## Maybe Holier, But Definitely Less Evil, Than You: Bounded Self-Righteousness in Social Judgment

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Few biases in human judgment are easier to demonstrate than self-righteousness: the tendency to believe one is more moral than others. Existing research, however, has overlooked an important ambiguity in evaluations of one's own and others' moral behavior that could lead to an overly simplistic characterization of self-righteousness. In particular, moral behavior spans a broad spectrum ranging from doing good to doing bad. Self-righteousness could indicate believing that one is more likely to do good than others, less likely to do bad, or both. Based on cognitive and motivational mechanisms, we predicted an asymmetry in the degree of self-righteousness such that it would be larger when considering unethical actions (doing bad) than when considering ethical actions (doing good). A series of experiments confirmed this prediction. A final experiment suggests that this asymmetry is partly produced by the difference in perspectives that people adopt when evaluating themselves and others (Experiment 8). These results all suggest a bounded sense of self-righteousness. Believing one "less evil than thou" seems more reliable than believing one is "holier than thou."

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In matters of morality, many people seem to view themselves through rose-colored glasses. In representative articles, researchers report that "people perceive social reality in ways that support a positive view of themselves" (Goethals, 1986, p. 154), leading "most people [to] think they are more ethical than others" (Fetchenhauer & Dunning, 2006, p. 72) and "chronically feel 'holier-than-thou" (Epley & Dunning, 2000, p. 861). Students of psychology routinely read that comparative judgments in moral domains are substantively similar to the more general "better-than-average" effect documented in nonmoral domains: "Compared with people in general, most people see themselves as more ethical, more competent at their job, friendlier, [and] more intelligent" (Myers, 2010, p. 62). These results can be counted on to elicit a knowing chuckle from many audiences, as people seem to readily predict self-serving evaluations in others (Kruger & Gilovich, 1999). Indeed, a widely available bumper sticker echoes the common-sense understanding of the self-concept: "Jesus loves you, but I'm his favorite." Self-righteousness, at least in Western cultures (Henrich, Heine, & Norenzayan, 2010), seems to know no bounds.

At first glance, this characterization of self-righteousness as unbounded seems based on solid empirical research. Among many other published research results, people report being more likely than others to donate blood, give to charity, give up their seat on a crowded bus for a pregnant woman, treat another person fairly, and generally act prosocially (Alicke, Klotz, Breitenbecher, Yurak, & Vredenburg, 1995; Dunning, Meyerowitz, J. & Holzberg, 1989; Epley & Dunning,

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2000; Goethals, Messick, & Allison, 1991; Heath, 1999; Heine & Lehman, 1997; Messick, Bloom, Boldizar, & Samuelson, 1985; Miller & Ratner, 1998; Moore & Small, 2007; Paunonen, 1989; Svenson, 1981; Weinstein, 1980). Self-righteousness seems to appear across a wide array of behaviors, whenever people judge their own moral character in relation to others.

We believe, however, that existing research overlooks an important ambiguity in evaluations of moral and ethical behavior, one that may lead to an overly simplistic characterization of people's well-documented capacity for self-righteousness. In particular, moral behavior includes a broad range of actions that span from doing good to doing bad. Believing that one is more moral than others could reflect a belief that one is either more likely to do good than others ("holier than thou") or less likely to do bad ("less evil than thou"). When people believe they are more moral than others, do they believe they are more like a saint than others, less like a sinner, or both?

Existing empirical evidence does not clarify this ambiguity because it typically conflates the moral and immoral aspects of behavior. Saying that one would give up one's seat on a bus for an elderly person, for instance, could be interpreted as a prediction of a moral act of kindness toward another person (making an elderly person comfortable while riding the bus) or as a prediction of avoiding an immoral act that harms another person (not letting an elderly person stand uncomfortably while riding the bus). Understanding the precise nature of self-righteousness requires measuring both characterizations of ethical actions independently.

It is interesting to note that one of the first experiments to document self-other differences in moral judgments (Messick et al., 1985) hints at an asymmetry in self-righteousness. These authors asked people to describe both fair and unfair acts that they have performed themselves and have observed in others. Although not the central component of their analyses, the authors noted an

asymmetry in the severity of the actions people generated. Whereas fair behaviors for self and others were qualitatively similar, unfair behaviors for self and others were noticeably different:

The unfair behaviors that subjects associate with themselves are almost exclusively acts of interpersonal inconsideration. [whereas] the unfair actions associated with others include inconsiderate acts but they also include subcategories that are not found associated with self. Cheating, stealing, destroying, shoplifting, and the like were not found in our sample of "I-unfair" behaviors. (Messick et al., 1985, p. 499)

These results suggest that self-righteousness might be bounded, better characterized by feeling "less evil than thou" rather than "holier than thou." A similar suggestion comes from research demonstrating that moral behavior is motivated to a surprising degree by people's discomfort with acting immorally rather than by their desire to act morally (Baumeister, Stillwell, & Heatherton, 1994). People comply with direct requests to help others, for instance, because of discomfort in refusing to help rather than because of a desire to help (Flynn & Lake, 2008).

Despite these preliminary indications, however, research has not explicitly tested the possibility that self-righteousness is asymmetric. In a broad review of the existing literature, we were able to identify only seven articles that offer an incidental test of asymmetric self-righteousness, but all report results in this direction. These results emerge when people list moral and immoral behaviors they and others engaged in (Allison, Messick, & Goethals, 1989; Liebrand, Messick, & Wolters, 1986), recall moral and immoral behaviors they and others engaged in (Gelfand et al., 2002; Green & Sedikides, 2004; Newman, Nibert, & Winer, 2009; Tasimi & Johnson, 2015), and predict the chances that they and others would engage in relatively good and bad behaviors (Dunning & Story, 1991). Although this comparison was not the focus on these experiments, they do suggest an asymmetry in self-righteousness is plausible. Here we report 8 experiments that test this asymmetry hypothesis directly.

## Measuring Self-Righteousness, Precisely

There are at least two reasons to predict that self-righteousness will be larger when evaluating immoral behavior than moral behavior. These reasons both stem from the psychological mechanisms that create self-other differences in judgment. First, people tend to evaluate information about others more dispassionately than information about themselves. In particular, information that threatens a person's identity triggers defensive mechanisms aimed at maintaining a desirable self-image (e.g., Campbell & Sedikides, 1999; Helzer & Dunning, 2012a; Kunda, 1990; Steele & Liu, 1983). People may attempt to discredit the threatening information (Ditto & Lopez, 1992; Ditto et al., 1998), generate new evidence to support a desired belief (Effron, 2014), or even redefine what counts as good evidence to support a favored conclusion (Dawson, Gilovich, & Regan, 2002; Gilovich, 1991). Self-other differences emerge when motivated reasoning "massages" the evidence for one target of evaluation—the self—but not the other. This motivated reasoning is likely to be stronger for threatening stimuli than for flattering stimuli, consistent with a general tendency for negative stimuli to capture attention and guide cognition relatively more than positive stimuli (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001; Rozin & Royzman, 2001). Imagining oneself donating to charity does not threaten one's moral self-concept but imagining oneself stealing from a charity does, and so motivated reasoning processes that enable self-righteousness may be triggered more readily for immoral actions than for moral actions (Elliot & Devine, 1994; Festinger & Carlsmith, 1959; Gilbert, Lieberman, Morewedge, & Wilson, 2004).

