likely to infer that Hibbles ruled when the god was Hibble ($M = 6$, $SE = .18$) than when the god was Alien ($M = 5.28$, $SE = .22$) or when the god was Glerk ($M = 4.87$, $SE = .29$), although participants' inferences did not vary when the god was Alien versus Glerk (mean comparisons: God as Hibble vs. God as Alien: $B = -.76$, $SE = .31$, $t = -2.45$, $p = .015$, 95% CI $[-1.38, -.15]$), God as Hibble versus God as Glerk: ($B = -1.08$, $SE = .32$, $t = -3.43$, $p < .001$, 95% CI $[-1.71, -.46]$, God as

Alien versus God as Glerk: $B = -.32$, $SE = .32$, $t = -.97$, $p = .33$, 95% CI $[-.97, .33]$). Nevertheless, U.S. atheists inferred that Hibbles ruled (i.e., their scores were significantly above the midpoint), irrespective of whether the god was Hibble ($t = 11.36$, $p < .001$, 95% CI $[5.65, 6.35]$, Cohen's $d = 3.25$), Alien ($t = 5.84$, $p < .001$, 95% CI $[4.84, 5.73]$, Cohen's $d = 1.80$), or Glerk ($t = 3.07$, $p = .003$, 95% CI $[4.29, 5.46]$, Cohen's $d = .97$).

Who should rule over Zombot? Again, the god's identity mattered for belief about who should rule. U.S. atheists were more likely to infer that Hibbles should rule when the god was Hibble ($M = 4.2$, $SE = .15$) or Alien ($M = 4.17$, $SE = .11$) compared with when the god was Glerk ($M = 3.56$, $SE = .21$), with the former two conditions not differing significantly from one another (mean comparisons: God as Hibble vs. God as Alien: $B = -.05$, $SE = .23$, $t = -.20$, $p = .84$, 95% CI $[-.50, .41]$, God as Hibble versus God as Glerk: $B = -.69$, $SE = .23$, $t = -2.96$, $p = .003$, 95% CI $[-1.14, -.23]$, God as Alien versus God as Glerk: $B = -.64$, $SE = .24$, $t = -2.65$, $p = .009$, 95% CI $[-1.12, .16]$). Interestingly, and counter to our expectation, U.S. atheists inferred that neither Hibbles nor Glerks should rule when the god was Hibble ($M = 4.20$, $SE = .15$, $t = 1.30$, $p = .20$, 95% CI $[3.89, 4.51]$, Cohen's $d = .37$; see Discussion). However, as predicted, they inferred that neither Hibbles nor Glerks should rule when the god was Alien ($t = 1.48$, $p = .15$, 95% CI $[3.94, 4.38]$, Cohen's $d = .46$), and that Glerks should rule when the god was Glerk ($t = -2.07$, $p = .045$, 95% CI $[3.13, 3.99]$, Cohen's $d = -.65$; see Figure 6).

Discussion

Again, all participants were told that both novel groups *believed* that the god was Hibble, but their responses varied as a function of the god's actual identity. For instance, when asked to infer who was in leadership, U.S. atheists were more likely to reason that Hibbles were in leadership when the god was Hibble compared with when the god was Glerk. Similarly, when asked to infer who *should* lead, U.S. atheists were more likely to reason that Hibbles should lead when the god was Hibble compared with when the god was Glerk. Also, and consistent with our predictions, U.S. atheists reasoned that Hibbles ruled irrespective of the god's identity (their scores were above the midpoint across conditions) yet reasoned that Glerks *should* rule when the god was Glerk (their scores were below the midpoint). Ultimately, our data reveal that even among participants who do not believe in God, beliefs about a god's identity licensed predictions about who is and should be in leadership.

Study 6

Studies 2 through 5 suggest that attributing a social identity to god, among Black Christians and White Christians, male Christians and female Christians, Christian adults and Christian chil-

⁹ This was a deviation from the preregistered analyses, in which participant race was included in the preregistered model. Given that we did not sample for participant race, we left open the possibility that we might by chance recruit enough racial minorities to examine effects as a function of race. However, because this was not achieved, we dropped this variable from the analysis.

dren, Christians *and* atheist, predicts conceptions of leadership. In Studies 6 and 7, we tested the reverse question: Do beliefs about who is in leadership predict beliefs about the god's identity? For example, U.S. citizens may recognize that White men occupy the highest status positions, and may therefore conceptualize god as a White man. That is, the reality that White men in the U.S. occupy most leadership positions is uncontroversial. For example, in 2018, 89% of Fortune 500 companies were led by White men (Fortune, 2017) and 98% of past U.S. presidents have been White men. This reality, rooted in chance historical events and maintained by racist and sexist laws and practices (Alexander, 2010; Harari, 2015; Williams, 1987), influences people to erroneously assume that White men are natural leaders (Bian et al., 2017, 2018; Pauker et al., 2016), and people in high social positions are often presumed to be close to God (Meier et al., 2007).

