

Thinking from God's perspective decreases biased valuation of the life of a nonbeliever

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Edited by Lee D. Ross, Stanford University, Stanford, CA, and approved November 25, 2015 (received for review June 20, 2015)

Religious belief is often thought to motivate violence because it is said to promote norms that encourage tribalism and the devaluing of the lives of nonbelievers. If true, this should be visible in the multigenerational violent conflict between Palestinians and Israelis which is marked by a religious divide. We conducted experiments with a representative sample of Muslim Palestinian youth ($n = 555$), examining whether thinking from the perspective of Allah (God), who is the ultimate arbitrator of religious belief, changes the relative value of Jewish Israelis' lives (compared with Palestinian lives). Participants were presented with variants of the classic "trolley dilemma," in the form of stories where a man can be killed to save the lives of five children who were either Jewish Israeli or Palestinian. They responded from their own perspective and from the perspective of Allah. We find that whereas a large proportion of participants were more likely to endorse saving Palestinian children than saving Jewish Israeli children, this proportion decreased when thinking from the perspective of Allah. This finding raises the possibility that beliefs about God can mitigate bias against other groups and reduce barriers to peace.

intergroup conflict | religion | violence | Israeli–Palestinian conflict

Many conflicts around the world have occurred between different religious groups, and many acts of violence have been carried out in the name of religious identity. Perhaps because religious violence seems so deeply embedded and recurrent in human history, the relationship between religious belief and violence is the subject of intense popular and scholarly debate (1–5). The recent surge of sectarian strife and violence, particularly in the Middle East and Europe, has reinvigorated the public debate on the link between religious belief systems and violence (with particular attention paid to Islam) and seems to lend credibility to the idea that religious belief promotes tribalism and violence toward nonbelievers. Despite the importance of the topic, controlled empirical studies of this relationship are scarce.

Religious belief is often characterized as encouraging violence because it is said to have a divisive nature and to devalue the lives of nonbelievers (3). The narrative that religious belief promotes human conflict is complicated by the fact that religious mandates may have motivated action to alleviate the plight of others, as in the case of the abolition of slavery (6), in ways that demonstrate a respect for human life (7). The application of religious mandates is strongly dependent on fluctuating interpretations across contexts. Although major world religions believe in a form of the Golden Rule (8), which may decrease aggression (9), it is not clear whether such rules are seen as applying equally to nonbelievers (10), and religious texts often suggest intolerance toward nonbelievers or seemingly promote violence (11, 12). Debating the relationship between religious belief and violence via theological or historical inquiry is unlikely to yield a clear answer. Perhaps a more pertinent approach may be to ask how religious belief influences the judgments and decisions that ordinary people make about intergroup relations.

Here, to address the role of religious belief in human conflict, we investigated relative valuation of the lives of members of

other religious groups. Devaluation of the life of another is important because it places that person outside of the scope of moral concern (13), creating a moral distance that may facilitate the use of violence (14, 15). To investigate how one important aspect of religious belief may influence the relative valuation of human life, we asked people to infer the preference of God. Participants answered questions that probed the relative value given to the lives of members of their own group and those of members of a religious outgroup. They answered first from their own perspective, and then from the perspective of God. We chose this method because God is the ultimate arbitrator of religious belief. Whereas religious traditions include apparently contradictory statements about intergroup relations, asking about God's preferences requires participants to think about what verdict God would give in a certain context. For religions such as Islam that believe in a moralizing God capable of punishing immoral behavior (16–18), thinking about God should invoke religious norms (19). If, on the whole, religious belief devalues the lives of nonbelievers, placing them outside the scope of moral concern, then people should believe that God prefers parochial choices that imply a decrease in the relative value of the lives of nonbelievers. However, if God is seen as promoting universal moral laws (20), and if those laws conflict with intergroup bias (21), participants should believe that God would prefer choices that more equally value human life regardless of religious identity.

