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Moral realism as moral motivation:

The impact of meta-ethics on everyday decision-making

Running Head: Moral realism as motivation

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Abstract

People disagree about whether “moral facts” are objective facts like mathematical truths (moral realism) or simply products of the human mind (moral antirealism). What is the impact of different meta-ethical views on actual behavior? In Experiment 1, a street canvasser, soliciting donations for a charitable organization dedicated to helping impoverished children, primed passersby with realism or antirealism. Participants primed with realism were twice as likely to be donors, compared to control participants and participants primed with antirealism. In Experiment 2, online participants primed with realism as opposed to antirealism reported being willing to donate more money to a charity of their choice. Considering the existence of non-negotiable moral facts may have raised the stakes and motivated participants to behave better. These results therefore reveal the impact of meta-ethics on everyday decision-making: priming a belief in moral realism improved moral behavior.

Keywords: moral behavior; realism; decision-making; objectivism; priming

Whether there is a fact of the matter about morality has produced much debate in philosophy (Railton, 2003; Shafer-Landau, 2003; Sinnott-Armstrong, 2009), psychology (Doris & Plakias, 2008; Kelly, Stich, Haley, Eng, & Fessler, 2007; Mikhail, 2011; Prinz, 2008; Royzman, Leeman, & Baron, 2009), and public discourse (Harris, 2010; Marks, 2011; Shermer, 2010). Moral *realists* maintain that objective moral facts exist, treating them like mathematical truths (e.g., $1+1=2$) or scientific facts (e.g., what constitutes physical health). Moral *antirealists* deny the existence of moral facts, maintaining there are no real answers to moral questions, often citing moral disagreement between individuals (Lombrozo, 2009) and between cultures (Graham & Haidt, in press; Graham, Haidt, & Nosek, 2009; Nisbett & Cohen, 1996; Uhlmann, Pizarro, Tannenbaum, & Ditto, 2009) as a reason to doubt realism. Importantly, moral antirealists do not deny the existence and importance of moral *values*; antirealists simply assert that moral values reflect the beliefs of a person or a culture, rather than immutable facts that exist independent of human psychology. In other words, like subjective preferences (e.g., chocolate tastes better than vanilla), rather than objective facts, moral values may depend on the psychology of an individual or a community. Realist and antirealist views alike are found among philosophers (Chalmers & Bourget, 2009) and ordinary folk (Goodwin & Darley, 2008, in press), sometimes depending on the issue or context (Sarkissian, Park, Tien, Wright, & Knobe, in press). Here, we investigate whether priming realism versus antirealism influences moral decision-making.

Although the effects of meta-ethical views on moral behavior have not been directly investigated, several proposals are on offer. Some researchers suggest there may be no effects, based on observations of how ethicists with different meta-ethical views behave (Schwitzgebel & Rust, 2011). By contrast, others suggest moral realism motivates acts of violence and terror in

the real world (i.e., suicide bombings) (Ginges & Atran, 2009, 2011; Ginges, Atran, Medin, & Shikaki, 2007; Greene, 2002); thus, moral realism may lead to apparently worse behavior.

We hypothesize that priming a belief in moral realism will enhance moral behavior under certain conditions – when the right thing to do is relatively unambiguous (e.g., it is good to be generous). Since “real” moral stakes may be *higher* moral stakes, priming a belief in moral realism may in fact motivate people to behave better and in line with their existing moral beliefs. Indeed, moral beliefs that are perceived as objectively true (just as $1+1=2$) may enhance either participants’ sensitivity to potential punishment at the hand of a divine being or social peers (Haley & Fessler, 2005; Shenhav, Rand, & Greene, 2011), or participants’ intrinsic motivation to do the right thing and to see themselves as morally good agents (Mazar, Amir, & Ariely, 2008).

We conducted two experiments to test the hypothesis that priming moral realism (versus moral antirealism) would improve participants’ moral behavior. In Experiment 1, participants were primed with realism or antirealism or not primed and then provided with the opportunity to donate money to a charitable organization dedicated to helping impoverished children. Participants’ donation decisions were compared across conditions. We hypothesized that participants primed with moral realism would be more likely to make a charitable donation than participants in the antirealism or control conditions. Experiment 2 tested the same basic hypothesis in an online environment.