Thus, what remains unclear is whether people use information about who is in leadership to make inferences about a god's identity. Answering this question was particularly important for understanding the extent to which beliefs about heaven and earth are bidirectionally linked (e.g., just as beliefs about heaven predict beliefs about earth, beliefs about earth might also predict beliefs about heaven). As in Studies 4 and 5, we tested this question in a novel group context, which enabled us to directly manipulate the intuitions under question without interference from participants' prior beliefs or expectations, and to examine whether these intuitions extend beyond Christian ideology.

Method

Participants. Study 6 (preregistered) included a new group of U.S. Christian adults ($N = 206$): 53 White men ($M_{\text{age}} = 49.01$, $SD = 15.85$, bachelor's degree or higher = 42%), 50 White women ($M_{\text{age}} = 46.58$, $SD = 15.26$, bachelor's degree or higher = 42%), 50 Black men ($M_{\text{age}} = 32.7$, $SD = 13.02$, bachelor's degree or higher = 32%), and 53 Black women ($M_{\text{age}} = 33.49$, $SD = 15.43$, bachelor's degree or higher = 30%). A post hoc power analysis confirmed that the sample was sufficiently powered to detect small-to-medium effects ($\alpha \leq .05$, $1 - \beta \geq .80$, $OR = 1.30$).

Materials and procedure. Participants were randomly assigned to one of two conditions: In the *God-to-Leader* condition, participants were shown a cartoon drawing of an individual next to planet Zombot, and told, "This one created everything on Zombot, including the water and lands, the grass and trees, and all of the creatures that live on it." The god was either in orange clothing or green clothing, counterbalanced across participants. Next, participants were shown two groups of creatures, one with orange clothing and another with green clothing, with one standing to the left and one standing to the right of a large and fancy castle. Participants were told and asked, "One group of creatures are the rulers of Zombot and they live in this really nice castle. Which group rules Zombot and lives in this really nice castle?" The left-right position of the groups was counterbalanced across participants.

In the *Leader-to-God* condition, participants were shown a group of creatures and told, "These ones are the rulers of Zombot and they live in this really nice castle." The creatures were either in orange clothing or green clothing, counterbalanced across participants. Next, participants were shown two individuals, one in orange clothing and one in green clothing, one standing to the left

and one standing to the right of Zombot. Participants were told and asked, "Everything on Zombot, including the water and lands, the grass and trees, and all of the creatures living on it, were created by one creator. Which one created Zombot?" The left-right position of the individuals was counterbalanced across participants. Lastly, participants provided information about their demographic and religious background, as well as about their political attitudes ($M = 3.98$, $SD = .11$). We did not include measures of racial prejudice or sexism given that this study involved novel groups. Also, unlike in Studies 3 and 4, we did not compare participants' beliefs about what *is* to what *should be*, because asking participants to infer which one *should have* created Zombot does not get at our primary question of whether beliefs about who is in authority predict beliefs about the god's actual identity (as opposed to whether beliefs about who is in authority predict beliefs about the god's ideal identity), and because we wanted to use this procedure with children (see Study 7), who often conflate what *is* with what *should be* (Roberts et al., 2017).

Data analysis. We conducted a logistic regression in which condition (God-to-Leader, Leader-to-God; effect-coded with Leader-to-God = -1), participant race (White, Black; effect-coded with Black = -1), gender (male, female; effect-coded with female = -1), and an interaction between these three variables were our primary fixed-effects of interest. Participant age, education, religiosity, frequency of church attendance, and political attitudes were included as covariates (all standardized). The dependent measures for these analyses were participants' selection of the high-status response (the god-like creatures in the God-to-Leader condition, the leader-like creator in the Leader-to-God condition). Scores could range from 0 to 1, calculated as proportions across participants. One-sample *t* tests were conducted to examine whether a greater-than-chance (i.e., 50%) proportion of participants selected the high-status response across the conditions.

