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# Thinking About God Discourages Dehumanization of Religious Outgroups

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In seven studies, six with American Christians and one with Israeli Jews (total N = 2,323), we examine how and when belief in moralizing gods influences dehumanization of ethno-religious outgroups. We focus on dehumanization because it is a key feature of intergroup conflict. In Studies 1–6, participants completed measures of dehumanization from their own perspectives and also from the perspective of God, rating the groups' humanity as they thought God would rate it, or wish for them to rate it. When participants completed measures from both their own and God's perspectives, they reported believing that, compared with their own views, God would see (or prefer for them to see) outgroup members as more human. In Study 7, we extend these findings by demonstrating that thinking about God's views reduces the extent to which religious believers personally dehumanize outgroup members. Collectively, results demonstrate that religious believers attribute universalizing moral attitudes to God, compared to themselves, and document how thinking about God's views can promote more positive intergroup attitudes.

Keywords: intergroup relations, religion, dehumanization

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Differences in religious beliefs and identity are often implicated as a source of intergroup conflict. A hallmark of such conflicts is the tendency for the groups involved to view one another as less than fully human. Dehumanization of outgroup members is welldocumented and functions as a psychological tool that is frequently used to justify intergroup violence (Kteily & Bruneau, 2017; Kteily et al., 2015). Despite the use of both religious belief and dehumanization in explaining intergroup conflict, it remains unclear whether religious beliefs exacerbate or attenuate the

Julia M. Smith b https://orcid.org/0000-0001-8788-6948 Michael H. Pasek b https://orcid.org/0000-0003-1393-1149 Allon Vishkin b https://orcid.org/0000-0002-9655-7449 Kathryn A. Johnson b https://orcid.org/0000-0002-9482-9041 Crystal Shackleford b https://orcid.org/0000-0003-4281-3328 tendency to view religious outgroup members as less than human. We present results from seven studies—six conducted with American Christians and one conducted with Israeli Jews—that seek to answer this question. In our first six studies, we focus on the intergroup attitudes that religious individuals attribute to God and think God would want them to espouse. In the seventh study, we extend these findings by examining how thinking about God's preferences influences individuals' own tendency to humanize or dehumanize outgroup members.

Julia M. Smith served as lead for methodology, data collection, formal analysis, and writing. Michael Pasek served as lead for Study 1a analysis and Bayesian and Bootstrap analyses and in a supporting role for Study 6 and 7 methodology, Study 6 analysis, and writing. Allon Vishkin served as lead for data collection and analysis for Study 6, and in a supporting role for writing. Kathryn A. Johnson served as lead for data collection for Study 1a and in a supporting role for writing. Crystal Shackleford served in a supporting role for methodology and analysis for the pilot study and for writing. Jeremy Ginges served as lead for funding acquisition and served in a supporting role for supervision, methodology, and writing.

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# **Religion and Intergroup Relations**

The effect of religion on intergroup behaviors is a subject of great contention, with significant contradictory evidence (Bloom, 2012). Part of the reason for such theoretical and empirical confusion is the fact that religion is a complex bundle of beliefs and behaviors that might have contradictory effects on intergroup relations. This suggests the need to ask more focused questions. The present research deals with an aspect of religion which differentiates it from other ideologies: beliefs about the nature and preferences of God. Some theorists suggest that belief in "Big Gods" who are omnipotent and care about human morality should confer an evolutionary advantage by promoting social cohesion between coreligionists and binding communities into tight ingroups (Norenzayan et al., 2016). Proponents of this perspective argue that such beliefs should promote parochial moral motives which favor the ingroup to the detriment of outgroups (Norenzayan, 2013; Norenzayan et al., 2016; Norenzayan & Shariff, 2008).

In line with this account, research suggests that intergroup conflict heightens belief in a God that punishes moral transgression (Caluori et al., 2020), that reading religious scripture that emphasizes God's punishing nature increases intergroup aggression (Bushman et al., 2007), and that societies in which religious belief is fused with daily life tend to be societies where inequality and differences in religious beliefs are associated with intergroup conflict (Neuberg et al., 2014). To the degree that belief in God promotes parochialism and religious believers seek to enact what they believe to be God's will, it follows that religious individuals might attribute to God a set of moral values that encourages parochial moral motives.

An emerging body of research provides an alternative account, instead suggesting that belief in a Big God might promote a set of universal moral values that attenuate, rather than exacerbate, intergroup conflict. In line with this hypothesis, research suggests that religious believers are more likely to trust individuals who signal their belief in God even when these individuals do not ascribe to the same religion (Hall et al., 2015); that thinking about religious topics and God can increase prosociality even toward nonbelievers (Everett et al., 2016); and that thinking about God (but not religion) can increase prosociality toward members of religious outgroups (Preston & Ritter, 2013).

Critical to understanding how belief in God influences intergroup relations is understanding how religious individuals believe God would want them to behave toward members of religious outgroups whose lives may be devalued (especially in high conflict settings). In a series of studies conducted in the Middle East and Fiji, religious believers were first asked whether a fellow ingroup member should sacrifice his life to save the lives of five others, who were either members of the respondent's religious ingroup or outgroup. Whether with Muslim Palestinians (Ginges et al., 2016), Jewish Israelis, or Christian Fijians (Pasek et al., 2020), religious believers indicated that, compared with their own moral views, God would be more likely to want the ingroup member to sacrifice his life to save individuals who belonged to another religious group. Notably, this was true even in contexts with high religious conflict. These findings provide evidence that religious believers attribute to God a preference for universalism, as opposed to parochialism. However, although such sacrificial dilemmas are important tools for investigating moral reasoning, they confound two things: measuring utilitarian thinking (and in the above studies valuation of lives), and willingness to harm (Everett & Kahane, 2020). Thus, it is possible that thinking about God may have had the above effects because it decreased aversion to harm and thus support for self-sacrifice across ingroup and outgroup conditions. If the effects instead derive from greater valuation of human life, including the lives of outgroups, we should find that people believe that God prefers them to think of outgroup members as more human. This is the focus of the present paper.

# Dehumanization

Dehumanization has been studied as one of several processes thought to contribute to genocide and wartime atrocities (Kelman, 1973). Considering certain groups of people as less than fully human removes from them the moral norms that typically characterize human interactions, including norms prohibiting violence (Bastian et al., 2012; Opotow, 1990). In practice, dehumanization can involve likening people groups to animals or other nonhuman entities, such as objects, or denying their uniquely human traits and experiences (Haslam & Stratemeyer, 2016). Comparisons of Jews to parasites during the holocaust, Tutsis to cockroaches during the 1994 genocide in Rwanda, Syrian refugees to rabid dogs during the 2016 United States presidential election, and immigrants to poison or infectious disease are all examples of how dehumanizing rhetoric has been used to justify violence and sway public opinion against certain groups in the past as well as the present (Kteily & Bruneau, 2017; O'Brien, 2003; Utych, 2018).

It is worth noting that the precise role of dehumanization in influencing intergroup violence is a matter of some dispute (Lang, 2020; Over, 2021; Rai et al., 2017), yet there is clear evidence that dehumanization is associated with negative intergroup behaviors. For example, dehumanization is associated with viewing dehumanized group members as more appropriate targets of violence (Goff et al., 2014), with a willingness to commit instrumental aggression (Rai et al., 2017), with discriminatory behaviors toward religious minorities (Kteily & Bruneau, 2017), and with antirefugee attitudes (Bruneau et al., 2017). In the context of the 2014 Gaza war, both Israelis and Palestinians dehumanized each other, and this dehumanization was associated with indicators of hostility such as collective aggression (Bruneau & Kteily, 2017).

The study of dehumanization has also expanded to include a spectrum of perceptions and assertions ranging from the denial of uniquely human emotions (infrahumanization; Leyens et al., 2000) to analogies that compare certain groups to nonhuman animals (animalistic dehumanization) or objects, such as machines (mechanistic dehumanization; Haslam, 2006) to the blatant endorsement of assertions that an outgroup is less than fully human (Haslam, 2014; Rai et al., 2017). Dehumanization in this broader sense is ubiquitous in perceptions of outgroups even outside the context of violent conflict, and assertions that certain groups are less "evolved" than others (i.e., blatant dehumanization) are commonly observed in online participant samples (Kteily et al., 2015). Even low levels of blatant dehumanization observed in low-conflict settings predict donations to outgroup charities and predict attitudes toward immigration and responses to injustice, over and above prejudice (Kteily et al., 2015). Dehumanization is thus a pervasive and impactful phenomenon which may occur in settings with both high and low conflict.