Experiment 1

Participants were primed with moral realism versus moral antirealism and then given the chance to donate money to a charitable organization. We hypothesized that participants primed with moral realism would be more likely to make a charitable donation.

Method

Participants

138 voluntary participants stopped to speak to an experimenter (A.D.) who served as a street-canvasser for a charitable organization, near subway stations in greater Boston.

Procedure

The canvasser approached potential participants in the sequence of steps detailed below. The basic procedure for soliciting donations was developed by the charitable organization.

(1) *Stopping the Passerby*. The canvasser wore a vest, displaying the organization's logo, and carried a binder, displaying the organization's name and logo. The canvasser attempted to engage any passerby who slowed down to read the display. Engagement of the passerby began with a smile and asking the passerby whether he/she had ever heard of the charitable organization. If the passerby continued walking slowly but did not stop, the canvasser asked the passerby to stop for just a minute to help him practice his presentation.

(2) *Building rapport*. If the passerby stopped (thus becoming a participant) the canvasser introduced himself to the passerby and asked how he/she was doing and what he/she was doing in Boston that day. Everyone who stayed for this step was recorded as a participant. All participants remained for the duration of the experiment. Note we did not (and could not) collect data from passersby who did not stop to talk to the canvasser. Most important for the experiment, once the primes were presented, no participants dropped out, and all data were analyzed.

(3) *Presenting the charity*. The canvasser presented information along with visual aids from the binder about the charitable organization: (a) the goals and scope of the charitable organization (e.g., to fight poverty and to help impoverished children worldwide); (b) the percentage of donations going to the needy recipients; from the binder, the canvasser displayed a pie graph

representing the percentage (above 90% for many years in a row); and (c) an example of how the charitable organization helps those in need; from the binder, the canvasser displayed pictures of people receiving aid. To make sure that participants paid attention and followed along, participants were asked during this step to affirm the value of the organization's goals (i.e., "Do these seem like worthy pursuits?"), the efficiency of the organization (i.e., "It's important to be efficient right?"), and the success of the organization's methods (i.e., "We're doing some great things, wouldn't you say?").

(4) *Asking for a donation.* Participants were told that the charitable organization is looking for "consistent monthly donors so that future programs can be effectively planned and funded". Participants who initially declined were asked whether they could "contribute a one-time donation to help [the charitable organization] fund programs".

(5) *Persuading participants to donate.* If the participant initially refused to donate, the canvasser attempted to persuade the participant to donate, focusing on the relatively low cost to the donor and the relatively high gain for the people in need. The canvasser also presented licensing documentation issued by the city of Boston to assure any skeptical participants that the charitable organization was registered with the city, had permission to collect donations, and ultimately that the organization was not fraudulent.

(6) *Close.* If the participant donated, the canvasser thanked the participant and told him/her that in the near future the charitable organization would contact him/her to confirm the donation. If the participant did not donate but expressed a desire to donate in the future, the canvasser asked for contact information so the charitable organization could follow up. Regardless of whether the participant donated, the canvasser ended by thanking the participant for his/her time and telling the participant to have a nice day.

In the control condition, the canvasser moved through the six steps above. Note that the canvasser did not record the duration of the steps. In addition to the control condition were two test conditions, i.e. realism, antirealism, assigned in sequence, in which an additional step was included in between steps 2 and 3. In the realism condition, the canvasser asked the participant a leading question to prime a belief in moral realism: “*Do you agree that some things are just morally right or wrong, good or bad, wherever you happen to be from in the world?*” In the antirealism condition, the canvasser asked: “*Do you agree that our morals and values are shaped by our culture and upbringing, so there are no absolute right answers to any moral questions?*” The canvasser asked for a donation from a total of 47 control participants, 46 realism participants, and 45 antirealism participants.