Results and Discussion

There were no significant main or interaction effects (see Figure 7). In the God-to-Leader condition, the majority of Christian adults

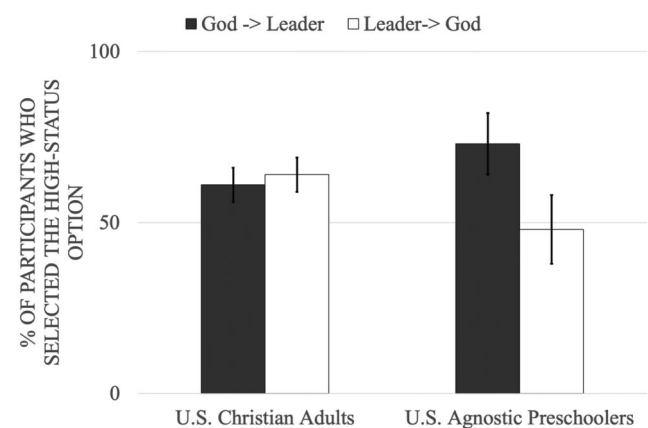


Figure 7. Studies 6 and 7. Percentage of participants who selected the high-status option, across U.S. Christian Adults (Study 6) and U.S. Agnostic Preschoolers (Study 7). Percentages could range from 0 to 100. Error bars depict standard errors of the standardized beta coefficient.

inferred that the leaders were those that resembled the god ($M = 61\%$, $SE = 5\%$, $t = 2.33$, $p = .02$, Cohen's $d = .44$), and in the Leader-to-God condition, the majority of Christian adults inferred that the god was the one that resembled the leaders ($M = 64\%$, $SE = 5\%$, $t = 2.96$, $p = .003$, Cohen's $d = .59$). Thus, U.S. Christian adults, in an unfamiliar and novel context, used a god's identity to infer who was in leadership (see also Study 4), and they additionally used information about who was in leadership to infer a god's identity, suggesting that the causal arrow operates in both directions: beliefs about a god's identity predict beliefs about leadership, and beliefs about leadership predict beliefs about a god's identity. This cycle, then, in perpetual motion between beliefs about heaven and earth, may enable real-world social hierarchies to persist (see General Discussion). We next examined whether this cycle existed in a sample drastically unlike Christian adults: agnostic preschoolers.

Study 7

Study 7 had two primary purposes. First, we wanted to test whether among agnostic preschoolers (i.e., those who had never heard of God), beliefs about a god's identity predicted beliefs about which group is in leadership. Study 3, which was correlational and focused on the domains of race and gender, and was conducted with only Christian children, left unclear whether beliefs about a god's identity causally predict conceptions of leadership, and whether they do so even without prior beliefs about God. If agnostic preschoolers, even in a novel context with novel groups and a novel god, do indeed use a god's identity to infer leadership, it would suggest that doing so is early emerging and intuitive. Second, as in Study 6, we tested the reverse causal pathway; whether beliefs about who is in leadership predict beliefs about a god's identity. Preschoolers have fewer social experiences than adults, and are less familiar with widespread social inequalities (e.g., that most Fortune 500 CEOs are White men). However, if children are introduced to real-world societal inequalities, they may use them as insight into who governs over that society (i.e., God).

Method

Participants. Study 7 (preregistered) included U.S. agnostic preschoolers (i.e., those who self-reported never having heard of God, ages 4 to 5; $N = 51$): 12 White boys ($M_{\text{age}} = 4.68$, $SD = .29$), 14 White girls ($M_{\text{age}} = 4.42$, $SD = .45$), 13 racial minority boys ($M_{\text{age}} = 4.52$, $SD = .35$, of which nine were Asian, two were Black, and two were Hispanic/Latino), and 12 racial minority girls ($M_{\text{age}} = 4.47$, $SD = .29$, of which six were Asian, three were Middle Eastern, two were Multiracial, and 1 was Hispanic/Latino). Children were recruited at a university-affiliated preschool. A post hoc power analysis confirmed that the sample was sufficiently powered to detect large effects ($\alpha \leq .05$, $1 - \beta \geq .80$, $OR = 3.06$).

Materials and procedure. The materials and procedure were identical to those used in Study 6, with the exception that children's demographic information was received from their preschool, and we did not ask them about their political background.

Data analysis. We conducted a logistic regression in which condition (God-to-Leader, Leader-to-God; effect-coded with God-to-Leader = -1), participant gender (male, female; effect-coded

with female = -1), and an interaction between these two variables were our primary fixed-effects of interests. Race was not included as a fixed-effect given that we were unable to recruit a large and diverse enough sample. As in Study 6, the dependent measures for these analyses were participants' selection of the high-status response.