Second, people naturally adopt different psychological perspectives when evaluating their own versus others' behavior (Buehler, Griffin, & Ross, 1994; Epley & Dunning, 2000; Kahneman & Tversky, 1979; Koehler & Poon, 2006; Kruger & Gilovich, 2004; Pronin & Kugler, 2007; Williams, Gilovich, & Dunning, 2012). When considering one's own behavior, people generally adopt an "inside" approach that relies heavily on their knowledge of their own intentions, motives, desires, selfconcept, or other person-specific information. People do not, however, have direct access to others' psychological states and must instead infer them from observed actions. When considering others' behavior, people therefore tend to adopt an "outside" approach to prediction, basing their predictions on observed behaviors and base rates from which corresponding intentions, motives, and other psychological states are then inferred (Gilbert & Malone, 1995). These differences in perspective can create differences in evaluations of oneself and others when intentions and observed behavior diverge. Because people generally have a positive self-image, people generally construe their own behavior as guided by positive intentions and goals (Markus & Wurf, 1987; Swann & Bosson, 2010; Wilson & Ross, 2001). A boss who lays off employees is likely to construe her behavior as an ethical effort to maintain the company's profitability for the remaining employees. An employee laid off by the same boss may interpret the boss's behavior as cruel indifference to the pain of unemployment. As a result, unethical behavior is generally observed in others rather than in oneself (Baumeister, 1999). Notice that this mechanism again suggests an asymmetry in people's recognition of their own versus others' capacity for moral versus immoral behavior. Moral behavior seems driven by moral intentions from both an inside as well as an outside perspective, but immoral behavior seems driven by immoral intentions primarily from an outside perspective. This cognitive mechanism therefore predicts more self-righteousness for immoral behaviors than for moral behaviors.

Understanding the precise nature of self-righteousness is important for gaining an accurate understanding of one of the most widely studied research topics in psychology—the self-concept. It is also of practical importance for understanding choices that are informed by one's self-concept. A person who feels less prone to behaving unethically than others, for instance, might not guard against temptations for unethical behavior. Both the motivational and cognitive mechanisms that create self—other differences in evaluations suggest a bounded sense of self-righteousness. Instead of viewing themselves through rose-colored glasses, people may view themselves through the equivalent of rose-colored bifocals.

## Overview of Experiments 1–7

We tested the precise nature of self-righteousness by measuring people's predictions about their own and others' moral and immoral behavior (Experiments 1–6), or measuring their memory for past moral and immoral behavior (Experiment 7). In all experiments, we studied participants that existing research suggested would be among the most likely to be self-righteous: Americans (Henrich et al., 2010). If the well-documented tendency among these participants for self-righteousness is unbounded, then we would expect what appear to be self-enhancing judgments for both moral and immoral behavior. If self-righteousness is bounded, then we would expect larger self-other differences when evaluating immoral actions than when evaluating moral actions. <sup>1</sup>

## **Experiment 1: Predicting Moral and Immoral Behaviors**

Participants predicted whether they were more or less likely than others to engage in each of seven moral and seven immoral behaviors.

Participants also rated how ethical, desirable, and common each behavior was in order to assess the plausibility of several alternative interpretations of our results. Ratings of ethicality and desirability served as manipulation checks of moral and immoral actions. Ratings of commonality tested an alternative interpretation based on egocentrism (Chambers & Windschitl, 2004; Klar & Giladi, 1999; Kruger, 1999). In particular, comparative judgments of the self against others may be based more heavily on assessments of the self than on assessments of others. This egocentrism account predicts that people would believe that they are more likely than others to engage in common behaviors and less likely than others to engage in uncommon behaviors, simply because people can find it hard to imagine themselves engaging in uncommon behaviors but do not think about others being unlikely to engage in uncommon behaviors as well. This egocentrism could provide an alternative account of our predicted results if people think that immoral behaviors are objectively less common than moral behaviors.

## Method

Participants (N = 64) were recruited for "a study on people and behavior" from Amazon.com's Mechanical Turk (M-Turk) and compensated at a rate equivalent to \$6 per hour. After reading instructions and answering a practice question, participants read about the seven moral and seven immoral behaviors detailed in Table 1 and answered how likely they are to engage in those behaviors in comparison to other people on a scale ranging from -7 (Others are far more likely to do this than me) to 7 (I am far more likely to do this than others) with 0 as the midpoint (Neither more or less likely for me or for others). For example, the moral behaviors included returning a lost wallet and buying food for a homeless person, and the immoral behaviors included lying to coworkers and stealing small amounts of money (Table 1 contains the exact text). Participants then rated how ethical, desirable (specifically, bad or good), and common the behaviors are on 9-point scales. The order of the 14 behaviors was randomized, such that the seven moral and seven immoral behaviors were interleaved with each other.

## **Results**

As Figure 1 shows, participants believed that they are less likely than others to engage in immoral behaviors, as evidenced by the significantly negative ratings for immoral behaviors (M=-3.50, SD=2.05), one-sample t(63)=13.68, p<.001, d=3.45. Participants did *not*, however, believe they are significantly more likely than others to engage in moral behaviors (M=.26, SD=1.78), one-sample t(63)=1.18, p=.24, d=.30. To compare the magnitude of self-righteousness for immoral and moral behaviors against each other, we first reverse-scored ratings for the immoral behaviors so that larger positive numbers indicate more self-righteousness. As predicted, self-righteousness was larger when evaluating immoral behaviors than when evaluating moral behavior, paired t(63)=11.89, p<.001, d=1.50.

Consistent with our intended manipulation, participants rated the seven moral behaviors as more ethical (M=3.06, SD=.90), on average, than the seven immoral behaviors (M=-2.78, SD=.85), paired t(63)=31.12, p<.0001, d=3.88. Notice that these average ratings demonstrate no asymmetry in judgments of ethicality, nor an asymmetry in the extremity of the behaviors we selected. Participants also rated the moral behaviors as more desirable (M=8.02, SD=.83) than the immoral behaviors (M=2.16, SD=.87), paired t(63)=31.06, p<.0001, d=3.88. This is not surprising given that desirability and ethicality are highly correlated, t(64)=.80, t=1.00

Finally, participants rated the moral behaviors as *less* common (M=4.38, SD=1.12) than the immoral behaviors (M=4.93, SD=1.14), paired t(63)=2.88, p<.01, d=.36. These results suggest that egocentric social comparisons are not producing the observed asymmetry in self-righteousness, because this mechanism suggests that people believe that they would be more likely than others to engage in common behaviors. Instead, our participants believed that they would be substantially less likely than others to engage in the immoral—and to them, common—behaviors. To further test whether commonness ratings affected the asymmetry in self-righteousness, we reverse-scored self-other ratings for immoral behaviors and entered commonness ratings of moral and immoral behaviors as covariates into an analysis of variance (ANOVA). The main effect of moral versus immoral behaviors remained,  $F(1, 61) = 4.38, p=.041, \eta_p^2=.067$ .

# **Experiment 2: Direct and Indirect Comparative Judgments**

Comparative judgments can be elicited in two ways: Either by asking participants to directly compare themselves to others on one response scale (as we did in Experiment 1), or by asking participants to indirectly compare themselves to others by first rating their own

<sup>&</sup>lt;sup>1</sup> In each experiment conducted on M-Turk, we included an attention check at the end. It always consisted of a question that presented a response scale and a small blank space next to it. If participants had paid any attention to the instructions, they would have known to write a word in the blank space rather than fill out the scale (this keyword varied from experiment to experiment). In no experiment did more than 3.0% of participants fail this attention check, and so to avoid unnecessary data exclusions we decided to include all participants in all experiments. Analyzing each experiment after excluding participants who failed the attention checks does not meaningfully alter the results.