# The Present Investigation

We sought to better understand religious beliefs about God's views of outgroup humanity, as well as how these beliefs might influence the degree to which religious believers dehumanize members of religious outgroups. One hypothesis is that people might report that God dehumanizes to the same extent that they do due to egocentric beliefs about God (Epley et al., 2009) or due to parochial beliefs where God's benevolence extends to the ingroup, but not to outgroups (Norenzayan et al., 2016). Another hypothesis is that thinking from God's perspective might increase dehumanization, as a result of religious outgroup members being placed outside moral boundaries or as a result of increased salience of different moral or religious values (Norenzayan et al., 2016; Struch & Schwartz, 1989).

In contrast, we hypothesized that religious individuals would attribute to God a preference for them to engage in less dehumanization of religious outgroup members, and that this would be true both in settings with lower and higher levels of religious conflict, consistent with prior work showing that believers attributed more equal valuation of ingroup and outgroup lives to God (Ginges et al., 2016; Pasek et al., 2020).

To discriminate between these hypotheses, we conducted a series of experiments in one low intergroup conflict setting (the United States) and one high intergroup conflict setting (Israel) to test whether Christian and Jewish participants in each respective setting attribute to God a preference for them to dehumanize religious outgroup members (in line with the parochial hypothesis), or, conversely, to see members of religious outgroups as being more human (in line with the universal hypothesis). Another benefit of sampling Jewish in addition to Christian participants is that it allows us to determine whether our findings apply to religions based on descent, in addition to proselytizing religions where extended prosociality might lead to conversion, thereby serving ingroup needs and motivations (Morris, 1996; Norenzayan et al., 2016).

Altogether, we conducted seven studies. Studies 1 and 2 use variations of a within-subject manipulation in which we asked American Christians both how they personally would rate the humanness of religious outgroup members and how they thought God would rate (Study 1) or would want them to rate (Study 2) the humanness of religious outgroup members. In Studies 3, 4, and 5, we investigated the circumstances under which people attribute a different perspective to God by using a between-subjects design (in Study 3), counterbalancing the direction of the within-subjects manipulation (in Studies 4 and 5), and comparing the effects of taking God's perspective with the effect of taking the perspective of an average person (Studies 4 and 5). In Study 6, we test whether our results generalize cross-culturally to Israeli Jews. Finally, in Study 7, we test whether thinking about God's preferences can influence people's own views. All studies reported in this article were determined to be exempt from IRB review. All of the studies except 1 and 4 are preregistered and deviations from the preregistrations are clearly explained. Links can be found at https://osf.io/ 4yajf/ (Smith et al., 2021).

#### Studies 1 and 2

We first sought to test whether religious Christians in the United States attribute to God a greater tendency to view members of religious outgroups as human, compared with their own views. In line with prior work (Ginges et al., 2016; Pasek et al., 2020), we employed a within-subjects design in which we asked Christians to complete a measure of dehumanization, once from their own perspective and a second time thinking about God's views. In addition to testing our hypothesis in both studies, in Study 1, we also sought to validate our manipulation by testing whether beliefs about God's omniscience and omnipotence (often referred to as "Big God" beliefs) moderate experimental effects.

For both studies, we expected that, compared with their own views, religious believers would attribute to God a greater preference for seeing members of religious outgroups as more humanlike (i.e., engaging in less dehumanization). We included multiple religious outgroups to determine whether our effects would generalize across minority religious outgroups and atheists. Although we did not make specific predictions about each group, in light of past research on dehumanization of Muslims specifically (Kteily & Bruneau, 2017; Kteily et al., 2015; Viki et al., 2013), we expected that Muslims might be particularly vulnerable to dehumanization in the U.S.

# Study 1

## Method

#### **Participants**

Participants were 3741 Christian Mechanical Turk workers in the United States (51% female,  $M_{age} = 38.07$ ,  $SD_{age} = 11.27$ ). All participants were over the age of 18 and consented to participate in the survey. They were aware that they could refuse to answer any question and were able to withdraw from the study at any time. Participants were prescreened by selecting from a menu of four religious identities: Nonreligious, Christian religion, Other religion, or Spiritual but not Religious. Qualified participants identified as Catholic (42%), Protestant (40%), or nondenominational Christian (18%). Seventy-one percent of participants were White or European American, 12% were Black or African American, 8% were Hispanic, 6% were Asian, and 3% reported other or multiple ethnicities. We asked participants to indicate the extent to which they consider themselves liberal or conservative on a bipolar scale ranging from 1-7 with lower numbers indicating liberalism and higher numbers indicating conservatism. Participants' mean score was a 4.35 (*SD* = 1.77).

#### Materials and Procedure

This study was conducted as part of a more extensive survey. Materials relevant to this study are reported below. A complete list of measures can be found in the protocol for Study 1 at https://osf.io/4yajf/.

**Big God Beliefs.** The theoretical background for this research is the literature on "Big God" beliefs (that is, belief in a deity that is omnipotent and concerned with human moral behavior; Norenzayan

<sup>&</sup>lt;sup>1</sup> The sample was collected in 2018. We preregistered a target sample size of 450 and collected a sample of 446 because four participants did not complete the survey. Nine participants failed two straightforward attention checks directing participants to choose a specific answer and were excluded, and 63 were excluded due to duplicate IP addresses suggesting that the same participant had completed the study more than once.

et al., 2016). Because such beliefs are complex and multifaceted, we were interested in validating our brief perspective-taking manipulation by examining it alongside a six-item measure of Big God beliefs such as that God is rewarding, punishing, knowing, caring, and powerful (Moon et al., 2018). Sample items include "I believe God knows everything about everything" and "I believe that God cares what I do" ( $\alpha = .86$ ). Participants responded on a Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

**Dehumanization.** To measure dehumanization, we used a modified version of the Ascent of Man scale (Kteily et al., 2015). This measure of blatant dehumanization presents participants with an image of silhouettes of a chimpanzee, three hominids representing increasing similarity with modern humans, and finally, the silhouette of a modern human. Participants are then asked to move a sliding scale to indicate how evolved they consider various groups. We were concerned that this scale would be culturally inappropriate for use with religious Christians in the United States because of its association with evolutionary theory. Specifically, we thought that the scale might either be perceived as offensive or have unintended religious connotations for our participants, particularly those who might reject evolutionary theory on religious grounds.

We conducted a pilot study using three variations of the scale, including the modified version that we used in our studies. In this version, we removed any language referring to evolution in the instructions and modified the associated image so that only the human and chimpanzee scale endpoints were included, omitting the intermediate hominids. We found that all three versions were correlated with verbal dehumanization scales, but that compared to the original scale, our modified version yielded higher correlations with existing scales, lower overall ratings (and thus, better ability to detect dehumanization), and no differences in scale use by belief in evolution (see online supplemental material for a full description of our pilot study).

Participants read the following instructions: "People can vary in how human-like they seem. Some people seem uniquely human, whereas others seem no different from animals. Using the image below, indicate using the sliders how human-like versus animallike you consider the average member of each group to be." Participants rated Christians (their ingroup), Muslims, Jews, and atheists using a slider ranging from 0 (*completely animal*) to 8 (*completely human*). For all other studies reported in this article, blatant dehumanization was measured on a scale ranging from 0 to 100. For the sake of consistency in reporting, we converted the scores in Study 1 to range from 0 to 100 and reversed them so that higher numbers indicate more dehumanization.

**God's Perspective.** After completing several other survey items (see online supplemental materials), participants were asked to rate the humanness of each of the four groups again. This time, participants were instructed: "Using the image below, please indicate the extent to which GOD thinks about each group as ape-like or human-like."

# Analytic Strategy

We conducted multilevel models using lme4 (Bates et al., 2014) and lmerTest (Kuznetsova et al., 2017) in R (R Core Team, 2020). We regressed humanness ratings on perspective (self = 0, God = 1), target group (Christian, Jew, Muslim, and atheist), and their interactions, with subject included as a random variable to account for the within-person nature of our manipulation and because participants had each rated all four groups. Across studies, we attempted to fit

fully specified models with random slopes and intercepts, but because our more complex models did not converge consistently, we followed recommendations to drop random terms and ran simplified random intercepts models to maintain consistent reporting across studies (Bates et al., 2015). In addition to the frequentist models reported here, we estimated these models within a Bayesian framework as a test of robustness. These models are available in the online supplemental material.

The target group was coded using orthogonal Helmert contrast codes, the first of which compared Christians (3) to religious outgroups (-1). The second contrast compared Muslims (2) to Jews and atheists (-1), with Christians coded 0. The third compared atheists (1) and Jews (-1), with Christians and Muslims coded 0. This coding allows us to answer two primary questions. First, using an orthogonal set of contrasts allows us to test for a difference between the self and God perspectives collapsed across target groups. This general humanization effect would be indicated by a significant effect of perspective. Second, Contrast 1 allows us to test whether participants report that God is lower in relative dehumanization-that is, a difference in evaluations of the (Christian) ingroup compared to religious outgroups, as would be evidenced by a significant interaction between perspective and the first specified contrast. Contrast 2 allows us to test whether Muslims are more dehumanized than other outgroups, because there is evidence that Muslims experience high levels of dehumanization in the United States. The contrast comparing atheists to Jews was included as a part of the orthogonal set, rather than having a theoretical basis. In this and other studies, our main hypotheses deal with overall effects of perspective on dehumanization and effects of perspective on relative dehumanization (as indicated by an interaction between perspective and Contrast 1). Because we did not make specific predictions about particular outgroups, we do not discuss the full set of contrasts in each study.