Results and Discussion

We found a different pattern of results than what was found in Study 6 with adults (see Figure 7). Specifically, there was a marginally significant difference between the two conditions, $B = -.59$, $SE = .32$, $z = -1.90$, $p = .057$. In the God-to-Leader condition, children inferred that the leaders of Zombot were those that resembled the god ($M = 73\%$, $SE = 9\%$, $t = 2.60$, $p = .015$, Cohen's $d = 1.04$), whereas in the Leader-to-God condition, children were at chance ($M = 48\%$, $SE = 10\%$, $t = -.20$, $p = .85$, Cohen's $d = -.08$). Thus, among agnostic preschoolers, unlike among Christian adults, the causal arrow moved only in one direction: a god's identity predicted conceptions of who was in leadership, but who was in leadership did not predict conceptions of a god's identity. In other words, these data suggest that early in development and before religious socialization and extensive social experiences with hierarchy, beliefs about gods might predict beliefs about persons, beginning what could eventually become (in adulthood) bidirectional effects between beliefs about gods and persons. Notably, we encourage a conservative interpretation of this marginally significant condition difference (see Pritschet, Powell, & Horne, 2016), and focus our discussion below on our primary conclusion: Beliefs about who rules in heaven license beliefs about who rules on earth, even among U.S. agnostic preschoolers.

General Discussion

Across seven studies, we find a clear and consistent pattern: attributing a social identity to God predicts perceiving individuals who share that identity as particularly fit to lead. In Study 1, we created two measures and found U.S. White Christians tended to conceptualize God as an old White man, whereas U.S. Black Christians tended to conceptualize God as an old Black man. In Study 2, we found that the more participants conceptualized God as White and/or male, the more strongly they believed that White men were best fit for a supervisor position; this was true among Black Christians and White Christians, men and women, and even after controlling for several attitudes and ideologies (e., racism, sexism, political attitudes, religiosity). In Study 3, we found that even Christian children tended to conceptualize God as a White man (as evidenced by their drawings and categorizations on our novel measure) and that the extent to which they conceptualized God as White predicted the extent to which they conceptualized White people as boss-like. Thus, across samples diverse in race, gender, and age, the extent to which God was conceptualized as a White man—the dominant U.S. depiction of God—predicted perceiving White men as particularly fit to lead.

Critically, we theorized that this phenomenon is not specific to Christian ideology: It reflects a broader intuition that god-like individuals are more fit for god-like positions. Indeed, in Studies 4 (with U.S. Christian adults) and 5 (with U.S. atheist adults), in a

novel context with novel groups and a novel god, participants used a god's identity to make inferences about leadership. We replicated these effects in Study 6, finding again that U.S. Christian adults used a god's identity to infer leadership, and that they additionally used information about who was in leadership to infer a god's identity. In Study 7, U.S. agnostic preschoolers also used a god's identity to infer leadership, though they did not use information about who led to infer a god's identity, suggesting that this latter inference emerges later in development. Collectively, our data provide robust support for a profound conclusion: beliefs about who rules in heaven predict beliefs about who rules on earth.

Our research informs the literature on religiosity and prejudice, which to date, has focused primarily on the roles of fundamentalism and ingroup biases (Allport & Ross, 1967; Hall et al., 2010). We controlled for multiple ideologies (e.g., religiosity, conservatism, racial prejudice, sexist attitudes), recruited diverse participant groups (e.g., Black, White, male, female, adult, child, Christian, atheist), and considered both Christian and novel contexts, and consistently found evidence to suggest that attributing a social identity to God is another route by which religiosity predicts group-based prejudice. These data build on the recent finding that exposure to religious iconography predicts pro-White and anti-Black prejudice (Howard & Sommers, 2017, 2019), to demonstrate further and for the first time that attributing a social identity to God predicts widespread, early emerging, and intuitive conceptions of who deserves to rule.