Table 1
Moral and Immoral Behaviors Used in Experiments 1–2

#### Behavior

#### Moral

- 1. Stop to help someone with a flat tire.
- 2. Donate blood when asked to do so.
- 3. Return a lost wallet you found to the police, leaving the significant amount of cash inside of it untouched.
- 4. Spend a Sunday volunteering in a soup kitchen.
- 5. Tell a professor that he or she had incorrectly marked your final exam and gave you too high a grade.
- 6. Return \$20 you had been incorrectly given as change after making a small purchase.
- 7. Buy food for a homeless person standing outside of a grocery store.

#### Immoral

- 1. Take advantage of a person who does not know the value of a product and sell it to them at an inflated price.
- 2. Rush to take the last seat on a crowded bus ahead of an elderly lady.
- 3. Find a \$20 tip left for the waiter in a restaurant and take the money for yourself.
- 4. Engage in an extramarital affair.
- 5. Lie to your coworkers to increase the chances that you will get a promotion rather than them.
- 6. Offer your help in the future while knowing that you do not intend to fulfill the promise when the time comes.
- 7. Crash into a parked car and drive off without leaving a note.

likelihood of engaging in a behavior and then separately rating others' likelihood of engaging in that behavior. Past research finds stronger self—other differences in direct comparisons than in indirect comparisons (Klar & Giladi, 1997; Moore, 2007; Moore & Kim, 2003). To test whether the asymmetry in self-righteousness depends on elicitation method, Experiment 2 provides a replication of Experiment 1 using both direct and indirect comparison methods.

## Method

Participants (N = 108) were master's of business administration students in a management course who completed this survey as part of a class exercise before the first class meeting. This was a 2

(within-subject factor: moral vs. immoral behaviors)  $\times$  2 (between-subjects factor: direct vs. indirect elicitation) design. This survey used the same materials from Experiment 1. Participants evaluated the seven moral and seven immoral behaviors in a random order using either a direct or indirect elicitation method. Participants in the direct comparison condition provided their judgments on a single scale ranging from -7 (Others are far more likely to do this than me) to 7 (I am far more likely to do this than others) with 0 as the midpoint (Neither more or less likely for me or for others). Participants in the indirect comparison condition provided their judgments on two separate scales: One for the self and one for other people, both on scales ranging from 0 (Not at all likely) to 7 (Extremely likely).

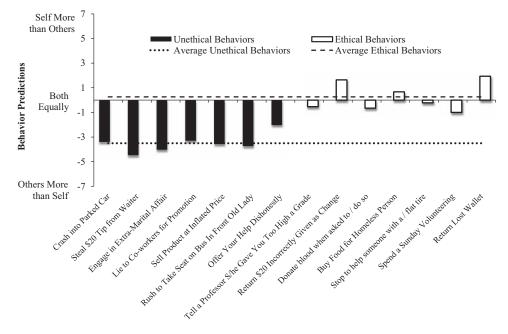


Figure 1. Behavior predictions for self and other in Experiment 1 (within-subject). Behaviors are ordered left to right from least ethical to most ethical, as rated by participants in Experiment 1. The zero-point on the y axis represents equal likelihood for self and other.

### **Results**

We observe asymmetric self-righteousness in both the direct and indirect methods (see Figure 2). When making direct comparisons, participants predicted they would be significantly less likely than others to engage in immoral behaviors (M=-1.93, SD=1.71), one-sample t(53)=8.31, p<.001, d=2.28. In contrast, participants did not predict they would be significantly more likely than others to engage in moral behaviors (M=-.29, SD=1.31), one-sample t(53)=-1.66, p=.10, d=.46. As in Experiment 1, the magnitude of self-righteousness was larger when evaluating immoral behaviors than when evaluating moral behaviors, paired t(53)=9.66, p<.001, d=1.34.

To create a measure of self-righteousness for indirect comparisons, we subtracted ratings for others from ratings for the self (i.e., [self-ratings] – [other-ratings]). Participants predicted that they would be significantly less likely than others to engage in immoral behaviors (M = -1.02, SD = .75), one-sample t(53) = 10.03, p < .001, d = 2.76, and also significantly more likely than others to engage in moral behaviors (M = .41, SD = .81), one-sample t(53) = 3.70, p < .01, d = 1.02. However, the magnitude of self-righteousness was again larger when evaluating immoral behaviors than when evaluating moral behaviors, paired t(53) = 6.80, p < .001, d = .92 (see Figure 2).

Next we compare self-righteousness between the direct and indirect methods. Consistent with past research (e.g., Moore, 2007, Experiment 1), we standardized our measure of self-righteousness across elicitation method because the direct and indirect methods utilize different scales. A 2 (elicitation method: direct vs. indirect) × 2 (behaviors: moral vs. immoral) mixed-model ANOVA revealed a main effect for elicitation method, F(1, 106) = 42.21,  $p < .01, \eta_p^2 = .29$ , a main effect for behaviors, F(1, 106) = 60.63, p < .01,  $\eta_p^2 = .36$ , and no interaction, F(1, 106) = .27, p = .61,  $\eta_p^2 = .002$ . Consistent with prior work, self-other differences were larger in direct comparisons than in indirect comparisons. More important for our hypotheses, self-righteousness was significantly larger when evaluating immoral behaviors than when evaluating moral behaviors. The nonsignificant interaction indicates that the magnitude of asymmetric self-righteousness did not vary by elicitation method.

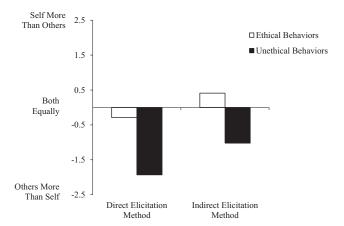


Figure 2. Behavior predictions for self and other by elicitation method in Experiment 2.

## Experiments 3-4: Predicting Identical Moral and Immoral Behaviors

Experiments 1 and 2 provide initial support for bounded self-righteousness. However, these experiments asked participants to consider qualitatively different moral and immoral behaviors, raising concerns that their results are due to some other confound in these behaviors. Experiments 3–4 therefore provide a more precise test of our hypothesis by providing participants with a fixed set of behaviors, framed as either a moral outcome or an immoral outcome

Beyond providing a direct replication, Experiment 4 also tests an alternative explanation based on a rather sophisticated social desirability bias in survey responses. That is, participants may exhibit false modesty when asked about the likelihood of engaging in moral behavior, which dampens the self–other difference that characterizes their true self-concept. Participants may actually believe that they are in fact 'holier than thou,' but may be unwilling to report this for fear of appearing arrogant. Although our surveys are completely anonymous and confidential, we nevertheless measured socially desirable responding in this replication to assess the plausibility of this alternative interpretation.

## Method

**Experiment 3.** Participants (N=79) were recruited from M-Turk and compensated at a rate equivalent to \$6 per hour. Participants read about seven different behaviors in a random order, framed either as moral or immoral. For example, one behavior was crashing into a parked car. The moral frame stated that the driver left a note with his or her contact information. The immoral frame stated that the driver did not leave a note with his or her contact information. Another behavior was getting onto a crowded bus. The moral frame stated that the person gave up the last seat for an elderly lady, whereas the immoral frame stated that the actor rushed to take the last seat ahead of an elderly lady. Table 2 shows full details of all the behaviors and frames.

Participants completed the same measures used in Experiment 1 for each behavior: how likely they were to engage in each behavior compared with others, as well as how ethical, desirable (i.e., good or bad), and common each behavior was. The order of these questions varied randomly within each behavior.