# Results

## Dehumanization at Baseline

The mean dehumanization rating across target groups was 13.70. Participants dehumanized their ingroup 12.96 points less than their outgroups (in general), b = -3.24, t(2611) = -13.24, p < .001, 95% CI [-3.72, -2.76]. Christians (M = 3.98) and Jews (M = 9.83) were the least dehumanized groups at baseline. Muslims were dehumanized 9.73 points more than Jews and atheists, b = 3.24, t(2611) = -9.36, p < .001, 95% CI [2.56, 3.92], and atheists were dehumanized 7.76 points more than Jews, b = 3.88, t(2611) = 6.46, p < .001, 95% CI [2.70, 5.05].<sup>2</sup>

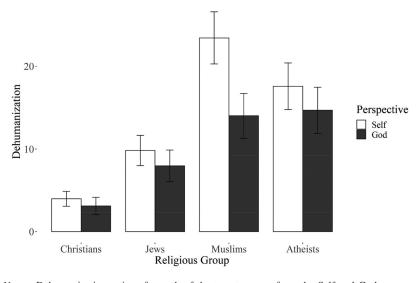
#### Differences in Self and God Ratings

Across groups, compared with their own ratings, participants believed that God would dehumanize people 3.77 points less than they themselves did, t(2611) = -6.28, p < .001, 95% CI [-4.94, -2.59]. This difference between participants' own beliefs and those they ascribed to God was 3.87 points larger for target outgroups than for participants' ingroup ratings, b = .97, t

<sup>&</sup>lt;sup>2</sup> Because results were highly skewed, we conducted bootstrap analyses for the primary results of each study as a robustness check. See online supplemental materials.

**Figure 1** Self and God Ratings, Study 1

Self and God ratings for each group in Study 1



*Note.* Dehumanization ratings for each of the target groups from the Self and God perspectives in Study 1. Error bars represent 95% confidence intervals.

(2611) = 2.79, p = .005, 95% CI [.29, 1.64]. It was also 7.04 points smaller for Jews and atheists than for Muslims, b = -2.35, t(2611) = -4.79, p < .001, 95% CI [-3.30, -1.39]. We did not observe a difference between atheist and Jewish target groups in terms of the size of the difference between the self and God perspectives, b = -.52, t(2611) = -.61, p = .542, 95% CI [-2.18, 1.14]. See Figure 1.

Simple slopes analyses showed that participants thought that, compared to themselves, God would view both Muslims (b = -9.43, t(2611) = -16.21, p < .001, 95% CI [-11.77, -7.08]) and atheists (b = -2.91, t(2611) = -2.42, p = .015, 95% CI [-5.26, -.56]) as being more human-like. However, participants' ratings of Christians (b = -.87, t[2611] = -.72, p = .469, 95% CI [-3.22, 1.48]) and Jews (b = -1.87, t[2611] = -1.56, p = .119, 95% CI [-4.22, .48]) did not differ by perspective. We note again that these two groups were the least dehumanized at baseline.

**Big God Beliefs.** We were interested in whether "Big God" beliefs were associated with baseline dehumanization and moderate differences between how participants themselves rated members of each group and what their God would think about each group. To explore these questions, we conducted a second model, with groups contrast-coded as reported above, adding Big God beliefs (centered) and all two- and three-way interactions. Big God beliefs were not associated with baseline dehumanization, b = .55, t(467.91) = .62, p = .533, 95% CI [-1.18, 2.28].

**Big God Beliefs as a Moderator.** Across target groups, those higher in Big God beliefs saw a larger discrepancy between God's beliefs and their own, with God dehumanizing groups less than participants did themselves, b = -2.72, t(2604) = -4.65, p < .001, 95% CI [-3.86, -1.57]. That is, belief in a Big God magnified the general effect reported above. No three-way interactions emerged. For the full regression table of the base and moderator models, see Table S1 in the online supplemental materials.

# Discussion

Compared with their own views, Christian Americans believed that God engaged in less dehumanization of outgroups. Notably, this effect was driven by a discrepancy between how participants themselves rated Muslims and atheists (the two groups they dehumanized the most) and how they thought God would rate members of these groups. Consistent with our hypothesis that belief in Big Gods can mitigate dehumanization of religious outgroup members, we found that effects were greater for those who reported higher levels of Big God Beliefs.

While these results provide compelling evidence that religious believers see God as a universalizing moral agent, our experimental design leaves open alternative explanations. Mainly, our two measures of dehumanization (self vs. God's perspective) were separated by several other psychological scales. We intended to separate the two experimental manipulations to reduce suspicion. However, it is possible that other included scales inadvertently served as a competing manipulation. To rule out this explanation, in Study 2, we sought to replicate our findings without intermediary scales.

In addition, thinking about what God wants people to do might be more relevant in their everyday moral reasoning than thinking about what God thinks. The wording of Study 1 allows us to make inferences about the views that individuals attribute to God, but not about how individuals think *God would want them* to view others. Therefore, we employed an alternative experimental manipulation in Study 2. Specifically, we asked American Christians to rate the groups "as God would want [them] to answer," instead of asking them how God would answer. This wording is also consistent with previous research investigating how individuals think God would want them to act in moral dilemmas (Ginges et al., 2016; Pasek et al., 2020).

Additionally, in Study 1, we used a single-item measure of dehumanization, assessing the extent to which Christians endorsed

blatant dehumanization of religious outgroups. Dehumanization can also be measured via more subtle scales that assess the degree to which individuals see people as being similar to animals or objects (Haslam, 2006). To assess dehumanization more broadly, we included additional measures of dehumanization in Study 2.

#### Study 2

We sought to replicate results of Study 1 and to extend them by (a) removing intermediary measures that could have accounted for experimental effects, (b) testing whether effects replicate when using modified instructions, (c) using measures of animalistic and mechanistic dehumanization in addition to the blatant dehumanization measure used in Study 1, and (d) also assessing attitudes toward Hindus and Buddhists, two religious outgroups that are not associated with the Abrahamic tradition. In Study 1, we collected responses from Christian participants without specifying religiosity because we wished to assess the impact of Big God beliefs on beliefs about dehumanization. Having established that Big God beliefs do moderate the extent to which believers see God as less dehumanizing than themselves, in Study 2 and subsequent studies, we turned our attention to more religious participants who are likely to hold Big God beliefs and for whom religion is likely to have a larger impact on their day-to-day lives.

We expected ratings of ingroup humanness to be very high. Therefore, we reasoned that differences between the self and God conditions would be nonsignificant regarding participants' ingroup. However, as with study 1, we expected that when participants answered as they believed God would want them to answer, they would rate religious outgroups as being more human than when responding from their own perspectives.

# Method

## **Participants**

Participants were 143 Christian Mechanical Turk workers in the United States (51.7% female,  $M_{age} = 40.18$ ,  $SD_{age} = 13.38$ )<sup>3</sup> who identified as moderately religious, very religious, or who considered their religion to be the most important thing in their lives. As in Study 1, all participants were 18 or older and were aware that they could withdraw from the study at any time.

In terms of religious denomination, 31.5% were Catholic, 38.8%Protestant, and 23.8% members of other denominations. Seventy-two percent were European American or White, 13.3% were African American or Black, 7.7% were Hispanic or Latino/a, 4% were Asian or Asian American, 2% were American Indian or Alaska Native, and 1.4% were other ethnicities. In Study 2 and all subsequent studies, participants were able to select all ethnicities that applied. Conservatism was measured as in Study 1 (M = 4.65, SD = 1.71).

## Materials and Procedure

**Dehumanization.** Participants completed measures of animalistic, mechanistic, and blatant dehumanization for six religious groups: Christians, Jews, Muslims, atheists, Hindus, and Buddhists. For each dehumanization measure, we randomized the order of religious groups. The three dehumanization scales were also presented in random order. animals"; "unsophisticated"; "refined and cultured" (reversecoded); and "rational and logical" (reverse-coded). Average reliabilities across target groups were  $\alpha = .71$  in the Self condition and  $\alpha = .79$  in the God's perspective condition. Mechanistic dehumanization was measured with four items (Bastian et al., 2013) assessing the degree to which members of each group were perceived as "mechanical and cold, like robots"; "superficial, lacking in depth"; "open-minded, able to think clearly about things" (reverse-coded); and "emotional; responsive and warm" (reversecoded). Average reliabilities across target groups were  $\alpha = .74$  in the Self condition and  $\alpha = .86$  in the God condition. Both animalistic and mechanistic dehumanization were measured on scales from 1 (does not describe this group at all) to 7 (describes this group extremely well). Blatant dehumanization was measured using the modified ascent of man scale reported in Study 1 (Kteily et al., 2015), with participants providing their ratings on a 0 (not at all human) to 100 (completely human) scale.