Our study builds on a small emerging body of work that investigated the relative roles of religious belief and religious affiliation on parochial attitudes and that offered suggestive evidence that people may believe that God promotes universal moral laws in intergroup contexts. For example, a study including samples of

Significance

Religious belief is often seen as a key cause of human conflict because it is said to promote preferential treatment of adherents and to harden group boundaries. Here, we examined a critical aspect of this link in the context of the Israeli–Palestinian conflict, a multigenerational violent conflict with significant religious aspects. We find that although Muslim Palestinian participants valued Palestinian over Jewish Israeli lives when making difficult moral choices, they believed that Allah preferred them to make moral decisions that valued the lives of Palestinians and Jewish Israelis more equally. Beliefs about God may promote more equal valuation of human life regardless of religious identity, encouraging application of universal moral rules to believers and nonbelievers alike.

Author contributions: J.G., H.S., S.A., and N.A. designed research; J.G. performed research; J.G. and H.S. analyzed data; and J.G., H.S., S.A., and N.A. wrote the paper.

The authors declare no conflict of interest.

This article is a PNAS Direct Submission.

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This article contains supporting information online at www.pnas.org/lookup/suppl/doi:10.1073/pnas.1512120113/-DCSupplemental.

Palestinians and Jewish Israelis found that support for violent parochial altruism was positively related to attendance at collective religious services, but not related to individual prayer to God (22). The inference was that collective rituals promoted norms favoring self-sacrifice to the group, of which the suicide attack is one extreme example. In an important study, Preston and Ritter (21) demonstrated that college students in the United States primed with God were more likely to help an outgroup member than an ingroup member, whereas participants primed with thoughts of a religious leader or religious institutions showed the opposite pattern of helping behavior.

Our study both complements and extends this prior research in three ways. First, whereas prior work compared the effects of different aspects of religion on altruistic or parochial behavior (21, 22), we focused on comparing personal preferences with those of God. Research in a different domain (indigenous forest management practices) showed that people's beliefs about preferences of supernatural entities (God and forest spirits) can be different from their own preferences and can strongly constrain behavior toward implementation of those preferences (23). Here we were interested in whether God's preferences encouraged or discouraged moral reasoning that may promote intergroup violence. Second, our study was carried out in a chronic violent conflict separated along religious lines and the beliefs we measured concerned religious groups directly involved in the conflict. Third, although a strength of Preston and Ritter's (21) work was that they used diverse measures of prosocial behavior (hypothetical helping behavior, hypothetical donations to charity, and cooperation in a prisoner's dilemma game with real monetary outcomes), these were measures of benign acts of cooperation. We were interested in measuring moral decision making that might be more closely related to intergroup violence. To do this we used a set of artificial but morally challenging dilemmas designed to measure the extent to which people valued the life of ingroup and outgroup members equally (13–15).

We ran experiments with a representative sample of Muslim Palestinian youth ($n = 555$, 50% female, aged between 12 and 18 y) living in the West Bank and Gaza. Thus, our experiments were carried out in the context of the Israeli–Palestinian dispute, a chronic and violent conflict. This conflict is divided along religious lines and many violent actors on both sides are religious. Indeed, Israelis and Palestinians seem partly motivated by attachment to sacred lands and sites (24). Our participants have grown up with persistent exposure to violence between Jewish Israelis and predominantly Muslim Palestinians (25). If religious belief promotes moral judgments associated with ingroup violence, they are likely to do so in the context of this dispute.

The majority of our participants were very religious and prayed regularly (>80%). To investigate whether thinking about Allah (God) influenced the relative value of the life of Jewish Israelis, participants responded to variants of the classic “footbridge” problem (26), in the form of stories where a Palestinian man can be killed to save the lives of five children (15, 27). We ran two experiments simultaneously. In one experiment participants heard stories where the Palestinian man has to be pushed from a footbridge by another man to stop a truck that would otherwise kill five children. In the second experiment, participants heard stories where a Palestinian has to jump from the footbridge to save the children (*SI Appendix*). Responses to push and jump experiments were similar and were pooled in this analysis for brevity. In both experiments, participants judged whether the sacrificial act was preferred both from their perspective and from the perspective of Allah. All participants responded to two versions of this dilemma: one where the children to be saved were Palestinian, and one where the children were Jewish Israeli. The order was counterbalanced.

Our primary dependent variable was ingroup bias in the valuation of human life. Ingroup bias would be present when participants approved (or thought God would approve) of the man on the

footbridge jumping (or being pushed) to save the lives of Palestinian children but not Jewish Israeli children. Table 1 gives the number and percentages of participants who exhibited ingroup bias, no bias (approved or disapproved of saving the Palestinian and Israeli children alike), or outgroup bias (approved of saving Israeli children but not Palestinian children), from their own perspective and from God's perspective.