#### **Results and Discussion**

As Figure 3 shows, participants predicted that they would be significantly less likely than others to engage in immoral behaviors (M = -2.31, SD = 1.82), one-sample t(39) = -8.03, p < .0001, d = 2.57, and also significantly more likely than others to engage in moral behaviors (M = 1.23, SD = 2.19), one-sample t(38) = 3.51, p = .001, d = 1.14. These results again reveal the predicted asymmetry in evaluations because the magnitude of self-righteousness was significantly larger for immoral behavior than for moral behavior, t(77) = 2.39, p = .019, d = .54. The belief that one is "less evil" than others is stronger than the belief that one is "holier" than others.

Consistent with our intended manipulation, participants again rated the moral behaviors as more ethical (M = 3.03, SD = .88) than the immoral behaviors (M = -2.21, SD = .75), t(77) =

Table 2
Identical Moral and Immoral Behaviors Used in Experiment 3

#### Moral behavior [immoral behavior]

- 1. Crash into parked car but leave [without leaving] a note with your contact information.
- 2. Give up [rush to take] the last seat on a crowded bus for [ahead of] an elderly lady.
- 3. Find a \$20 tip left for the waiter in a restaurant and return it to the waiter [take it for yourself].
- 4. Tell the truth [lie] to your co-workers even though you know it will increase the chances they will get a promotion rather than you [to increase the chances that you will get the promotion rather than them].
- 5. See someone who needs help with a flat tire and stop to help [but ignore them and keep on driving].
- 6. Tell [keep it to yourself when you notice that] a professor that he or she [had] incorrectly marked your final exam and gave you too high a grade.
- 7. Return [keep] \$20 you had been incorrectly given as change after making a small purchase.

28.56, p < .0001, d = 6.51. Notice that the asymmetry observed in behavioral predictions cannot be explained by differences in the extremity of the behaviors we described. Both immoral and moral behaviors differed significantly from the extreme ends of the scale (-4 and + 4, respectively), one-sample ts > 6.87, ps < .0001, but the moral behaviors were rated as closer to the extreme than the immoral behaviors, z = 2.73, p < .01, suggesting that self-righteousness was smaller for moral behaviors even though the moral behaviors were relatively more ethical than the immoral behaviors were unethical.

Participants also rated the moral behaviors as more desirable (M = 7.97, SD = .82) than the immoral behaviors (M = 2.65, SD = .74), t(77) = 30.20, p < .0001, d = 6.84. Desirability and ethicality were almost perfectly correlated, t(79) = .99, p < .0001.

Finally, participants again rated the moral behaviors as less common (M = 4.52, SD = 1.43) than the immoral behaviors (M = 5.34, SD = 1.08), t(77) = 2.90, p = .005, d = .66. When we reverse-scored ratings of immoral behaviors and entered commonness ratings as a covariate into an ANOVA, the effect of moral versus immoral behaviors remained significant, F(1, 78) = 4.39, p = .040,  $\eta_p^2 = .06$ .

Experiment 4. These results provide further support for bounded self-righteousness. Using identical behavioral contexts and varying only the ethicality of the outcome, participants again showed more self-righteousness in predictions of immoral behavior than in predictions of moral behavior. As mentioned earlier, one alternative is that these results are produced by a particular kind of social desirability bias, whereby participants exhibit false modesty when asked about the likelihood of engaging in moral behavior. Participants may actually believe that they are 'holier than thou,' but may not say this for fear of appearing arrogant. To examine the plausibility of this alternative interpretation, we conducted Experiment 4 as an exact replication of Experiment 3 but added a scale that measures socially desirable responding (the Marlowe-Crowne Social Desirability Scale; Crowne & Marlowe, 1960). This scale asks 33 questions for which answering truthfully requires admitting to small transgressions, such as voting while being ill-informed about the candidates and gossiping about others. If socially desirable responding is explaining our asymmetry, then the Marlowe-Crowne scale should correlate differentially with immoral versus moral behavior. That is, those who score high on our measure of social desirability might appear both especially

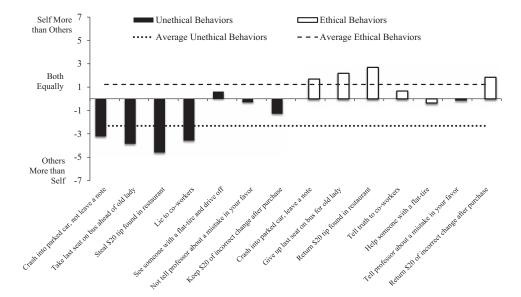


Figure 3. Behavior predictions for self and other for identical behaviors framed as either moral or immoral in Experiment 3 (between-subjects).

self-righteous when considering immoral behaviors *and* especially modest when considering moral behaviors.

We recruited a larger sample size (n=188 M-Turk workers) to meet the power criterion needed to detect potential correlations with the Marlowe–Crowne scale. Results again showed evidence consistent with bounded self-righteousness, albeit somewhat weaker than we observed in Experiments 1–2. Participants again predicted that they would be significantly less likely than others to engage in immoral behaviors (M=-2.08, SD=1.95), one-sample t(92)=-10.29, p<.0001, d=2.15. Participants also predicted that they would be significantly more likely than others to engage in moral behaviors (M=1.37, SD=1.95), one-sample t(94)=6.83, p<.001, d=1.41. These results are again consistent with an asymmetry in self-righteousness because its magnitude was significantly larger for immoral behavior than for moral behavior, t(186)=2.51, p=.013, d=.37.

Second, socially desirable responding does not appear to explain the asymmetry in self-righteousness. To test this, we reversescored the immoral behaviors and entered the Marlowe-Crowne ratings as a covariate into an ANOVA. The effect of moral versus immoral behaviors remained significant, F(1, 185) = 6.17, p =.014,  $\eta_n^2 = .03$ . Moreover, correlations between behavioral predictions and the Marlowe-Crowne scale do not suggest an asymmetry in socially desirable responding. For immoral behaviors, this correlation was negative, r(93) = -.33, p = .001. The more a participant exhibited socially desirable responding on the Marlowe-Crowne scale, the more this participant believed that he or she would avoid immoral behavior compared with others. For moral behaviors, this correlation was positive, r(95) = .37, p <.001. The more a participant exhibited socially desirable responding on the Marlowe-Crowne scale, the more this participant believed that he or she would enact moral behavior compared with others. Notice that the magnitude of this correlation with the Marlowe-Crowne scale does not differ between immoral and moral behavior, demonstrating no asymmetry in socially desirable responding. If false modesty—a socially desirable response—was guiding people's reluctance to predict being more moral than others, then we would have observed a negative correlation between the Marlowe-Crowne scale and predictions for moral behaviors. At the very least, we would have observed a different pattern of correlations between the Marlowe-Crowne scale and predictions of immoral versus moral behavior. That we observe correlations of the same magnitude in both cases suggests that false modesty is not a plausible alternative interpretation for bounded self-righteousness.

## Experiments 5–6: Framing Moral and Immoral Behavior

Experiments 5–6 provide two additional tests of our hypothesis by examining whether the same objective outcome framed as either moral or immoral would produce an asymmetric pattern of self-righteousness. Participants faced the same hypothetical decision: how to divide money between oneself and a charity. The action underlying the decision, however, was framed as either a relatively moral action (giving money to the charity out of one's study compensation) or relatively immoral action (taking study compensation from funds earmarked for charity). In Experiment 5, paid online participants evaluated a hypothetical charity in an

online survey and predicted how much they would give or take out of \$5. In Experiment 6, volunteer participants recruited at a science museum selected a favorite charity out of 3 options and predicted how much they would give or take out of \$20. We tested whether self-righteousness—a larger predicted difference between the self and others—was again stronger for an action framed as immoral than for the objectively identical action framed as moral.