Three key points are worth noting. First, both realism and antirealism primes alluded to *moral* concerns (e.g., “some things are just morally right or wrong” in the realism condition, and “our morals and values” in the antirealism condition); we did not wish to prime morality in one condition and not the other. Second, we selected a behavior that was likely to be perceived as generally good (e.g., helping impoverished children), though specific attitudes toward (and rates of) charitable giving may vary across people and cultures. We note that distinct effects may obtain for moral issues that are recognized as controversial (e.g., suppose the charitable organization had been pro-life or pro-choice) (Goodwin & Darley, in press). Third, both questions were designed to highlight the key components of both realism and antirealism views – but, importantly, in uncontroversial terms. This approach allowed us to capitalize on the possibility that laypeople endorse certain aspects of *both* realism and antirealism and, more generally, hold somewhat flexible, context-dependent meta-ethical views; other approaches may be better suited to measure individual differences in people’s meta-ethical views at baseline

(Goodwin & Darley, 2008, in press). Thus, as expected, participants, with one exception, responded affirmatively.

The primary analyses of Experiment 1 focused on donation rate (e.g., the proportion of participants willing to donate) rather than donation amount for a few reasons (see Supplementary Material). For example, some participants pledged to donate monthly at the time of the experimental session, but we had no way of determining whether these participants continued monthly donations; they were able to cancel (or change the amount of) their monthly contributions at any time (via phone call to the charitable organization). We do note that supplemental analyses of donation amounts, treating the amount of an initial pledge as a one-time donation, revealed the same pattern of results (see Supplementary Results).

Results

Donation rates were compared across all three conditions (Fig. 1), yielding an effect of condition (Kruskal Wallis Test, $\chi^2(2, N=138)=9.44, p=0.009$). Participants primed with moral realism were twice as likely to be donors as control participants (Mann-Whitney $U=793.5, p=0.008$) and antirealism participants (Mann-Whitney $U=770.5, p=0.012$). Control and antirealism participants did not differ from each other (Mann-Whitney $U=1046.5, p=0.907$). We replicated this basic pattern in hypothesis-blind canvassers (see Supplementary Results). In sum, priming participants to consider moral realism doubled donation rates.