**Composite Scale.** The direction of effects and patterns of significance were the same for all three scales, so for ease of reporting we combined them. A factor analysis using the minimum residual solution showed that the three scales load onto one factor with factor loadings of .92, .98, and .58 for the animalistic, mechanistic, and blatant scales, respectively, accounting for 72% of the variance. We rescored each of the dehumanization measures to be on a 0 to 100 scale with higher numbers indicating greater dehumanization and averaged them to form a dehumanization composite ( $\alpha_{self} = .81$ ,  $\alpha_{God} = .85$ ). See the online supplemental materials for separate analyses using each of the different scales.

**Experimental Manipulation.** After participants completed dehumanization measures from their own perspectives, they read the following instructions: "Next, we are going to ask you the same set of questions again. This time, we would like you to base your ratings on how *God would want you to answer*. For this task, you will need to try to think about what God wants. Please answer the *questions as you think God would want you to answer them.*" Next, participants completed all three dehumanization scales again, for all groups, in random order.

#### Analytic Strategy

As in Study 1, we conducted multilevel models using the lme4 package (Bates et al., 2014) and the lmerTest package to calculate degrees of freedom and significance tests (Kuznetsova et al., 2017).<sup>4</sup> We regressed the composite dehumanization measure on perspective (Self = 0, God = 1), target group, and their interaction, with subject included as a random variable. The target group was coded using orthogonal Helmert contrast codes, the first of which compared Christians (5) to religious outgroups (-1). The second

Animalistic dehumanization was measured with four items (Bastian et al., 2013) assessing the degree to which individuals saw members of each group as: "lacking in self-restraint, like

<sup>&</sup>lt;sup>3</sup>We recruited a sample of 156 participants using TurkPrime and excluded participants with duplicate worker IDs. Following preregistered criteria, we also excluded those whose completion times did not fall within two standard deviations of the logarithmic mean as well as those who did not identify as Christian on our self-report item.

<sup>&</sup>lt;sup>4</sup> In our preregistration, we initially planned to conduct paired-sample *t*-tests to compare participants' answers when thinking from their own perspectives to participants' answers when thinking from God's perspective, aggregated across religious outgroups. However, because dehumanization can differ across religious outgroups, we reasoned that a mixed linear regression would be a more appropriate way to examine overall effects of perspective as well as group-level differences. The originally planned *t*-tests are available in the online supplemental materials.

contrast compared Muslims (4) to atheists, Buddhists, Hindus, and Jews (-1), with Christians coded 0. The third compared atheists (3) to Buddhists, Hindus, and Jews (-1), with Christians and Muslims coded 0. The fourth compared Hindus (2) to Buddhists and Jews (-1), with Christians, Muslims, and atheists coded 0, and the final contrast compared Buddhists (1) to Jews (-1) with all other groups coded 0.

Although our main interest was whether God's perspective would affect dehumanization of outgroups in general, we did not assume that all outgroups would be equally dehumanized or equally affected by our manipulation. Therefore, in addition to the model described above, we also specified dummy-coded models with each religious group as a reference group, including subject intercepts as a random variable. In each of these models, "perspective" represents the simple slope of perspective for the target group.

# Results

# Relative Dehumanization at Baseline (Self Perspective)

When thinking from their own perspectives, participants saw their ingroup as more human than other groups by 10.26 points, b = -1.71, t(1562) = -7.43, p < 001, 95% CI [-2.15, -1.26].

# Differences Between Self and God Ratings

Across target groups, participants thought that God would want them to dehumanize groups less than they did themselves, b =-5.99, t(1562) = -8.25, p < .001, 95% CI [-7.41, -4.57]. We did not observe an interaction between perspective and Contrast 1, which compares participants' ingroup to outgroups, b = .03, t(df) =.08, p = .939, 95% CI [-.61, .66]. That is, contrary to our expectations, participants thought God would want them to consider their own group (in addition to outgroups) to be more human than they had originally rated them. The magnitude of this effect did not differ between ingroup and outgroup ratings. Notably, we did, however, find an interaction between perspective and our contrast comparing Muslims to other outgroups, b = -1.19, t(1562) =-2.99, p = .003, 95% CI [-1.97, -.41]. This revealed that the discrepancy between participants' own views and the moral preferences they attributed to God was larger when it came to evaluating Muslims. See Figure 2.

Simple slope analyses reveal the effect of perspective was significant for each target group except Buddhists (see Figure 1 and online supplemental materials for a table). A dummy-coded model treating Chrisitans as a reference group also allowed us to examine differences in relative dehumanization at a group-specific level. Specifically, we found that Christian participants reported believing that, compared with their own views, God would want them to engage in marginally less relative dehumanization of Muslims, b =-4.91, t(1562) = -1.95, p = .051, 95% CI [-9.83, .01]. For the full regression table, see Table S2 in the online supplemental materials.

# Discussion

The Christian Americans in this study indicated that God would prefer them to dehumanize religious groups less than they do themselves. This pattern held for five of the six target groups we measured, including participants' religious ingroup. Notably, while we expected participants would view their ingroup as universally human at baseline, this did not appear to be the case.

Thinking of God's preferences decreased dehumanization of every religious outgroup except Buddhists. It is worth noting that initial (Self perspective) dehumanization ratings of Buddhists were relatively low. However, it seems unlikely that this is a result of floor effects because thinking from God's perspective decreased dehumanization of the least dehumanized religious outgroup, Jews. Because we were interested in how religious cognition influences dehumanization across multiple intergroup contexts, we did not explore this question further, but we note it as a point of interest for further research. Thinking about God's preferences also reduced dehumanization of atheists, suggesting that the universalizing potential of Big God beliefs may improve attitudes toward the nonreligious as well as toward religious outgroups.

In Studies 1 and 2, participants answered the dehumanization measures first from their own perspectives and second from God's perspective. Because the order of presentation was not counterbalanced, it is possible that participants simply dehumanize groups less when they rate them for the second time. In Study 3, we employed a between-subjects design in which respondents rated their ingroup and outgroups either from their own or from God's perspective, but not both. Then, in Studies 4 and 5, we used a counterbalanced presentation of Self-God ratings and God-Self ratings to more explicitly test whether order effects explain the results in Studies 1 and 2. It is also possible that findings are not due to taking God's perspective per se, but merely due to taking a perspective other than one's own or contrasting one's own perspective with that of another. Therefore, we also introduced an alternative perspective-taking manipulation to rule out the possibility that effects are driven by the more general act of considering someone else's views.

# Study 3

This study was designed to test whether participants would also report God's preferences as more humanizing in a between-subjects design. As in Study 2, Christian Americans rated five religious groups (Christians, Muslims, Jews, Hindus, and atheists) using three measures of dehumanization. Unlike Studies 1 and 2, participants were randomly assigned to answer either from their own perspective or based on how God would want them to answer. We expected that dehumanization ratings would be lower among people answering as they thought God would want them to (compared to those answering from their own perspective).

#### Method

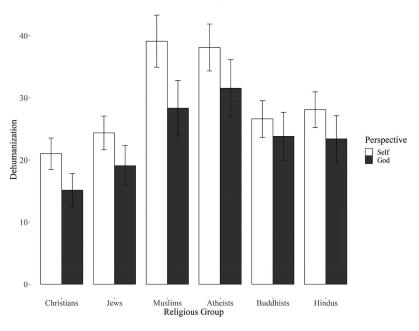
#### **Participants**

Using the same selection criteria as in Study 2, we recruited 191 moderately to highly religious Christian MTurk workers in the United States (59% female,  $M_{age} = 38.81$ ,  $SD_{age} = 11.94$ )<sup>5</sup> who were 75% White, 11% Black, 8% Hispanic or Latino/a, 5% Asian American, and 2% American Indian or Alaska Native. Participants' mean conservatism was 4.32 (SD = 1.82).

<sup>&</sup>lt;sup>5</sup> According to preregistered exclusion criteria, we excluded three participants whose self-reported religion was not Christianity.

Self and God Ratings, Study 2 Self and God ratings for each group in Study 2

Figure 2



*Note.* Dehumanization ratings for each of the target groups from the Self and God perspectives in Study 2. Error bars represent 95% confidence intervals.

## Materials and Procedure

**Dehumanization.** Participants rated their own religious group and each of the religious outgroups on the same animalistic, mechanistic, and blatant dehumanization scales as in Study 2. As before, we combined the three scales into a composite scale ranging from 0 to 100, with higher numbers indicating greater dehumanization. The average Cronbach's alpha, across target groups, was .80 in both the Self and God conditions.