#### Method

**Experiment 5.** Participants (N = 269) were recruited on M-Turk. We used a 2 (action: give vs. take)  $\times$  2 (target: self vs. other) mixed-model design with action varying between-participants and target varying within-participants. After completing an unrelated study (the sample size was set for this unrelated study), participants were asked to imagine that they were given an additional compensation of \$5 for the study. In the give condition, participants were asked to imagine that they were also given an envelope that would be sent to a charity organization of their choice if they chose to donate some of their compensation. In the take condition, participants were asked to imagine that their additional compensation was already in the envelope earmarked for charity, but they could take some of this money as additional compensation for themselves (see also Keysar, Converse, Wang, & Epley, 2008; List, 2007). Notice that these choices are objectively identical (how to split \$5 between themselves and a charity) but are subjectively distinct (dividing money by giving to a charity vs. taking from a charity). The give condition involves an action perceived to be relatively moral whereas the take condition involves an action perceived to be relatively immoral (Keysar et al., 2008). After each participant predicted how much money he or she would donate or take, all participants were then asked to predict the average amount other people in this experiment would donate to, or take from, a charity organization.

**Experiment 6.** This procedure was the same as Experiment 5 except that participants were unpaid volunteers recruited from a large science museum (N=103), participants selected their favorite of three different charities and imagined donating to that specific charity, and participants imagined giving or taking out of \$20. We used a 2 (action: give vs. take)  $\times$  2 (target: self vs. other) mixed-model design with action varying between-participants and target varying within-participants.

Interested visitors to a large museum in Chicago agreed to complete our survey. Participants were first asked to indicate which of three charities they would be most interested in supporting: the American Red Cross, Society for Prevention of Cruelty to Animals, and the Salvation Army. Participants assigned to the give condition were then asked to imagine that they had participated in an experiment, were paid \$20 for their time, and were then given the opportunity to donate some amount of this money to their favored charity. Participants then predicted how much they thought they would donate if they were actually faced with this decision, and also predicted how much the average person would donate. Participants assigned to the take condition, in contrast, were asked to imagine that they participated in an experiment, and that \$20 would be given to their preferred charity in exchange for their time, but that participants could keep some of this money for themselves. These participants then predicted how much of this \$20 they

would take for themselves, and how much the average person would take. Participants then answered some demographic questions and were debriefed.

### **Results and Discussion**

**Experiment 5.** As Table 3 shows, participants in the take condition predicted that they would take significantly less money from the charity (M = \$2.78, SD = \$1.93) than other people would (M = \$3.35, SD = \$1.38), paired t(133) = 3.66, p < .001, d = .33. Participants in the give condition, however, did not predict that they would give significantly more money to charity (M = \$1.85, SD = \$1.68) than other people would (M = \$1.81, SD = \$1.30), paired t(134) = .29, p = .77, d = .03. A 2 (action: give vs. take)  $\times$  2 (target: self vs. other) ANOVA with repeated measures on the second factor revealed a main effect for target, F(1, 267) = 6.64, p = .01,  $\eta_p^2 = .02$ , a main effect for action, F(1, 267) = 56.68, p < .001,  $\eta_p^2 = .18$ , qualified by a predicted interaction, F(1, 267) = 8.73, p = .003,  $\eta_p^2 = .03$ . Self-righteousness, defined as the predicted difference in behavior between oneself and others, was again asymmetric.

**Experiment 6.** As in Experiment 5, participants in the take condition predicted that they would take significantly less money from the charity (M = \$2.29, SD = \$5.50) than others would (M =6.73, SD = 6.17, paired t(50) = 4.69, p < .001, d = .66. Unlike Experiment 5, participants in the give condition also predicted that they would give significantly more money to charity to a charity (M = \$10.94, SD = \$11.48) than others would (M = \$7.98, SD = \$11.48)\$10.34), paired t(51) = 2.82, p = .007, d = .40. Overall, these volunteer participants recruited from a Museum predicted being much more generous than did the online participants recruited for pay in Experiment 5. Indeed, 80.4% of participants in the take condition predicted they would take nothing from the charity out of \$20, whereas only 20.9% of participants in Experiment 5 said they would take nothing. In order to test for an asymmetry in self-righteousness in a data set with such massive floor effects in one cell of the design, we conducted a Tobit regression. This test is specifically designed for analyzing censored data where parametric tests are inappropriate. We first reverse-scored responses in the take condition so that higher numbers indicated more selfrighteousness. As predicted, a Tobit regression with participant fixed-effects revealed a significant action (take vs. give) by actor (self vs. other) interaction consistent with asymmetric selfrighteousness,  $\beta = -7.52$ , SE = 3.17, z = 2.37, p = .018.

Experiments 5 and 6 both provide evidence consistent with bounded self-righteousness. It is interesting to note that participants in both experiments believed they would take significantly less money from a charity than others would, but were less certain that they would give significantly more money to a charity than others would. That participants in Experiment 6 showed evidence of self-righteousness when predicting moral behavior but participants in Experiment 5 did not likely stems partly from objective differences between our samples. Participants in Experiment 5 were recruited for pay in an online labor market (for some a regular job) and were imagining a hypothetical charity, whereas participants in Experiment 6 were likely to be more financially stable, were volunteering their time, and were imagining a specific charity they just chose as one of their favorites. The degree to which people think they are more generous than others depends on many different factors, but the asymmetry in evaluations of moral versus immoral behavior seems consistent across them.

## **Experiment 7: Remembering, Self-righteously**

Experiment 7 provides one final independent test for the existence of bounded self-righteousness by examining whether an asymmetry exists in memory for immoral versus moral behavior. Because remembering the past is at least partly a process of construction that relies on the same psychological mechanisms as predicting the future (Schacter, Addis, & Buckner, 2007), the basic motivational and cognitive mechanisms that create bounded self-righteousness in predictions of future behavior in Experiments 1–6 should also create bounded self-righteousness in memory for one's own and others' behavior. Following a procedure similar to Messick et al. (1985), we asked participants to recall recent immoral and moral actions committed by themselves and others. We expected that participants would recall more extreme immoral actions for others than for themselves, but would not recall systematically more moral actions for themselves than for others.

## Method

Participants (N=247) were recruited from M-Turk. We used a 2 (behavior frame: ethicality vs. altruism)  $\times$  2 (action: moral vs. immoral)  $\times$  2 (target: self vs. other) mixed-model design, with behavior frame and target varying between-subjects and action varying within-subjects. To examine whether the results observed in previous experiments might be produced partly by the way we framed moral and immoral behavior, we manipulated this description in this experiment. In the ethicality condition, participants read that the experiment was investigating "the psychology of ethical and unethical behavior." In contrast, in the altruism condition, participants read that the experiment was investigating "the psychology of generous and selfish behavior." Participants then

Table 3
Summary of Findings in Experiments 5–7

| Exp. | Nature of judgment                              | Moral condition      |                     |            | Immoral condition   |                     |             |
|------|---|----------------------|---------------------|------------|---------------------|---------------------|-------------|
|      |   | Self                 | Other               | Difference | Self                | Other               | Difference  |
| 5    | Predict giving to or taking from charity (\$5)  | \$1.85 <sub>a</sub>  | \$1.81 <sub>a</sub> | \$.04      | \$2.78 <sub>c</sub> | \$3.35 <sub>d</sub> | \$57*       |
| 6    | Predict giving to or taking from charity (\$20) | \$10.94 <sub>a</sub> | \$7.98 <sub>b</sub> | \$2.96*    | \$2.29 <sub>c</sub> | \$6.73 <sub>d</sub> | -4.44*      |
| 7    | Recall moral or immoral action                  | $2.96_{a}$           | $3.14_{\rm a}$      | 18         | $-1.83_{c}$         | $-2.91_{\rm d}$     | $-1.08^{*}$ |

Note. The "Difference" columns represent absolute differences between means [Self - Other]. Different subscripts within rows denote means that differ at p < .05. Asterisks in the "Difference" columns denote significant differences from 0 (implying no self-righteousness) at p < .05. Exp. = experiment.

read that they would be asked to recall one ethical (or generous) action and one unethical (or selfish) action, according to condition, in counterbalanced order. The framing of participants' behavior was therefore manipulated between-participants, and the action (moral vs. immoral) was manipulated within-participants.