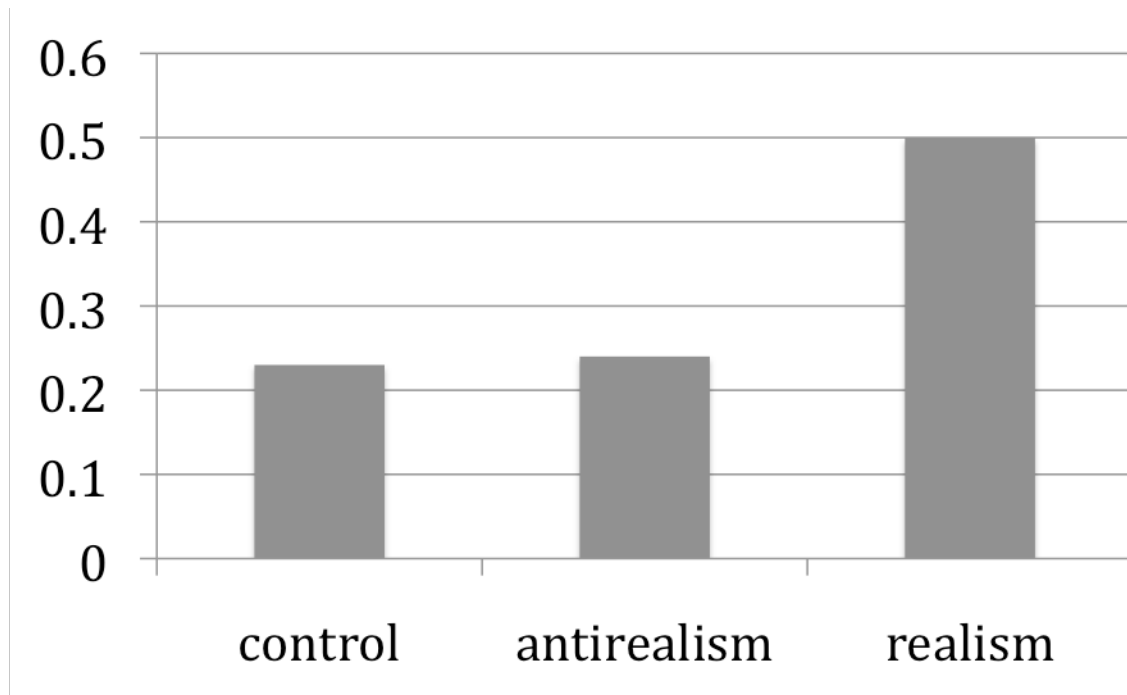


Figure 1. Proportion of participants who made charitable donations across three conditions in Experiment 1.

Experiment 2

Experiment 2 aimed to replicate the same basic pattern observed in Experiment 1 with five key modifications. First, Experiment 1 relied on an antirealism prime that may have given participants an excuse to opt out of donating. Although the antirealism prime used in Experiment 1 assumed the existence of “our morals and values”, it also highlighted that “there are no absolute right answers to any moral questions”. In an important sense, the absence of absolute or actual answers to moral questions is the essence of antirealism. Nevertheless, another approach to priming antirealism, employed in Experiment 2, is to emphasize not the absence of objective moral truths but the presence of “subjective moral truths”, in other words, the antirealist notion “it is up to each person to discover his or her own moral truths”. Second, Experiment 1 focused on a single specific charity; by contrast, Experiment 2 allowed participants to imagine a charity

of their choice to test the generalizability of the pattern found in Experiment 1. Third, whereas Experiment 1 relied on a control condition in which no leading question was posed, Experiment 2 relied on a control condition in which a leading question was posed about neutral, non-moral content. Fourth, Experiment 2 was conducted in a different environment – an online marketplace – and focused on participants’ reports of how much money they would donate online, out of a set sum (\$20) to their chosen charity. Fifth, because Experiment 2 was conducted online and guaranteed anonymity, participants may have felt more comfortable disagreeing with the prime questions, as compared in Experiment 1, where a live canvasser posed all questions (including the prime) face-to-face. In sum, Experiment 2 sought to provide further support for the same hypothesis: priming moral realism increases charitable decisions.

Method

Participants

Two hundred subjects (56 female, $M_{\text{age}} = 26.61$) participated in the study in exchange for \$0.11 via Amazon Mechanical Turk.

Procedure

The study was introduced with the following text: *“Please help us by answering the following questions. In the future, our lab would like to implement an option at the end of all online studies for participants to make a small donation (up to \$20) to a charity of their choice. Below, please indicate the approximate amount you would give to a charity of your choice, if you had the opportunity to do so.”* Participants were assigned randomly to one of three conditions: (1) realism, (2) antirealism, and (3) control. In the realism condition, participants were presented with the same question as in Experiment 1: *“Do you agree that some things are just morally*

right or wrong, good or bad, wherever you happen to be from in the world?” In the antirealism condition, participants were presented with a modified version of the question from Experiment 1: *“Do you agree that our morals and values are shaped by our culture and upbringing, so it is up to each person to discover his or her own moral truths?”* In the control condition, participants were presented with a new non-moral question: *“Do you agree that online studies are beneficial for researchers and participants?”* Participants had the chance to answer “Yes” or “No”, which also ensured that they read the prompt. Next, participants answered the key question probing their donation decision: *“What is the amount of money you would consider donating (up to \$20)?”* Finally, participants answered demographic questions.

The vast majority of participants (195 out of 200 participants) responded “Yes”, as expected, to the primes. Of the five participants who disagreed, 1 disagreed with realism, 3 disagreed with antirealism, and 1 disagreed with the control prompt. Two participants in the control condition did not respond to either the prompt or the donation question, and two participants in the realism condition did not complete the rest of the experiment after responding “Yes” to the prime. Nine participants were therefore eliminated from our analyses, leaving a total of 191 participants across the three conditions: (1) realism (N=74), (2) antirealism (N=58), and (3) control (N=59).