Our research also informs the historical view that across U.S. history, the myth of God as White was often used to associate whiteness with Godliness and reinforce notions of White superiority, whereas the myth of Black people as being the cursed "sons of Ham" who were "blackened" because of their sins was often used to dissociate blackness from Godliness and reinforce notions of Black inferiority (Blum & Harvey, 2012; Haynes, 2002; Williams, 1987). Regardless of whether the myth of God as White was intentionally used for hierarchy-reinforcing purposes, our data demonstrate that it is deeply woven into U.S. society (e.g., the majority of Google images depict God as a White man) and U.S. minds (see also Jackson et al., 2018), and that it has hierarchy-reinforcing correlates, among both White and Black participants. Indeed, the broader psychological literature demonstrates that both high-status and low-status groups endorse ideologies that reinforce social hierarchy (e.g., Jost & Hunyady, 2005; Sidanius & Pratto, 1999). We propose that conceptualizing God as a White man operates as yet another hierarchy-reinforcing ideology.

Critically, Studies 4 through 7 demonstrate that these effects extend beyond the domains of race and gender. Again, even in a novel context, and even among adults who do not believe in God (Study 5) or children who have never heard of God (Study 7), beliefs about a god's identity predicted the belief that those who shared that identity were more fit for leadership. Informed by these data, we propose that across many contexts, the extent to which people believe in a god and attribute a specific social identity to that god might predict the extent to which they conceptualize those who share that identity as god-like. Our data provide strong support for this possibility, though additional research, especially cross-cultural research, will be needed (see below).

Our finding that even young children conceptualize God as more White than Black (and more male than female), which predicts the conception of White candidates as more boss-like, is

particularly important for understanding the development of religious ideologies and social biases. The present research demonstrates, for the first time, that U.S. children have beliefs about God's social identity, which predict their conceptions of human beings. Preventing children from attributing a social identity to God, or perhaps even encouraging them to develop counter representations of God (e.g., Asian woman), may prevent them from making the kind of hierarchy-reinforcing inferences detected here. How to achieve this will be a challenge for future researchers, especially in the domain of gender, given that descriptions and depictions of God as male are so pervasive.

An important strength of the current research is its scope; finding, for instance, that attributing a specific social identity to a god predicts conceptions of leadership both within and outside of the Christian context. Critically, though, our studies conducted within the Christian context were correlational (though note our many covariates) whereas our studies conducted outside of the Christian context were experimental. We reasoned that directly manipulating participants' beliefs about God's actual identity would be difficult, given that those beliefs are (a) unfalsifiable, (b) met with skepticism and resistance when challenged (see Study S3 in the online supplemental materials), and (c) built upon early emerging intuitions that may be difficult to override. This is not to say that these intuitions are impossible to override, only very difficult; future research that attempts this manipulation more directly (perhaps over a long period of time) might yield informative insights. Until then, we propose that the conception of God as a White man may indeed be causally implicated in the conception of White men as particularly leadership worthy, but that the cause occurs early in development and in the real world. That is, early in childhood, U.S. children come to conceptualize God as a White man, which by adulthood, solidifies as an intuitive representation (Jackson et al., 2018). Attempts to intervene on or manipulate such representations may need to occur in childhood, rather than in a lab during adulthood. We look forward to additional developmental research that attempts to do so. For instance, a longitudinal study that tracks individuals from early childhood into adolescence could examine whether the onset of the representation of God as a White man subsequently alters the perceived leadership potential of White men (or the reverse; see Studies 6 and 7).

Another important strength of the current research is its sample diversity, though additional research is needed, both within and outside of the United States. Do U.S. individuals of other social identities (e.g., Native, Asian, Muslim, nonbinary, transgender) conceptualize God as a White man? To what extent, and for what reason, do these conceptions vary within groups? For example, are Black Christians who attend churches with mostly White congregations more likely to conceptualize God as White? Additional research with larger and more diverse child samples would be especially informative, given that we were unable to systematically examine variation as a function of children's race, gender and age with the relatively small sample of Study 3.

Moreover, although Study 7 was novel in that it examined the intuitions of agnostic preschoolers, those preschoolers attended a university-affiliated preschool and had parents who were highly educated, which has been shown to predict atheism (Mercier, Kramer, & Shariff, 2018). Certainly, our samples are not representative of the broader U.S. population.

We also hope to see future research that includes samples recruited outside of the U.S. context. Does the conception of God as a White man emerge among racial minorities in predominately European contexts, such as Germany and Sweden? What about in predominantly Black and Brown contexts with a heavy Christian influence, such as Ghana and Mexico? Future research should also consider variation across religious and institutional contexts. How do religious leaders conceptualize God's identity, and do they transmit their conceptions to their congregations? Are these effects particularly powerful in religious organizations, or do they similarly influence beliefs about any kind of leadership (e.g., leading a society vs. leading an organization)? We examined conceptions of leadership broadly defined, though attributing a social identity to God may be particularly predictive of conceptions of leadership when the position under consideration is particularly close to God (e.g., to date, 100% of the 266 Popes have been White men). Note that our findings do not necessarily extend to polytheistic contexts in which powers and identities vary across Gods (e.g., Hinduism). Thus, an important task for future research will be to test the extent to which our findings extend to more polytheistic contexts.