In a subsequent screen, participants in the self condition read that they should recall actions they engaged in recently. Participants in the other condition read that they should recall actions that they "observed someone you know do recently." The target was therefore manipulated between-participants. Next, participants wrote about the actions they recalled. Participants were encouraged to "write enough so that we would be able to understand the action itself and the situation and circumstances surrounding it."

We later asked two independent coders, blind to our hypotheses and our full set of experimental conditions, to evaluate participants' actions. We sought a measure of positivity—whether an action was positive or negative—to test whether self—other differences emerged on moral behaviors, immoral behaviors, or both. We therefore asked the two coders to rate how extreme each action was on a scale ranging from 7 (extremely positive) and -7 (extremely negative) with 0 as the midpoint (neutral).

#### Results and Discussion

We averaged the coders' evaluations, r = .91, p < .001, into a single composite for each action. A 2 (behavior type: ethicality vs. altruism)  $\times$  2 (action: moral vs. immoral)  $\times$  2 (target: self vs. vther) ANOVA on behavior positivity with repeated measures on the second factor revealed main effects for action, F(1, 243) = $1,837.41, p < .0001, \eta_p^2 = .88, \text{ for target, } F(1, 243) = 14.76, p < .0001, \eta_p^2 = .88, \text{ for target, } F(1, 243) = 14.76, p < .0001, \eta_p^2 = .0001$ .001,  $\eta_p^2 = .057$ , and for behavior type, F(1, 243) = 8.94, p < .001,  $\eta_p^2 = .035$ . Moral actions were rated more positively than immoral actions, participants recalled more positive behaviors for themselves than for others, and altruistic behaviors were rated more positively than ethical behaviors. More important, a predicted interaction emerged between target and action, F(1, 243) = 26.24,  $p < .001, \eta_p^2 = .097$ . As can been seen in Table 3, participants' own immoral actions (M = -1.83, SD = 1.53) were evaluated as less negative<sup>2</sup> than others' immoral actions (M = -2.91, SD =1.71), F(1, 245) = 27.24, p < .001,  $\eta_p^2 = .10$ . In contrast, participants own moral actions (M = 2.96, SD = 1.25) were not evaluated differently from others' moral actions (M = 3.14, SD =1.25), F(1, 245) = 1.34, p = .25,  $\eta_p^2 = .005$ .

People remembered others being more immoral in the past than they were themselves, but did not recall themselves being systematically more moral in the past than others. Self-righteousness appears bounded not only in predictions of the future but also in memory of the past.

## **Experiment 8: Explaining Bounded Self-righteousness**

Experiments 1–7 provide convergent evidence that self-righteousness is bounded. Although participants thought they were less likely than others to engage in relatively immoral behaviors, they did not think they were more likely than others to engage in relatively moral behaviors. Experiment 8 was designed to test one plausible mechanism underlying this result.

As we explained earlier, existing research suggests two mechanisms that led us to expect this pattern of bounded self-

righteousness. One relies on a motivation to think well of oneself. Anything that threatens this self-concept, such as the thought of engaging in immoral behavior, could trigger motivated reasoning that maintains a desirable self-view (Ditto & Lopez, 1992; Steele & Liu, 1983). The thought of engaging in moral behavior does not threaten one's self-concept as an ethical person, and so would not be expected to produce the same degree of self-righteousness.

Here, however, we test the second well-known mechanism underlying self-righteousness, namely that people assess themselves and others from different perspectives that rely on different sources of information. When evaluating themselves, people rely on "inside" information as part of their self-concept, such as their own intentions, motives, and desires (Buehler et al., 1994; Epley & Dunning, 2000; Kahneman & Tversky, 1979; Koehler & Poon, 2006; Kruger & Gilovich, 2004; Pronin & Kugler, 2007; Williams et al., 2012). Because people generally understand their own behavior in a way that is consistent with a positive self-image, people rarely perceive their own actions as driven by malicious intentions or misanthropic motives (Baumeister, 1999; Swann & Bosson, 2010). As a result, people would be relatively unlikely to predict that they would engage in immoral behaviors. When evaluating others, in contrast, people rely on more easily accessible "outside" information, such as population base-rates and observations of others' behaviors (Epley & Dunning, 2000; Gilbert & Malone, 1995; Pronin, 2009). Because people observe others engage in both moral and immoral behaviors, relying on "outside" information to predict others' behaviors will lead to more symmetric predictions about others' propensity for moral and immoral behaviors. This mechanism therefore creates a larger self-other gap in evaluations of relatively immoral actions than in evaluations of moral actions.

Experiment 8 examines this proposed mechanism by testing whether providing individuating "inside" information about others attenuates self-righteousness in predictions of immoral actions (Experiment 5b, Epley & Dunning, 2000). We asked an initial group of 100 participants to write about their character and "who you are" as a person. We then showed these descriptions to a second group of participants. We predicted that after gaining access to others' self-evaluations, people would incorporate this information into their assessments of others' possible behaviors. Because others almost invariably think of themselves as ethical, we predicted that providing this inside information would attenuate the self-righteousness we observed in predictions of immoral behavior.

## Method

**Stimuli development.** We first recruited 100 participants (52% women) from M-Turk. These participants were asked to write five words that describe them and a short essay describing

<sup>&</sup>lt;sup>2</sup> An uninteresting interaction between action and behavior type also emerged, F(1, 243) = 52.33, p < .001,  $\eta_p^2 = .18$ . Immoral actions in the ethicality domain were judged to be more negative (M = -2.99, SD = 1.78) compared with the altruism domain, (M = -1.75, SD = 1.39), t(245) = 6.16, p < .001, d = .78. In contrast, moral actions in the ethicality domain (M = 3.33, SD = 1.40) were judged to be more positive compared with the altruism domain (M = 2.77, SD = 1.02), t(245) = 3.61, p < .001, d = .46. No other interactions emerged,  $F_S < 1.15$ ,  $p_S > .28$ .

"who you are." We used these responses as individuating information for our main experiment.

For replication purposes, these participants also made comparative assessments about the relative likelihood that they and other people will engage in seven moral and seven immoral behaviors, using the same stimuli used in Experiment 1 (displayed in Table 1). These judgments were made on scales ranging from -7 (Others are far more likely to do this than me) to 7 (I am far more likely to do this than others) with 0 as the midpoint (Neither more or less likely for me or for others). The results indeed replicated the bounded self-righteousness results found in previous experiments. Participants believed that they were less likely to engage in immoral behaviors than others, as evidenced by the significantly negative ratings given to immoral behaviors (M = -3.50, SD =2.48), one-sample t(99) = -14.11, p < .0001, d = 2.84. But participants did not believe they are more likely than others to engage in relatively moral behaviors (M = .29, SD = 2.34), one-sample t(99) = 1.23, p = .22, d = .25. As in Experiment 1, the magnitude of self-righteousness was significantly larger when evaluating immoral behaviors than when evaluating moral behavior, paired t(99) = 11.25, p < .001, d = 1.13. Bounded selfrighteousness appears robust in this population.