Results

A one-way ANOVA of participants’ donation amounts yielded a main effect of condition ($F(2,188)=5.06$ $p=0.007$). Pairwise comparisons revealed that participants primed with moral realism reported that they would donate more money ($M=9.86$, $S.D.=7.98$) than participants primed with moral antirealism ($M=7.32$, $S.D.=6.22$, $t(130, \text{corrected d.f.})=2.05$ $p=0.04$) and

participants in the control condition ($M=6.17$, $S.D.=5.98$, $t(131, \text{corrected d.f.})=3.05$ $p=0.003$). Control and antirealism participants did not differ from each other ($t(115)=1.02$ $p=0.32$).

We also found an effect of condition on the proportion of participants who reported that they would donate the full amount of \$20 ($\chi^2(2, N=191)=13.18$, $p=0.001$). Again, participants primed with moral realism were more likely to report that they would donate the full amount, compared to participants primed with moral antirealism ($\chi^2(1, N=132)=7.31$, $p=0.007$) or control participants ($\chi^2(1, N=133)=9.17$, $p=0.002$). Control and antirealism participants did not differ from each other ($\chi^2(1, N=117)=0.12$, $p=0.73$).

The effect of condition on the proportion of participants who reported they would donate a nonzero amount was not significant ($\chi^2(2, N=191)=3.75$, $p=0.15$); 15 out of 59 realism participants, 6 out of 52 antirealism participants, and 6 out of 53 control participants reported they would donate a nonzero amount. Participants may have been more likely to report nonzero donations in this experiment since they could choose their own charity.

General Discussion

Priming participants to consider moral realism increased decisions to donate in both Experiments 1 and 2, revealing the potential impact of meta-ethical views on everyday decision-making. In prior work, priming morality (e.g., Ten Commandments, unscrambling religious words) has led to increases in good behavior (e.g., charitable giving) (Shariff & Norenzayan, 2007) as well as decreases in bad behavior (e.g., cheating) (Mazar, et al., 2008). However, in the current research, *both* realism and antirealism primes prompted participants to consider moral values in general; yet, it was the *realism* prime that uniquely increased donations. Priming moral or religious concepts may have, in previous cases, primed moral realism, thus affecting behavior.

The specific impact of the moral realism prime allows us to eliminate several alternative explanations. First, simply asking participants to consider moral values (as per the antirealism prime) did not produce an effect; thus, priming morality in general may not necessarily lead to better behavior. Second, both primes (and the control prompt in Experiment 2) took the form of a leading question that could encourage agreeable responding, i.e. foot-in-the-door phenomenon (Beaman, Preston, Klentz, & Steblay, 1983), including willingness to donate. Yet, again, it was priming realism in particular that motivated people to act in line with putatively existing moral beliefs (e.g., it is good to be generous). We note that explicit agreement with the primes may not be necessary, so long as the primes render only one meta-ethical view salient and not multiple competing views. Alternatively, explicit agreement or the format of agreement may affect the strength of the prime. For example, participants offered only informal verbal agreement – a brief ‘yes’ or ‘no’ – in Experiment 1 and a simple yes/no button response, online, in Experiment 2. Would the primes have been more effective if participants had been instructed to defend the target view by delivering a speech or writing an essay in support of it (Janis & King, 1954)? Would the primes have been less effective in the absence of any explicit agreement at all? It will be important for future work to address these questions.