To demonstrate the relevance of our ingroup bias measure for understanding intergroup violence, we regressed “yes” answers to a question asking participants whether they thought it was their “duty as Muslims” to kill nonbelievers, on an overall measure of ingroup bias for evaluation of lives (average of self and God's perspective). We created dichotomous measures for ingroup bias giving a score of 1 if participants showed ingroup bias and a score of 0 if they did not. Ingroup bias was related to approval of intergroup violence; those who showed bias were more likely to believe it their duty to kill nonbelievers ($B = 0.45$, $SE = 0.18$, $z = 2.52$, $P = 0.01$).

In preliminary logistic regressions we regressed the existence of ingroup bias from self perspective and ingroup bias from God's perspective on experimental versions (jump vs. push), question order, residence (West Bank vs. Gaza), refugee status, age group, and gender. Boys were more likely than girls to show both ingroup bias from self perspective ($B = 0.35$, $z = 2.04$, $P = 0.04$) and ingroup bias from God's perspective ($B = 0.51$, $z = 2.68$, $P < 0.0001$). The only other reliable predictor was residence, with participants from Gaza showing more ingroup bias from God's perspective than participants from the West Bank ($B = 0.80$, $z = 3.70$, $P < 0.0001$). Ingroup bias was not different in the two versions of the experiment (jump vs. push) or question order (*SI Appendix, Tables S2 and S3*).

Most important, to test our competing hypotheses about the effects of one core aspect of religious belief on biased evaluation of human life, we ran a mixed-effects logistic regression investigating whether bias was different when participants took Allah's perspective vs. their own perspective. We find that biased evaluation of lives decreased when participants took Allah's perspective ($B = -10.85$, $z = -14.24$, $P < 0.0001$) (Fig. 1). Overall, biased evaluation of human life was almost 30% lower when thinking from the perspective of God. This was consistent across different subsamples and experiments: It was not moderated by residence in the West Bank or Gaza, refugee status, age group, or gender (see *SI Appendix, Tables S5–S8* for more details), and it was robust when the above-mentioned set of controls was entered into the model (*SI Appendix, Table S9*).

These results reveal that participants believed that they had preferences different from those of God when it came to answering certain moral dilemmas. Rather than encouraging divisive tribalism, participants believed that God had relatively stronger preferences than they did to treat the value of human lives equally, regardless of religious identity. That is, participants believed that Allah preferred them to value the lives of Jewish Israeli and Palestinian children more equally. Prior work suggests that the devout will constrain their behavior to fit in with supernatural preferences (23). If so, thinking about Allah (God), the arbitrator of religious mandates, might mitigate biased valuation of the lives of outgroup members. Still, we need to know more about how people deal with perceived differences between their own preferences and those of God. Although personal preferences are often constrained by God's preferences, as with supernaturally imposed dietary

Table 1. Number of participants who exhibited response bias

| Perspective | Ingroup bias | No bias | Outgroup bias |
|-------------|-----------------|-----------------|---------------|
| Self | $n = 233$ (42%) | $n = 303$ (55%) | $n = 16$ (3%) |
| Allah | $n = 167$ (30%) | $n = 364$ (66%) | $n = 18$ (3%) |