**Main experiment.** Participants (N=202; 52.5% women) were recruited from M-Turk. We used a 2 (individuating information: yes vs. no)  $\times$  2 (behaviors: moral vs. immoral) mixed-model design, with the first factor manipulated between-participants and the second manipulated within-participants. Participants read that they would be asked to assess their own and another randomly chosen person's behavior. In the individuating information condition, we provided participants with individuating information about one other person, using the stimuli we collected from the 100 participants run in the preliminary phase. In the no individuating information condition, participants did not see a description collected from the preliminary phase of this experiment and were simply told that the other person they will be evaluating is randomly chosen from the sample of M-Turkers participating in this experiment.

All participants then read the seven moral and seven immoral behaviors used in Experiment 1 (randomly ordered) and answered whether they or the other person is more likely to engage in those behaviors on a scale ranging from -7 (*This other person is far more likely to do this than me*) to 7 (*I am far more likely to do this other person*) with 0 as the midpoint (*Neither more or less likely for me or for others*). As in Experiments 1–2, participants also rated how ethical and common the behaviors are on 9-point scales. The order of moral and immoral behaviors was randomized, as was the order of individual behaviors within the moral and immoral categories.

## **Results and Discussion**

**Manipulation checks.** We first tested whether the moral behaviors were rated as more ethical than the immoral behaviors. A 2 (individuating information: yes vs. no)  $\times$  2 (behaviors: moral vs. immoral) ANOVA on ethicality with repeated measures on the second factor revealed only a main effect for behaviors,  $F(1, 200) = 1,510.95, p < .0001, \eta_p^2 = .88$ . Participants rated the moral behaviors as more ethical (M = 2.83, SD = 1.01) than the immoral behaviors (M = -2.40, SD = 1.21). There was no effect of

individuation information on judgments of ethicality, either for ethical or for unethical behaviors, ts < 1.28, p > .20.

As in Experiment 1, the immoral and moral actions did not differ in their extremity. Both immoral and moral behaviors significantly differed from the low and high ends of the scale, respectively, one-sample ts > 16.47, ps < .0001, ds > 2.32. However, these differences-from-the-extremes did not differ from each other, z = .97, p = .33. Also consistent with Experiment 1, participants rated the moral behaviors as less common (M = 4.58, SD = 1.12) than the immoral behaviors (M = 5.26, SD = 1.20), paired t(201) = 5.95, p < .001, d = .42. Egocentric social comparisons do not appear to explain bounded self-righteousness.

**Comparative judgments.** A 2 (individuating information: yes vs. no) × 2 (behaviors: moral vs. immoral) ANOVA on comparative judgments with repeated measures on the second factor revealed a main effect for behaviors, F(1, 200) = 43.13, p <.001,  $\eta_p^2 = .18$ , a main effect for individuating information, F(1, $200) = 5.25, p = .023, \eta_p^2 = .026, and an interaction, F(1, 200) =$ 10.76, p = .001,  $\eta_p^2 = .051$ . As Figure 4 shows, the individuating information did not alter the degree of self-righteousness in evaluations of moral behaviors. For moral behaviors, having access to others' self-evaluations did not affect self-other judgments (M = -.08, SD = 2.16) compared with not having this individuating information (M = .23, SD = 2.06), F(1, 200) = 1.14, p =.29,  $\eta_p^2 = .006$ . Self-righteousness was nonsignificant in both of these conditions, one-sample ts < 1.16, ps > .25, ds < .23. In contrast, having access to others' self-evaluations altered the degree of self-righteousness for immoral behaviors. Participants who had individuating information reported a smaller self-other difference in the likelihood of engaging in unethical behaviors (M = -.87, SD = 2.31) than participants who did not have individuating information (M = -2.11, SD = 2.36), F(1, 200) =14.39, p < .001,  $\eta_p^2 = .067$ . Although participants in both conditions felt they were significantly less likely than others to behave immorally, this difference was more than two times larger when participants lacked individuating information, one-sample t(102) = -9.11, p < .0001, d = 1.80, than when they had it, one-sample t(98) = -3.73, p < .001, d = .75. Comparing these two conditions directly against each other indicates that providing individuating information about the other person's self-evaluation significantly reduced the magnitude of self-righteousness, t(200) = 3.79, p < .001, d = .54.

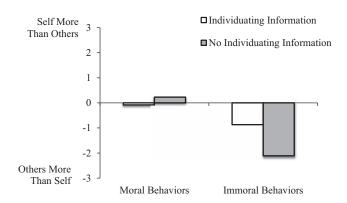


Figure 4. Self-other judgments as a function of morality and individuation in Experiment 8.

The different perspective people adopt when evaluating themselves versus a random "other" does not explain all of the bounded self-righteousness we observed, but it does seem to explain a significant amount of it. Diminishing this perspective gap by providing others' self-evaluations, the same kind of information people are likely to rely on when predicting their own behavior, significantly reduced the tendency to feel "less evil" than others.

### **General Discussion**

It is often said that people view themselves through rose-colored glasses, but our research on self-righteousness suggests something closer to rose-colored bifocals. In a series of 8 experiments, we find convergent evidence for a bounded sense of self-righteousness. Consistent with a large body of existing literature, our participants consistently believed they would behave more ethically than others, but this was primarily true when considering relatively immoral actions. When considering relatively moral actions that involve doing good rather than doing bad, we found relatively little evidence that people thought they would behave more ethically than others. Our 8 experiments contain 11 independent comparisons between self-righteousness for immoral versus moral behaviors (see Figure 5). The average self-righteousness effect for immoral behavior was very large (d = 1.84), and significantly greater than zero, one-sample t(10) = 5.70, p < .001. In contrast, the average self-righteousness effect for moral behavior across these 10 comparisons was relatively smaller (d = .45), albeit still larger than zero, one-sample t(10) = 2.93, p = .015. These results did not seem to be produced by a sophisticated pattern of social desirability biases (such as false modesty for moral behavior), as socially desirable responding in Experiment 4 was positively correlated with self-righteousness for both moral and immoral actions. Selfrighteousness, at least among the populations we sampled from, may be better characterized as feeling "less evil than thou" than feeling "holier than thou."

We predicted this bounded sense of self-righteousness based on both the motivational and cognitive mechanisms that are known to produce self-other differences in judgment (Kunda, 1990; Chambers & Windschitl, 2004). Anything that threatens a person's identity can trigger motivated reasoning to support an existing belief about oneself. Because most people believe they are moral, imagining oneself committing an immoral action could trigger reasoning with the goal of defending an existing positive selfconcept (such as by derogating others; Fein & Spencer, 1997). We did not, however, test this motivated reasoning mechanism directly in our research. Instead, we tested a cognitive mechanism based on the difference in perspectives people adopt when evaluating themselves versus others. When evaluating oneself, people tend to adopt an inside perspective, predicting their behavior based on their own intentions, aspirations, or self-concept (e.g., Buehler et al., 1994; Epley & Dunning, 2000; Helzer & Dunning, 2012b; Koehler & Poon, 2006; Kruger & Gilovich, 2004). Because most people think of themselves as ethical, and as having ethical intentions, people are unlikely to believe they would behave unethically. When evaluating others, in contrast, people are more likely to adopt an outside perspective, basing their predictions on observed base rates of behavior in daily life (Buehler et al., 1994; Epley & Dunning, 2000). Because people do indeed learn about others behaving both ethically and unethically, these different perspectives for oneself and others predict a larger self-other difference in predictions of unethical behavior ("I'd never pass by someone with a flat tire along the highway without helping, but I see many others driving by

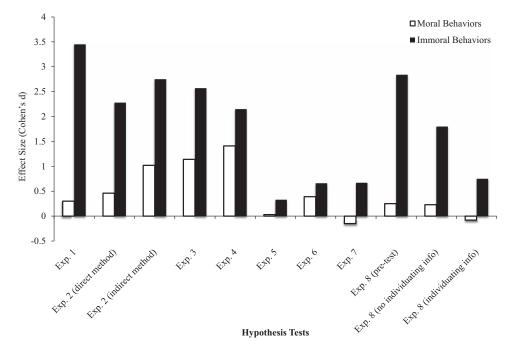


Figure 5. Effect sizes (Cohen's ds) for predictions or recall of moral and immoral behaviors in all experiments. Exp. = experiment.

without stopping, so I must be more likely than others to stop and help someone fix a flat tire"). Consistent with this account, providing people with others' self-concepts in Experiment 8 significantly diminished self-righteousness.