We explore two distinct but compatible accounts of why moral realism may lead people to act in line with moral beliefs. First, moral realism might render one’s own moral status (and changes in that status) more salient. Moral rules that are perceived to be “real” may be more psychologically costly to break due to increased sensitivity to possible punishment by others, i.e., social peers or a divine being (Haley & Fessler, 2005; Shenhav, et al., 2011), or even one’s own self. Participants may wish to serve egoistic motivations – e.g., to avoid feeling shame, to experience empathic joy, to preserve or improve one’s self-image. Indeed, moral realism may

even lead to a focus on the intrinsic motivation to do what's truly right and to see oneself as the kind of person who does what's right (Mazar, et al., 2008). A growing body of research suggests that in general people are highly motivated to enhance their own perception of themselves as moral agents – agents who make the right sorts of moral decisions and act in a way that is consistent with their moral beliefs (Alicke, 2000; Uhlmann, et al., 2009; Young, Chakroff, & Tom, in press). In emphasizing that there is a fact of the matter about morality, moral realism may enhance these tendencies.

Second, priming moral realism may prime empathetic or collectivist attitudes. Moral realism encompasses the notion that everyone shares the same set of moral rules – e.g., moral facts apply to all. As such, priming moral realism could partially influence moral behavior toward unrelated others (e.g., the beneficiaries of the charity, impoverished children) by priming participants to feel connected through the thread of common morality (Oveis, Horberg, & Keltner, 2010; Valdesolo & DeSteno, 2011). By contrast, moral antirealism stipulates differences between moral norms across individuals and cultures. An important topic for future research is the relationship between moral realism and moral collectivism – whether moral realism motivates individuals to contribute to the group. Future research might also investigate whether priming common *morality* yields a unique or uniquely robust effect, compared to other features people might share (e.g., language).

The present finding may be unexpected given the prior suggestion that moral realism might lead to worse behavior including acts of violence and terror (Ginges & Atran, 2009; Ginges, et al., 2007; Greene, 2002). One possibility is that how and whether moral realism influences behavior may depend on the specific behavior at stake. For example, while moral realism may promote generous giving to unambiguously good causes, it may also increase

certain punitive behaviors (e.g., targeted acts of violence). Moral realists may be more likely to punish those who break moral rules, which they perceive as “real” and non-negotiable. We note though that pilot results do not appear to support the specific hypothesis that moral realism is associated with more punitive attitudes (Stemper, Durwin, & Young, unpublished data).

One way then to understand the current results alongside the intuition that moral realism or fundamentalism leads to *worse* behavior (Ginges & Atran, 2009, 2011; Ginges, et al., 2007; Greene, 2002) is to re-conceptualize those acts (e.g., targeted acts of violence and terror) as morally good or even obligatory in the eyes of the actor. Yet another possibility is that priming meta-ethical views (realism versus anti-realism) may yield reduced effects in the case of immoral actions that deserve punishment. Recent research suggests that people are already likely to take a realist or objectivist stance toward morally bad behaviors (e.g., harming others), compared to morally good behaviors (e.g., helping others) (Goodwin & Darley, in press). In other words, participants may already be more likely to think there is a fact of the matter when it comes to whether it is morally permissible to harm another, compared to whether there is a fact of the matter about whether it is morally obligatory, for example, to give money to charity. Thus, an additional meta-ethical prime of moral realism may yield diminished impact on (punitive) attitudes toward bad behaviors, given people’s baseline views.

Future work should investigate the extent to which the current results extend more broadly by characterizing both the precise mechanisms by which priming meta-ethical views influences behavior across different moral contexts and also the extent to which participants endorse (or disagree with) the primed meta-ethical view (Custers & Aarts, 2010). Indeed, the current design did not allow us both to prime participants with realism and antirealism and to

determine participants' baseline meta-ethical beliefs.¹ A worthwhile challenge will therefore be to probe the impact of standing meta-ethical views, not only in the lab or philosophical armchair, but in boardrooms and courtrooms as well.

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¹ If multiple views (e.g., realism and anti-realism) are presented, and participants had an opportunity to endorse, implicitly or explicitly, one view over the other, for any given “prime”, then the patterns observed in the current work due to priming would likely disappear – after all, more than one view would have been “primed”. A further prediction though is that individual differences might emerge in this context: decisions to donate might be higher in participants who agree with realism (and disagree with antirealism) and lower in participants who agree with antirealism (and disagree with realism). Future work is required to test this prediction.