**Experimental Manipulation.** Participants were randomly assigned to either the Self or God condition. In the Self condition, participants completed scales with no special instructions. In the God condition, they were instructed to answer the same questions as God would want them to answer. The target religious groups were presented in random order and participants completed all three dehumanization measures in random order.

## Analytic Strategy

Because participants rated multiple target groups, we conducted a multilevel model in which we regressed the composite dehumanization scores on perspective (Self = 0, God = 1), target group, and their interaction, with subject as a random variable. Target group was coded using orthogonal Helmert contrast codes, the first of which compared Christians (4) to religious outgroups (-1). The second contrast compared Muslims (3) to atheists, Hindus, and Jews (-1), with Christians coded 0. The third compared atheists (2) to Hindus and Jews (-1), with Christians and Muslims coded 0, and the final contrast compared Jews (1) to Hindus (-1), with all other groups coded 0. As in Study 2, this coding allowed us to test whether, across groups, participants dehumanized less when thinking from God's perspective than when thinking from their own. It also allowed us to compare how participants rated their own group's humanity compared to other groups.

# Results

In contrast with our findings in Studies 1 and 2, we did not find a difference between the Self and God condition, b = -1.40, t(185) = -.59, p = .558 (see Figure 3). Participants rated Christians as more human than other groups by 11.45 points in the Self condition and 12.65 points in the God condition. We did not observe interactions between perspective and any of the contrasts that we examined (see Table S3 in the online supplemental materials).

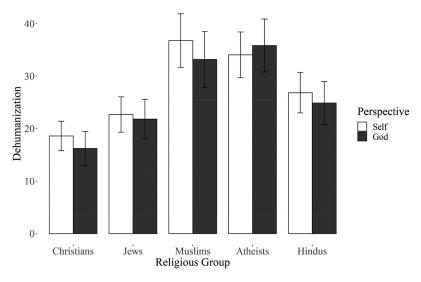
# Discussion

Contrary to our first two studies using a within-subjects design, with a between-subjects design participants dehumanized groups to an equal extent in the Self and God conditions. These results left open questions about order effects, and also raised important questions about the mechanism underlying the results of Studies 1 and 2. Specifically, the lack of effects observed in Study 3 suggests that in Studies 1 and 2, participants may have been using their own responses as a reference point and then adjusting from that reference point when asked to think about God. That is, reporting God's preferences as more humanizing may depend on individuals actively thinking about how God's moral views differ from their own. Although this explanation seems likely, a different design was needed to rule out possible order effects. Studies 4 and

# Figure 3

Self and God Ratings, Study 3

Self and God ratings for each target group in Study 3



*Note.* Dehumanization ratings for each of the target groups from the Self and God perspectives in Study 3. Error bars represent 95% confidence intervals.

5 were designed to rule out order effects as an alternative explanation and to test our hypothesis that comparing one's own views to those of God leads to differences in participants' own dehumanization and the dehumanization they ascribe to God.

### Studies 4 and 5

Studies 4 and 5 were identical, and Study 5 was a preregistered direct replication of Study 4. Christian Americans were randomly assigned to one of three between-subjects conditions. In one condition, which we refer to as the Self-God condition, participants completed a procedure identical to Study 2, answering dehumanization items once from their own perspectives and a second time as God would prefer them to answer. In a second condition, the God-Self condition, participants answered first as God would prefer them to answer and then from their own perspectives. In a third condition, participants answered first from their own perspectives, and then as they thought "the average person" would answer them (Self-Average). We chose "the average person" as a control perspective because we were interested in ruling out the possibility that perspective taking, rather than religious cognition, might be responsible for our effects in Studies 1 and 2.

If results of Studies 1 and 2 were merely due to the order in which the conditions were presented, then dehumanization should be lower the second time it was measured, regardless of condition. However, if the results of Studies 1 and 2 represent different beliefs about God's preferences, in particular, we should find that, regardless of order, participants will indicate that God wants them to dehumanize religious outgroups less than they ordinarily would. Additionally, if the results of Studies 1 and 2 are merely due to the act of contrasting one's own perspective with that of another (and not driven by beliefs about God), we would expect to find the same results comparing the Average Person condition with the God condition. However, we hypothesized that participants would view the average person as more dehumanizing than themselves.

#### Method

# **Participants**

As in Studies 2 and 3, we recruited participants in the U.S. who identified as moderately to highly religious Christians using TurkPrime panels (see Table 1 for sample size and participant demographics)<sup>6</sup>.

# Materials and Procedure

Dehumanization was assessed using the same measures as in Study 2. As before, we combined the animalistic, mechanistic, and blatant dehumanization scales into one composite measure ranging from 0 to 100, with higher scores indicating greater dehumanization. Across the two studies, Cronbach's alphas for the composite measure ranged from .80 to .86 indicating the measure had good internal reliability (see online supplemental materials for alphas by perspective).

As in Study 2, participants evaluated Christians, Jews, Muslims, Hindus, Buddhists, and atheists on all three dehumanization measures in random order from one perspective, viewed a prompt asking them to think from a different perspective, and then completed all three measures, presented in random order, a second time. In the Self-God condition, the instructions were identical to Study 2. In the God-Self condition, the instructions were modified to reflect the new order, such that participants were instructed to first think

<sup>&</sup>lt;sup>6</sup>We excluded participants whose completion times did not fall within two standard deviations of the logarithmic mean or who reported a religion other than Christianity. These exclusion criteria were preregistered in Study 5.

Table 1	
Demographics of Participants in Studies 4 and 5	

Demographics	Study 4	Study 5
N	291	293
Age		
Mean	39.7	38.7
SD	13.2	12.8
Gender		
% male	39.2	39.2
% female	60.5	60.7
Ethnicity		
% White or European American	69.8	74.7
% Black or African American	19.9	12.3
% Asian or Asian American	4.0	3.8
% Hispanic or Latino/a	6.5	5.8
% American Indian or Alaska Native	1.0	2.7
% Native Hawaiian or Pacific Islander	1.0	0.0
Denomination		
% Catholic	25.1	33.1
% Protestant	47.4	47.1
% Other Denominations	27.5	19.8
Conservatism		
Mean	4.18	4.47
SD	1.73	1.86

from God's perspective and then to think from their own perspectives. Participants in the Self-Average condition viewed the same instructions regarding one's own attitudes followed by the prompt: "Next, we are going to ask you the same set of questions again. This time, we would like you to base your ratings on how the average person would answer. Please answer the questions as you think the average person would answer them."

# Analytic Strategy

To investigate the effect of our experimental manipulations, we operationalized perspective as an interaction between condition (Self-God vs. God-Self vs. Self-Average) and "Time," in the sense that each participant answers the dehumanization questions at two time-points. For instance, in the Self-God condition, Time 1 represents thinking from their own perspectives, and Time 2 represents thinking about God's perspective. Our multilevel models regressed the composite dehumanization measure on Condition, Time, Target Group, and on all two- and three-way interactions.

Condition and Time were both dummy-coded with the Self-God condition and Time 1, respectively, as reference points (using 0, 1 codes). We contrast coded Target group as described in Study 2, such that Contrast 1 compared the participants' ingroup to all other religious groups. Using the Self-God condition as a reference allowed us to use the time dummy-code to determine whether our findings from Study 1 replicated because this contrast represents the change in ratings for participants in the Self-God condition when they moved from thinking from their own perspectives to thinking about what God would want. The God-Self and Self-Average contrasts represent the simple effects of condition at time 1.

Because we did not find any between-subjects difference between conditions in Study 3, we did not expect to find a difference in dehumanization between the Self-God and God-Self conditions at time 1 in Studies 4 and 5. We also did not expect a difference between the Self-God and Self-Average conditions at time 1 because participants were thinking from their own perspectives in both cases. The interactions between condition and time (that is, the God-Self  $\times$  Time and Self-God  $\times$  Time contrasts) allowed us to assess differences in how dehumanization scores changed from time 1 to time 2 in each condition compared to the Self-God condition. These interactions also allowed us to calculate simple slopes to determine the change in dehumanization scores from Time 1 to Time 2 in each condition.