These results join a growing body of research providing a more precise understanding of self-evaluations. A person's self-concept is produced by a mix of psychological processes, some of which lead to unrealistically positive self-views but also others that do not. For instance, people tend to evaluate themselves compared with others egocentrically, focusing on their own traits and abilities and only subsequently considering others' traits and abilities. This can lead to unrealistically positive self-evaluations when people are evaluating themselves compared with others on relatively easy tasks in which everyone is relatively proficient (such as operating a computer mouse), but can lead to unrealistically negative evaluations when people are evaluating relatively difficult tasks (such as juggling a computer mouse; Kruger, 1999; Klar & Giladi, 1999). People may likewise be egocentric when considering the likelihood that certain events will happen to themselves versus others, leading to what appear to be unrealistically optimistic self-views when evaluating relatively common events that are likely to happen to almost everyone but unrealistically pessimistic self-views when evaluating relatively uncommon events that are unlikely to happen to anyone (Weinstein, 1980; Kruger & Burrus, 2004). Finally, people tend to define traits, such as "leadership," egocentrically by focusing on the traits they possess rather than on the traits they lack, leading to unrealistically positive selfevaluations when considering relatively ambiguous traits (e.g., leadership) but not unrealistically biased evaluations of more concrete traits (such as intelligence; Dunning et al., 1989).

Our research likewise identifies an important boundary on unrealistically positive self-evaluations. Moral behavior spans a broad spectrum of behaviors, ranging from doing bad to doing good. Looking at only part of that spectrum, or conflating the two within a single evaluation, produces an imprecise understanding of how people think about themselves compared with others. Although few are strangers to self-righteousness in everyday life, it may not be as widespread across the moral spectrum as existing research might imply.

Our experiments test how widespread self-righteousness might be across the moral spectrum, but they do not test how widespread this pattern might be across the globe. We have referred to "people" without qualification throughout this article, because we have been referring to those people who are known to reliably exhibit self-righteousness (namely, Westerners from an individualistic culture). Variance in the mechanisms that produce selfrighteousness could moderate the results we have observed in other cultures. In particular, some research suggests that selfenhancement motives may be diminished or absent entirely in more collectivist cultures (Heine, Lehman, Markus, & Kitayama, 1999; Heine, 2005), whereas other research suggests that selfenhancement motives are universal but that their manifestations vary by cultural contexts (Sedikides, Gaertner, & Toguchi, 2003; Sedikides, Gaertner, & Vevea, 2005). In the most direct test of cross-cultural differences in self-righteousness that we know of (Balcetis, Dunning, & Miller, 2008), the results were somewhat mixed. In this series of four reported experiments, two showed no significant cross-cultural differences in self-righteousness as measured by behavioral predictions, one showed significantly weaker self-righteousness among collectivistic participants, and one found directionally weaker self-righteousness among collectivistic participants but did not report whether the difference was statistically reliable. A more precise understanding of the nature of self-righteousness may also provide a more precise understanding of cross-cultural differences that may or may not emerge in direct experimental tests. Larger cross-cultural differences may emerge, for instance, in evaluations of unethical behavior than in evaluations of ethical behavior. Whether bounded self-righteousness is moderated by major cultural differences, and whether it can explain variance in the existence of cross-cultural differences, are very important questions for future research.

In the meantime, we believe a more precise understanding of self-righteousness is important because it suggests a specific type of misunderstanding about oneself. In particular, participants in our experiments consistently believed that they would not be as prone to unethical behavior as others. When put to the actual test, however, these predictions about others' behavior seem to be more accurate than people's predictions about themselves (e.g., Epley & Dunning, 2000). In one experiment (Kawakami, Dunn, Karmali, & Dovidio, 2009), White participants predicted that they would be less likely to work with another White participant who made a blatantly racist joke than people who heard the joke actually were. In another (Bocchiaro, Zimbardo, & Van Lange, 2012), less than 4% of participants predicted that they would be willing to obey an experimenter's request to recommend a blatantly unethical and harmful experiment to a potential group of participants. When faced with the actual unethical request, 77% agreed to recommend the unethical experiment.

A potentially mistaken belief about the likelihood of one's own unethical behavior is precisely what makes the classic experiments of social psychology—such as Milgram (1963), Darley and Latane (1968), and Zimbardo (2007)—so surprising. Participants in these classic experiments behave less ethically than readers of the experiments expect they would behave themselves (e.g., Bierbrauer, 1979). A mistaken sense of self-righteousness may make people in their professional or personal lives unlikely to take steps that would mitigate the risk of unethical actions because they underestimate the likelihood of falling prey to them. A scientist who doesn't believe she is as likely as others to manipulate data might not adopt laboratory practices that would diminish the temptation (Simmons, Nelson, & Simonsohn, 2011). A doctor who doesn't believe he would recommend a drug to a patient simply because he was paid by the drug company might reject conflict-of-interest reforms (Sharek, Schoen, & Loewenstein, 2012). A gun owner who never believes he would turn his gun on a family member might store it loaded in his nightstand rather than unloaded in a basement safe. People's self-evaluations matter because they guide their choices (Swann & Bosson, 2010). A mistaken belief about the likelihood of one's own ethical risks compared with others might lead people to put themselves in risky ethical situations that they would otherwise avoid.

## **Concluding Thought**

Any statistician knows that paying attention to only a small range of available observations can lead to mistaken inferences. An educator interested in whether SAT scores predict college GPA might see no relationship when looking only at students admitted

to a prestigious university, but would see a very strong correlation when looking across the entire range of SAT scores. A pollster who surveys only elderly citizens might predict a very different outcome in an election than one who surveys the citizens from the entire age spectrum. And a psychologist interested in how people make choices by studying how people respond only to potential losses would miss the very different pattern of behavior observed when examining how people respond to gains (Tversky & Kahneman, 1974). Our research suggests that existing psychological research could paint a misleading picture of the precise nature of self-righteousness, at least partly because it has not systematically examined the entire spectrum of moral actions. People's tendency toward self-righteousness has been recognized long before researchers documented its magnitude. But what casual observers of others' behavior can miss are the limits of self-righteousness that empirical research can detect. Examining the entire range of ethical actions reveals the boundaries on self-righteousness that a narrower focus might conceal.

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## Correction to Wilcox et al. (2016)

In the article "How Being Busy Can Increase Motivation and Reduce Task Completion Time" by Keith Wilcox, Juliano Laran, Andrew T. Stephen, and Peter P. Zubcsek (*Journal of Personality and Social Psychology*, 2016, Vol. 110, No. 3, pp. 371–384. http://dx.doi.org/10.1037/pspa0000045), the affiliation of the author Andrew T. Stephen was incorrectly listed in the byline and the author note. The author is affiliated with the University of Oxford. The author note paragraph "Andrew T. Stephen is now at the University of Oxford" should have been omitted. All versions of this article have been corrected.

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