Another open question is whether the relations and effects detected here are mediated by beliefs about an authoritarian versus forgiving God (though the two are not necessarily mutually exclusive; see Potvin, 1977). Beliefs about an authoritarian God are particularly predictive of prosocial behaviors, in part by virtue of instilling a fear of God's wrath (Yilmaz & Bahçekapili, 2015, 2016). One possibility is that individuals who attribute a social identity to God, and whom also conceptualize God as authoritarian, are particularly likely to conceptualize individuals who share God's identity as leadership worthy. Thus, future research that examines beliefs about God's social identity and God's mind is needed. Such research could also examine the extent to which these conceptions interact with diverse religious ideologies. Catholics, for instance, may be more likely than Muslims to conceptualize God as omnipotent (Nyhof & Johnson, 2017), and may therefore be particularly likely to infer that God-like individuals should be in leadership.

Our research also raises the broader question of how people come to attribute a social identity to God. In particular, how do people come to attribute a *race* to God? The Bible, for instance, provides a definitive description of God's gender, but provides no definitive description of God's race. Why, then, is God commonly depicted and conceptualized as White? Recall that our content analysis of popular children's books revealed that God was never portrayed White, and presumably, parents do not directly tell their children that God is White. Yet children, even those from racial minority backgrounds, conceptualize God as more White than Black. Why? As mentioned previously, one possibility is that children are simply exposed to imagery that depicts God as White (e.g., via Google). Another, however, is that the metaphors used to describe God may encourage the conception of God as White. That is, just as the metaphors that represent God as occupying a high vertical position reinforce the notion that God represents a high position of power (Meier et al., 2007), the metaphors that represent God as occupying a *white* position of power (e.g., "Then I saw a great white throne and Him who sat upon it, from whose presence earth and heaven fled away, and no place was found for them"; Revelations 20:11) may encourage the conception of God as White. In parallel, the metaphors that represent blackness as un-

holy and destructive (e.g., "Let the darkness and black gloom claim it; Let a cloud settle on it; Let the blackness of the day terrify it"; Job 3:5) could encourage the conception of God as not Black. Whether or not this is the case remains open for investigation.

Lastly, an important task for future research will be to examine how the effects detected here operate within the broader structure of the U.S. Christian church. That is, most U.S. Christian churches are led by White men (Chaves & Anderson, 2014). One reason for this is that many Christian churches do not allow women to enter positions of leadership, often citing The Bible as justification (e.g., The Bible states that God does "not permit a woman to teach or to assume authority over a man; she must be quiet," Timothy 2:12; Chaves & Anderson, 2014; Christians for Biblical Equality, 2007), and as mentioned previously, religious fundamentalism and authoritarianism might enable such race-based and sex-based hierarchies to persist (Hall et al., 2010). Our data suggest that the extent to which congregations conceptualize God as a White man might predict whom they perceive as worthy (and unworthy) of leadership, thereby uplifting White men toward positions of power within the Christian church.

Although much is left to be understood, our research begins to unearth the widespread and intuitive way by which attributing a social identity to God can promote group-based oppression. Moving forward, we hope to see additional research, particularly across multiple psychological disciplines (e.g., cognitive, cultural, developmental, social), to further examine how beliefs about heaven shape beliefs about earth.

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Correction to Roberts et al. (2020)

In the article “God as a White Man: A Psychological Barrier to Conceptualizing Black People and Women as Leadership Worthy” by Steven O. Roberts, Kara Weisman, Jonathan D. Lane, Amber Williams, Nicholas P. Camp, Michelle Wang, Mishaela Robison, Kiara Sanchez, and Camilla Griffiths (*Journal of Personality and Social Psychology*. Advance online publication. January 30, 2020. <http://dx.doi.org/10.1037/pspi0000233>), the phrase Mixed Effects in the table title for Tables 1–3 and Tables 6–8 is incorrect. The corrected phrase should appear instead as Fixed Effects.

All versions of this article have been corrected.

<http://dx.doi.org/10.1037/pspi0000282>