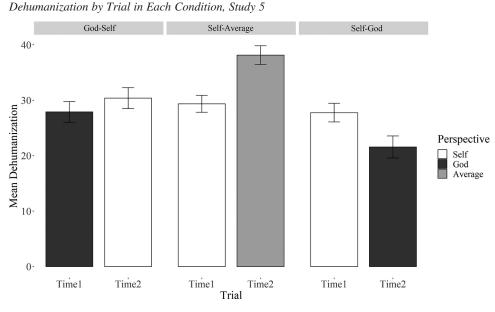
# Results

Results of both studies show that the effects of Studies 1 and 2 cannot be reduced to order effects. As with prior studies, participants in the Self-God condition indicated that God would wish for them to dehumanize less (at Time 2) than they reported doing at Time 1 both in Study 4, b = -4.10, t(3168) = -4.59, p < .001, 95% CI [-8.01, -4.46] and in Study 5, b = -6.23, t(3198.02) =-6.86, p < .001, 95% CI [-8.01, -4.46]. In contrast, participants in the Self-Average condition rated groups as less human at Time 2, when answering from the perspective of the average person, compared to Time 1, when answering from their own perspectives (Study 4: b = 11.14, t(3168) = 11.76, p < .001, 95% CI [9.29, 12.99], Study 5: b = 8.78, t(3188) = 10.48, p < .001, 95% CI [7.15, 10.42]). Surprisingly, we also found that in Study 4, participants in the Self-Average condition dehumanized more at Time 1 than participants in the Self-God condition, even though the instructions for Time 1 in the two conditions were identical. This was not the case in Study 5. Last, in the God-Self condition, we still found less dehumanization when participants took God's perspective, even when they did so prior to answering from their own perspectives. Simple slopes analyses reveal that dehumanization increased when participants were asked to think from their own perspectives at Time 2 compared to when they thought from God's perspective at Time 1 (Study 4: b = 1.87, t(3168) = 2.14, p = .032, 95% CI [.17, 3.57], Study 5: b = 2.50, t(3188) = 2.93, t(3188) =p = .003, 95% CI [.84, 4.17]). See Figure 4 for ratings by trial in each condition in Study 5, Figure 5 for ratings by perspective separated by group in Study 5, and see online supplemental materials, Table S4, for full regression results from Studies 4 and 5.

## Discussion

Results of Studies 4 and 5 provide converging evidence that religious Christians believe God wants them to see both their ingroup and religious outgroup members as more human, compared to how they themselves view these members. The findings also suggest that results from Studies 1 and 2 cannot be attributed to mere order effects because dehumanization ratings decreased from time 1 to time 2 in the Self-God condition but increased in the other two conditions. The finding that dehumanization ratings increased in the Average Person condition relative to Self but decreased in the God conditions relative to Self indicates that the effects are not driven merely by the act of perspective-taking.

These studies show that people believe that God wishes for them to view members of outgroups as more human than they themselves do. Along with Study 3, they suggest that religious people do not possess clear norms regarding how God would respond to dehumanization scales. Rather, they use a comparison process to distinguish between themselves and God. This has the somewhat ironic effect of them reporting higher levels of dehumanization from their own perspectives after taking God's perspective, which likely represents a humble



*Note.* Shows dehumanization at Time 1 and Time 2 for the God-Self, Self-Average, and Self-God conditions in Study 5. Error bars represent 95% confidence intervals. See online supplemental materials for the equivalent figure from Study 4.

recognition that humans rarely live up to the values they believe God espouses. We note, however, that the difference between participants' own answers and those that they ascribe to God was smaller when participants first responded from God's perspective, suggesting that the act of thinking about God might reduce the general tendency to dehumanize outgroup members, an idea we test in Study 7.

# Studies 1–5 had common participant pools: religious Christians in the United States. In Study 6, we sought to extend these findings to a different religious group, Jews, living in a different cultural context, Israel. In so doing, Study 6 follows calls to broaden the scope of

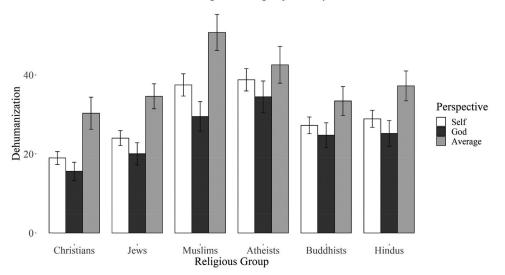
Study 6

#### Figure 5

Figure 4

Self, God, and Average Person Ratings, Study 5

Self and God ratings for each group in Study 5



*Note.* Dehumanization ratings for each target group from the Self, God, and Average Person perspectives in Study 5, collapsed across Time. Error bars represent 95% confidence interval. See online supplemental materials for the equivalent figure from Study 4.

11

psychological research to diverse samples beyond the United States (Henrich et al., 2010).

We hypothesized that thinking from God's perspective would lead Jewish Israelis to view both their ingroup and salient ethnoreligious outgroup members as being more human-like, and that, to the degree that Jewish Israelis rated their ingroup as being very human-like at baseline, thinking from God's perspective should reduce relative dehumanization of ethno-religious outgroup members. Outgroups included in this study were both Muslim and Christian Palestinians, and Muslim and Christian Palestinians who are citizens of Israel. In our survey materials, we refer to the latter two groups as "Israeli Arabs", because that is the term typically used by our participants. These hypotheses were preregistered along with our method and analytic plan (https://osf.io/4yajf/).

# Method

#### **Participants**

Following the preregistration, we recruited 310 Jewish Israelis who identified as religious via an online panel (www.ipanel.co.il). We excluded participants who failed a manipulation check as well as those with an unreasonably fast completion time.<sup>7</sup> There were 256 participants in the final sample (48% male, 52% female,  $M_{age} = 38.44$ ,  $SD_{age} = 14.67$ ).

# Materials and Procedure

In study 6, we measured only blatant dehumanization, which was assessed using the modified version of the Ascent of Man scale (Kteily et al., 2015) as described in Study 1. We chose this measure because the Ascent of Man scale has been validated in Israel (Bruneau & Kteily, 2017) and our previous results showed high reliability across the blatant and verbal measures. Blatant dehumanization was measured on a scale from 0 to 100, with scores reversed such that higher scores indicated greater dehumanization.

Target groups included one item for the ingroup (Israelis who are Jews) and five items for relevant outgroups (Arab Israelis who are Muslim; Arab Israelis who are Christian; Muslim Palestinians who live in the West Bank; Muslim Palestinians who live in Gaza; Christian Palestinians). Outgroups chosen for this study allowed us to investigate dehumanization along both religious and national lines.

#### Procedure

Participants were randomly assigned to one of two conditions. In the Self-God condition, they first completed the measure of blatant dehumanization from their own perspective and then again from God's perspective. In Study 6, the instructions for God's perspective were similar to those for Study 1:

Next, we are going to ask you the same set of questions again. This time, we would like you to base your ratings on how God would answer. For this task, you will need to try to think from God's perspective. Please answer the questions as you think God would answer them.

In the God-Self condition, participants first completed the measure from God's perspective and then again from their own perspective. At the end of the study, participants completed a manipulation check in which they were asked to indicate whose perspective they were asked to consider during the survey from among four options (their parents, God, the average person, or then-prime-minister Benjamin Netanyahu), with the correct option being *God*.

# Analytic Strategy

We conducted a multilevel model regressing each rating of blatant dehumanization on the target group, perspective (Self = 0, God = 1), and their interaction. Target groups were entered as five orthogonal Helmert contrasts (Contrast 1: Israeli Jews = 5, all other target groups = -1; Contrast 2: Israeli Jews = 0, Christian Arab Israelis = 4, all other target groups = -1; Contrast 3: Israeli Jews and Christian Arab Israelis = 0, Muslim Arab Israelis = 3, all other target groups = -1; Contrast 4: Israeli Jews, Christian Arab Israelis, and Muslim Arab Israelis = 0, Christian Palestinians = 2, Muslim Palestinians in Gaza and Muslim Palestinians in West Bank = -1; Contrast 5: Muslim Palestinians in Gaza = 1, Muslim Palestinians in West Bank = -1, all other target groups = 0). This model allows us to test for (a) baseline differences (i.e., Self perspective) in the extent to which participants dehumanize outgroups compared to their ingroup (using Contrast 1), (b) a main effect of perspective, collapsed across target groups, and (c) an interaction between perspective and relative dehumanization (Contrast 1  $\times$ Perspective). Participants' intercepts were random factors.

# Results

#### **Primary Results**

At baseline, participants saw their ingroup as 23.28 points more human-like than they saw members of other target groups, b =-3.88, t(2761.07) = -17.46, p < .001, 95% CI [-4.31, -3.44]. Consistent with hypotheses, collapsed across target groups, participants thought that God would see groups as being more human-like than they themselves did, b = -4.65, t(2761.92) = -6.61, p < .001, 95% CI [-6.02, -3.27]. Notably, this difference—between participants' own ratings and those they attributed to God—was greater for ratings of target outgroups than for ratings of the ingroup, b = .89, t(2761.57) = 2.84, p = .005, 95% CI [.28, 1.51]. That is, participants thought that God would engage in less relative dehumanization of outgroups than they themselves did. Full results are displayed in Table S5 and were robust when preregistered covariates were included in the model (see online supplemental materials).