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Supplementary Results

Additional Canvassers

Street-canvassers from the same charitable organization blind to the experimental hypotheses were randomly assigned to use one of the two primes (i.e., realism, antirealism) during all their presentations to participants over a day of canvassing. Seven canvassers were assigned to the realism prime; two canvassers were assigned to the antirealism prime. The number of monthly donations per hour that the canvassers collected in the single day they used the prime was recorded and compared to their lifetime average, which, conservatively, included the one day they used the moral prime. We relied on this measure (number of monthly donations per hour) for the eight hypothesis-blind canvassers since it is the statistic the charitable organization records each day for each individual canvasser. Therefore, given the canvassers' individual lifetime averages at the charitable organization, we were able to determine the impact of the primes on the number of donations the canvassers received.

Consistent with Experiment 1, the number of monthly donations per hour trended towards being higher on the day the moral realism prime was used compared to lifetime averages (realism: 4.77, lifetime: 2.52; $t(6)=1.02$, $p=.051$; Supplementary Figure 1). The two canvassers who used the antirealism prime did not receive any donations (antirealism: 0, lifetime: 2.14). A mixed-effects ANOVA yielded an interaction between prime (realism vs. antirealism) and test (prime vs. lifetime average) ($F(1,7)=5.71$, $p=0.048$, partial $\eta^2=0.45$).

Donation Amounts for Experiment 1

The primary analyses of Experiment 1 focused on *donation rate* rather than on *donation amount* for reasons provided below. Here we report supplemental analyses of donation amounts. Donation amount was recorded for 85 participants; 38 were in the control condition, 19 were in the realism condition, and 28 were in the anti-realism condition. Some of these participants pledged to donate monthly at the time of the experimental session. However, we had no way of determining whether these participants continued monthly donations; they were able to cancel (or change the amount of) their monthly contributions at any time (via phone call to the charitable organization). Thus, the following analyses treat the amount of an initial monthly pledge as a one-time donation (e.g., a monthly pledge for \$30 would be treated as equivalent to a one-time donation of \$30). After removing outliers ($N=7$; greater than two standard deviations from the mean), there were 36 participants in the control condition, 17 participants in the realism condition, and 25 participants in the anti-realism condition. Of the 36 participants in the control condition, 2 pledged to donate monthly; of the 17 realism participants, 2 pledged to donate monthly; and of the 25 anti-realism participants, 1 pledged to donate monthly. On average the monthly pledge amount was \$21.60. The mean monthly pledges were \$24, \$20, and \$20, in the control, realism, and anti-realism conditions, respectively.

Consistent with the primary analyses presented in the main text across Experiments 1 and 2, participants primed with moral realism ($M=6.65$, $S.D.=9.14$) donated significantly more than control participants ($M=1.89$, $S.D.=5.80$; $t(51)=2.30$, $p=0.025$) and marginally more than participants primed with anti-realism ($M=2.04$, $SD=6.28$; $t(40)=1.94$, $p=.0595$). Control participants and antirealism participants did not differ from each other ($t(59)=0.097$, $p=0.92$).

Finally, we note a number of reasons (aside from the methodological issues noted above) why we chose to focus our primary analyses for Experiment 1 on donation rates (versus donation amounts) in the main text. First, donating *any* amount may reflect support for the specific cause of helping impoverished children. Other researchers investigating the determinants of charitable behavior have also probed participants' "willingness to contribute" (Bekkers & Wiepking, 2011; Kogut & Ritov, 2005). Second, while we recognize that donation *amount* might reflect the *extent* of a participant's support, donation amount may also reflect other less relevant factors, e.g., the participant's overall income, prior charitable commitments. Note that these reasons apply primarily to Experiment 1, which targeted a single, pre-determined charity; by contrast, Experiment 2 not only allowed participants to consider a charity of their choice also restricted the context in which participants would donate hypothetically (i.e., in future online experiments) and the amount (i.e., up to \$20).

Supplementary Figure 1. Number of monthly donations per hour for 7 additional canvassers, comparing canvassers' lifetime averages to days when they used the realism prime.