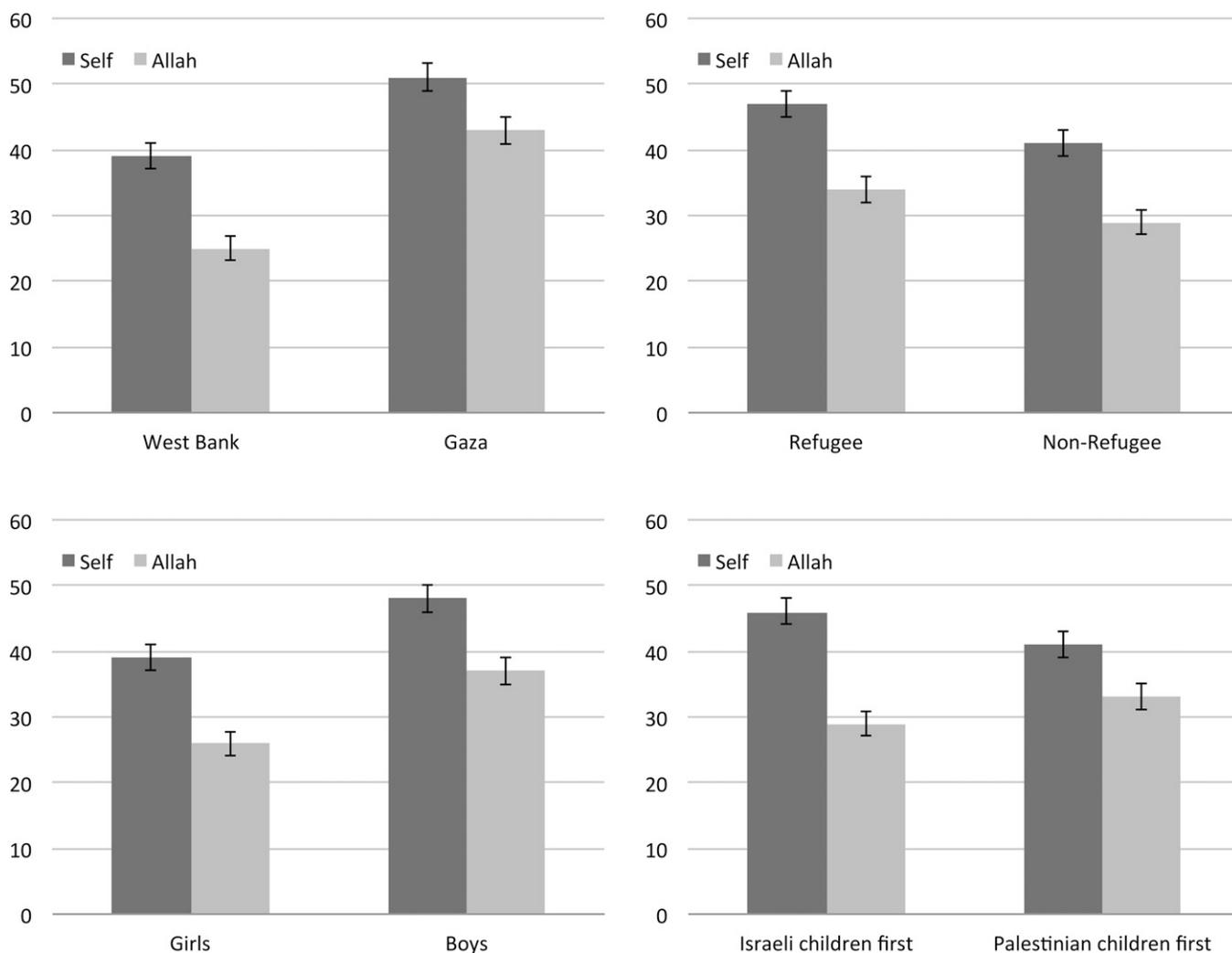


Fig. 1. The percentage of participants who valued Palestinian lives over Jewish Israeli lives decreased when judging from the perspective of Allah, compared with judging from their own perspective. Error bars are 95% confidence intervals.

restrictions or environmental practices, in other situations people may ignore or reframe supernatural preferences.

Research done in the North American context has shown that people often ascribe their own beliefs to God (28), something not found in our current work. However, understanding when such egocentric beliefs about God are more or less likely seems a fruitful avenue for future research. Self-centered beliefs about God may be more likely when supernatural mandates are less understood (e.g., by a less-devout sample), when they are difficult to apply to novel contexts, or when cultural factors moderate egocentric estimates of God's beliefs. We also note that in specific contexts communities might diverge in their interpretation of God's preference with regard to intergroup conflict. Future research might explore the different situations in which God's will might encourage or discourage parochial violence (including who invokes God's will and the context in which this is done), or serve to increase commitment to issues associated with intergroup conflict (29).

We think it is striking that despite the salience of religious violence in the Israel–Palestine conflict, a random sample of Palestinian Muslims recognize Allah as a deity who is more concerned than they are with the fate of members of a perceived antagonistic group, and more approving of sacrifice on the part

of Muslims to save the lives of Jewish children on the other side of a violent conflict.