To better understand these results, we conducted simple slope analyses for each target group. Participants did not rate their own views and those of God differently for their ingroup (b = -.19, t (2762.05) = -.11, p = .913, 95% CI [-3.56, 3.18]) or for Christian Arab Israelis (b = -1.89, t[2760.64] = -1.10, p = .273, 95% CI [-5.26, 1.48]), the two groups least dehumanized at baseline. By contrast, participants reported that God would view Christian Palestinians (b = -4.16, t[2760.51] = -2.41, p = .016, 95% CI [-7.53, -.78]), Muslim Arab Israelis (b = -5.74, t[2761.52] = -3.33, p = .001, 95% CI [-9.10, 2.37]), Muslim Palestinians in Gaza (b = -8.72, t[2670.95] = -5.07, p < .001, 95% CI [-12.08, -5.35]), and Muslim Palestinians in the West Bank (b = -7.22,

 $<sup>^{7}</sup>$  In line with other published work (e.g., Georgeac et al., 2019), we preregistered a cut-off of 1/3rd the median completion time. Results remained unchanged when excluding completion times that did not fall within two standard deviations of the logarithmic mean (as in other studies reported here).

t[2761.12] = -4.19, p < .001, 95% CI [-10.59, -3.85]) as more human compared to their own ratings. See Figure 6.

# **Did Order Influence Results?**

The Self-God and God-Self conditions were presented in a counterbalanced order. To explore potential order effects, we conducted an ancillary model in which we added order and all associated two- and three-way interactions to the model, with order contrast coded (God-Self = -.5, Self-God = .5).

Collapsed across target groups, the difference between participants' own ratings and their beliefs about God's views was greater when they first answered from their own perspective, b = -3.81, t (2751) = -2.71, p = .007, 95% CI [-6.56, -1.06]. When participants first responded from their own perspective, they reported that, compared with themselves, God would see people (across target groups) as 6.44 points more human like, b = -6.44, t(2749.56) = -6.67, p < .001, 95% CI [-8.33, -4.56]. When participants first responded from God's perspective, this difference was still significant, albeit smaller, b = -2.63, t(2752.46) = -2.57, p = .010, 95% CI [-4.63, -.63] (see online supplemental materials for full results).

# Discussion

Jewish Israelis reported that God would dehumanize salient ethno-religious outgroups less than they did themselves. More specifically, compared to their own views, Jewish Israelis reported that God would view Muslim Arab Israelis and Palestinians, as well as Christian Palestinians, as more human. This discrepancy was not observed when participants rated their ingroup or Christian Arab Israelis—the two groups they dehumanized the least. As a result, thinking from God's perspective decreased relative dehumanization, creating a greater equilibrium between how they saw ingroup and outgroup members. These results are notable for two reasons. First, they extend the findings from Studies 1–5 to Jews—members of a religion of descent rather than a proselytizing religion. Second, they demonstrate that participants view God as less dehumanizing than themselves even in high-conflict contexts where outgroup members are seen as posing a threat to ingroup safety.

# Study 7

In Studies 1–6, we focused on understanding participants' beliefs about how God would view—or want them to view—the humanity of religious outgroup members. In Study 7, we sought to understand how these beliefs might influence participants' own opinions about outgroups' humanity. We asked participants to complete the modified Ascent of Man scale from their own perspectives, then asked them to write about how God would wish for them to think about outgroups. Finally, we asked them to respond to the Ascent scale again from their own perspectives.

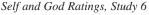
We hypothesized that participants would dehumanize less at time 2, after they thought about God's preferences, than at time 1. This hypothesis, our method, and our analytic plan were preregistered (https://osf.io/4yajf/).

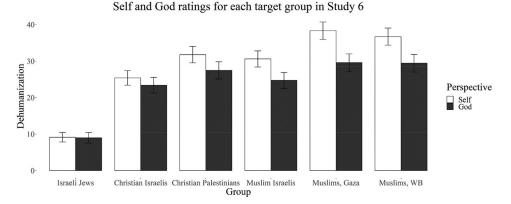
# Method

# **Participants**

Following the preregistration, we recruited 1000 American Christians via Cloud Research's Prime Panels. We excluded participants who did not self-identify as Christian, who were not at least moderately religious, or who failed a manipulation check. There were 774 participants in the final sample (37.32% male, 62.16% female,  $M_{age} = 50.37$ ,  $SD_{age} = 16.20$ ). All participants were 18 or older and consented to participate in the study. Participants were 82% White or European American, 10% Black or African American, 5% Hispanic or Latino/a, 3% Asian or Asian American, 1% American Indian or Alaska Natives, and 1% other ethnicities. In terms of denomination, participants were 30.2% Catholic, 50.5% Protestant, and 19.3% other Christian denominations. Participants leaned slightly conservative, with a mean of 4.72 (SD = 1.85) on a seven-point scale (1–7) with higher numbers indicating more conservatism.

# Figure 6





*Note.* Dehumanization ratings for each of the target groups from the Self and God perspectives in Study 6. Error bars represent 95% confidence interval. "Christian Israelis" refers to Christian Arab Israelis; "Muslim Israelis" refers to Muslim Arab Israelis; and "Muslims, Gaza" and "Muslims, WB" refer to Muslim Palestinians living in Gaza and Muslim Palestinians living in the West Bank, respectively.

# Materials and Procedure

**Dehumanization.** We measured dehumanization using the 101-point modified version of the Ascent of Man scale (Kteily et al., 2015) used in previous studies. We reversed the scale such that higher numbers indicate more dehumanization for the sake of consistency of interpretation. We asked participants to rate their ingroup (Christians) and the two outgroups (Muslims and atheists) who were most dehumanized in previous studies.

**Procedure.** Participants first completed the ascent scale from their own perspectives, as described in Studies 2–5. Next, participants viewed the following prompt: "Please take a moment to think about God. How would God want you to view members of different religious groups? Please take a moment to write your thoughts in the box below." As preregistered, participants' responses served as a manipulation check. We excluded 21 participants whose answers were nonsensical or irrelevant to the prompt. Next, participants completed the scale a second time, again from their own perspectives. Specifically, participants viewed the prompt: "In the last part of the survey, we are going to ask you to rate the humanity of groups one more time. Please answer as you see fit." Participants then completed the Ascent of Man scale with the same instructions as in Time 1.

**Desire to Do God's Will.** At the end of the survey, we asked participants the extent to which they agreed with the following statement: "I try to live my life according to the way God would want me to live." Participants answered on a seven-point scale ranging from "Strongly Disagree" to "Strongly Agree."

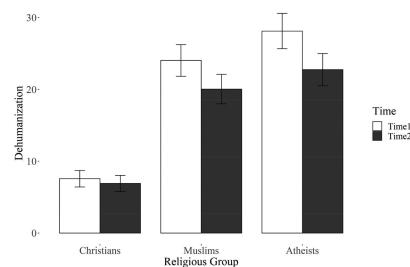
# Analytic Strategy

We conducted a multilevel model regressing each rating of blatant dehumanization on the target group, time (Time 1 = 0, Time 2 = 1), and their interaction. Target groups were entered as two orthogonal Helmert contrasts (Contrast 1: Christians = 2, Muslims

#### Figure 7

Time 1 and Time 2 Ratings, Study 7

Time 1 and Time 2 ratings for each target group in Study 7



*Note.* Dehumanization ratings for each of the target groups at Time 1 and Time 2 in Study 7. Error bars represent 95% confidence intervals.

and atheists = -1; Contrast 2: Christians = 0, Muslims = 1, atheists = -1). This model allows us to test for baseline differences in the perceived humanity of groups (using Contrast 1), a main effect of time, collapsed across target groups, and (c) an interaction between time and relative dehumanization (Contrast 1 x Time). Participants' intercepts were random factors.

# Results

#### **Primary Results**

At Time 1, participants rated their own group as being more human than other groups by 6.20 points, t(3741.26) = -22.37, p < .001, 95% CI [-6.74, -5.66]. Participants also rated Muslims as more human than atheists by 2.05 points, t(3734.99) = -4.21, p < .001, 95% CI [-3.00, -1.10]. Across groups, participants dehumanized less at Time 2, after thinking about what God would want, than at Time 1, b = -3.33, t(3736.80) = -5.99, p < .001, 95% CI [-4.42, -2.24]. We also observed a decrease in relative dehumanization (Time × Contrast 1), such that participants rated outgroups more similarly to their ingroup at Time 2 than at Time 1, b = 1.34, t(3731.56) = 3.43, p = .001, 95% CI [.57, 2.10]. See Figure 7.

#### Desire to Do God's Will as a Moderator

The desire to do God's will did not moderate our effects above. No two- or three-way interactions emerged (see Table S6 in the online supplemental materials).

#### Discussion

In Studies 1–6, we found that religious individuals attributed to God a preference for reduced outgroup dehumanization. In Study 7, we extended this finding to explore how thinking about God's preferences might influence people's own views. After thinking about the way that God would wish for them to think about religious outgroups, participants rated religious outgroups as more human compared to before they had thought about God's desires.

#### **General Discussion**

Across six studies with Christians in the United States and one study with Jews in Israel, we found that religious individuals report that God would dehumanize less or wish for them to dehumanize less than they do themselves, and that thinking about God's wishes can reduce dehumanization from participants' own perspectives. These findings have a number of implications. First, they inform the debate regarding the relationship between religious cognition and intergroup relations. Theorists often suggest that belief in moralizing gods increases parochialism, placing people who do not share religious beliefs outside of the moral scope of concern (e.g., Norenzayan et al., 2016). More broadly, perceived moral or value differences between groups have been suggested as one source of intergroup dehumanization (Struch & Schwartz, 1989). Together, this implies that thinking from the perspective of one's god might increase dehumanization of ethno-religious outgroups. We found the opposite: when believers rated the humanness of outgroup members from both their own and from God's perspective, they reported that, compared to their own views, God would want them to view outgroup members as being more human, and thinking about God's preferences indeed led them to view outgroup members as more human. Rather than increasing outgroup derogation, thinking about God and God's preferences fostered more positive intergroup attitudes.

Second, our results inform discussions regarding how people perceive God's preferences, suggesting that people attribute to God preferences that are more universalizing than their own. While investigating (and ruling out) order effect explanations for our findings, we also demonstrated that the effects require a within-subjects manipulation. In between-subjects comparisons, there is no distinction between the views of self and those of God. This suggests that in cases where there are no clear norms for God's preferences (e.g., in the form of a religious ruling), people might infer God's perspective in an egocentric manner. Yet when given the opportunity to compare the self to God, we can see that religious people distinguish what they see as God's perspective from their own. Thus, our findings imply that researchers who study religious cognition should consider that participants' reported beliefs might differ depending on what reference point is accessible to them. That is, beliefs about God's attitudes or preferences might be evaluated in comparison to any number of reference points, including the participants' own preferences, desires, and behavior. This is an important distinction for theoretical and practical reasons because studies that assess beliefs without an explicit comparison between God and oneself might miss important nuances that exist in comparative judgments.

A third implication of our findings is that aspects of religious cognition, namely thinking about God's preferences for increased perceptions of outgroup humanity, might decrease prejudice and foster cohesion across religious lines. For example, perceiving groups as more human can be associated with greater support for those groups' rights (Prati & Loughnan, 2016). Because dehumanization is associated with endorsement of aggressive public policies (Kteily & Bruneau, 2017), support for antisocial acts such as torture, retaliatory violence, and police brutality (Goff et al., 2014; Kteily et al., 2015), and instrumental aggression (Rai et al., 2017),

reducing dehumanization might also be an important step toward decreasing violence, especially in high-conflict settings.

Nevertheless, three important caveats are in order. First, while moralizing God beliefs may reduce dehumanization of religious outgroup members, other aspects of religion might have opposing effects. For example, collective religious rituals may enhance parochialism (Ginges et al., 2009). Thus, our work should not be taken to imply that religious people dehumanize less than nonreligious people but only that, among believers, the specific aspect of religious cognition that we investigated, namely perceptions of God's preferences, was related to reduced dehumanization. Moreover, religious beliefs are malleable, and in specific contexts groups may develop nonnormative views about God's preferences which encourage conflict (Atran et al., 2008).

Second, even when indicating God's preferences, participants on average rated groups (including the ingroup) as less than fully human and, more importantly, rated the ingroup as more human than certain outgroups. This could be interpreted as indicating that God is viewed as parochial, albeit less parochial than the self. Moreover, we recognize that when participants think that God wants them to think of the ingroup as more human than outgroups, it is possible that thinking about God might lead some people to view outgroup dehumanization as justified, which could still have a deleterious impact on intergroup relations. However, our goal in this research was to explore change in participants' ratings from their own to God's perspective, and changes in their own ratings after thinking about God. Our results provide evidence in favor of a universalizing influence of religious cognition: participants think that God would prefer them to dehumanize less and thinking about God's preferences led them to do just that. Moreover, our results hold when we dichotomized the Ascent scale in Study 2 (see online supplemental materials). Thus, we interpret our results as indicating that this particular aspect of religious cognition, thinking about God's desires, has a universalizing, rather than parochializing influence on dehumanization. Nevertheless, the question of whether seeing God as dehumanizing is used as a justification for dehumanization is an important question that should be addressed in future research.

Third, although this research provides evidence in favor of a universalizing effect of religious cognition on dehumanization, translating this knowledge to develop context-sensitive interventions would require further testing and validation. Additionally, because this research used only self-report measures as outcome variables, it would be worthwhile to incorporate behavioral outcomes in future research.

Another interesting finding to follow up in future research was that participants also reported that God would prefer a more humanizing view of the ingroup. In Studies 2, 4, and 5, participants reported that God would wish for them to view even their own group as more human than they did. The implications of such a tendency for intergroup relations are unclear. On the one hand, viewing one's group as more human while viewing outgroups as more human maintains the gap of relative dehumanization, which is associated with negative attitudes and behaviors toward outgroups (Kteily et al., 2015). On the other hand, differences in absolute dehumanization are also meaningful because they are associated with increased endorsement of the human rights of the group in question (Prati & Loughnan, 2016). Moreover, dehumanization of oneself or one's own group has been associated with conflict and intergroup violence because denying one's own abilities to think, reason, and feel can serve to absolve a person of some moral responsibility (Kelman, 1973; Kouchaki et al., 2018). It is possible, then, that thinking of one's own group as more human might also be related to more positive intergroup outcomes than thinking of one's group as less than fully human.

More work is needed to determine how our effects might differ across different cultural boundaries. In terms of our results with respect to dehumanization specifically, such generalizability may be uncertain. The problem is that we do not yet know enough about how dehumanization, as measured in our research, is applicable outside of the global north. Cross cultural work into dehumanization has been done principally in North America, Europe, and East Asia, and in those cases generally with undergraduate students (Haslam & Loughnan, 2014). For example, the importance and relevance of animalistic "dehumanization" may depend on a particularly anthropocentric world view, a perspective that differs across cultural boundaries (Herrmann et al., 2010).

In some contexts, dehumanization may be such a sensitive issue that it is difficult to measure. For example, we included dehumanization measures in studies conducted in Fiji, but efforts to adapt these measures in a culturally sensitive manner, such as by removing references to animals that many Fijians found too offensive to answer, reduced the internal validity of our scales. Moreover, many Fijians still found the construct too taboo to answer. Nevertheless, from a broader perspective, we are quite confident in the cross-cultural generalizability of our finding that moralistic gods encourage less parochial views of salient out-groups. Other work has shown that taking God's perspective leads to moral reasoning in favor of more benevolent behavior toward members of other ethno-religious groups among Jews and Muslims in the Middle East, and among Christian iTaukei as well as Hindu Indo-Fijians (Ginges et al., 2016; Pasek et al., 2020). Although we assume that our results are likely to apply to adherents of other "Big God" religions, they are not likely to apply to nonbelievers, for whom reminders of God do not appear to exert similar influence (White et al., 2019).

One of our goals in this research was to extend previous findings that God is perceived as benevolent to outgroups to the specific concept of dehumanization. However, it is likely that the perception of God as more benevolent (toward outgroups) than the self extends to other related phenomena and may represent a broader effect where believers view God as generally better than the self. It is important to note, however, that in intergroup contexts, different behaviors may be considered moral, good, or benevolent depending on whether individuals attribute parochial or universalizing moral motives to God. A god who discriminates against nonbelievers to the benefit of believers might be seen as benevolent or loyal to the believers, whereas a god who treats all people equally might be seen as universally benevolent. Our research suggests that God is viewed as more universalizing than the self, but further research is needed to determine the extent to which universalizing views are also seen by individuals as being moral, benevolent, or good - and to determine how far perceptions that God is generally better than the self reach.

#### Conclusion

In this research, we found that religious participants report that God wishes for them to see the humanness in others—including members of various religious and national outgroups–and that thinking about these preferences can increase perceptions of outgroup humanity. Our findings suggest that, insofar as believers try to act according to God's wishes, beliefs about God's positive evaluation of others might lead, in turn, to a more universal, as opposed to parochial, application of moral and social norms.

# **Context of the Research**

This paper fits into a larger research program broadly concerned with how religious belief influences intergroup relations and intergroup conflict. In several previous and ongoing studies, we have found that certain aspects of religion (e.g.,taking the perspective of God) seem to promote intergroup cooperation (Ginges et al., 2016; Pasek et al., 2020) whereas others (such as religious rituals) might exacerbate religious conflict (Ginges et al., 2009). This work applies the findings of previous perspective-taking studies to a new outcome, dehumanization, which has historically played, and continues to play, a central role in conflict between members of different religious groups. It also informs the rest of our research program by introducing the idea that comparison between oneself and God can lead to different outcomes than evaluating self and God separately.

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