Humans will fight, kill, and die for a variety of abstract beliefs or entities, including national rights and ideological doctrines of many types. Together with intriguing prior work showing how priming God can increase cooperation with outgroups (21), or how costly signaling of religious belief can increase trust across religious boundaries (30), our findings cast doubt on the notion that there is something special about religious faith, including Islamic belief, that invariably favors promotion of violent intergroup conflict.

Methods

Procedure. Our experiment was embedded in a larger survey on political opinions. On the basis of census maps of the West Bank and Gaza provided by the Palestinian Central Bureau of Statistics, residential areas were sampled proportionally to achieve a representative sample of the general population. First, Palestinian areas were divided into two areas: West Bank (64% of the sample) and Gaza Strip (36% of the sample), and counting areas were divided according to size. One hundred counting areas were selected randomly. In each counting area, a sample was selected whereby six children would be interviewed, three boys and three girls divided equally over the three ages under examination. Houses in each counting area were divided to allow random selection of six homes. In the first home, an interview could be conducted with any one of the six types of children needed; if there were more children who fit the description, one was selected using Kish household tables. In the second home, the age and gender of the child selected in the

previous home would be excluded and so the choices would become five, rather than six, and so on. The total number of families that declined to be part of the sample was 61; the rejection rate was therefore 10%. Staff from the Palestinian Center for Policy and Survey Research conducted the sampling and the interviews. Each interview was carried out by a team of one male and one female Palestinian interviewer in participants' homes. This research was approved by the institutional review board of the New School for Social Research and the Palestinian Center for Policy and Survey Research. Informed consent was obtained under guidelines approved by the institutional review board of the New School for Social Research.

Two experiments were embedded in the survey (jump vs. push), with participants randomly assigned to one or the other. Within each experiment we adopted a 2 (between: Jewish Israeli children or Palestinian children first) \times 2 (within: self perspective vs. Allah's perspective) experimental design. Participants responded to stories where a Palestinian man can be killed to save the lives of five children. Some participants heard stories where this Palestinian man has to be pushed from a footbridge by another man to stop a truck that would otherwise kill five children. Other participants heard stories where a Palestinian has to jump from the footbridge to save the children. All participants responded to two versions of this dilemma: once where the children to be saved were Palestinian, and once where the children were Jewish Israeli. In addition, participants responded to each dilemma twice: once from their perspective and once from God's perspective. They were first asked whether they thought the man should jump/be pushed or not and were then asked which choice Allah would approve of more.

Materials. All measures were pretested with a small focus group of Palestinian minors in the target age groups of 11–19 y. The younger children were not able to understand the standard trolley dilemma, which requires that participants imagine themselves in the described situation and indicate whether they would act as suggested (e.g., push someone onto the track). They were also not familiar with train tracks and trolleys, because there are no train lines in the West Bank or Gaza. Therefore, we adjusted the scenario and replaced the runaway trolley with

a truck, and instead of asking participants to imagine themselves in the scenario we created a character (Hadi) and asked participants what he should do (and what God would approve of). Below is the scenario used in the experiment with experimental variations in brackets:

Imagine that a man called Hadi is standing on a footbridge at night overlooking a truck as it speeds, out of control, down the road. It is clear that the driver is sleepy and out of control. If the truck does not stop it will kill five Palestinian [Jewish Israeli] children playing on the road. Hadi realizes that the only way he can save the children is to jump [push the very large Palestinian] off the bridge in front of the speeding truck to stop the truck and warn the driver. If he does this the truck will hit him [the Palestinian man] and he will almost certainly die, but the truck will stop and the five Palestinian [Jewish Israeli] children will be saved.

What do you think he should do?

1. He should jump [push the Palestinian] off the footbridge to save the children.
2. He should not jump [push the Palestinian] off the footbridge.

What do you think God would approve of more?

1. Hadi jumps [pushes the Palestinian] off the footbridge to save the children.
2. Hadi does not jump [does not push the Palestinian] off the footbridge.

ACKNOWLEDGMENTS. We thank N. Obeid, C. Shackelford, K. Lee, J. Black, and M. S. Rad for research assistance and the editor and anonymous reviewers for their generous and constructive feedback. Research and manuscript preparation were supported by funding from National Science Foundation Grant SES-0962080, Office of Naval Research Grant MINERVA-ONR N000141310054, and the Social Sciences Research Council.

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