

## Doing Good Leads to More Good: The Reinforcing Power of a Moral Self-Concept

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**Abstract** What is the role of self-concept in motivating moral behavior? On one account, when people are primed to perceive themselves as “do-gooders”, conscious access to this positive self-concept will reinforce good behavior. On an alternative account, when people are reminded that they have done their “good deed for the day”, they will feel licensed to behave worse. In the current study, when participants were asked to recall their own good deeds (positive self-concept), their subsequent charitable donations were nearly twice that of participants who recalled bad deeds, or recent conversation topics, consistent with an account of moral reinforcement. In addition, among participants reporting good deeds, those who did not note whether they were recognized or unrecognized by other people donated significantly more than participants who took note of others’ responses. In sum, when people are primed to see themselves as good people, who do good for goodness’ sake, not to obtain public credit, they may be motivated to do more good.

### 1 Introduction

What motivates moral behavior? While economic and evolutionary theories emphasize the impact of external punishments and rewards (Fehr and Gächter 2002; Rand et al. 2009), recent evidence suggests that individuals may be relatively immune to external factors and motivated more by an internal self-concept – how people see themselves (Stone and Cooper 2001; Vazire 2010; Vazire and Mehl 2008). In one

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study, participants' decision to cheat did not depend on the probability of being caught, the magnitude of punishment, or benefit from cheating; participants cheated so long as they could do so under the conscious radar of their own consciences, allowing them to maintain a positive self-concept (Mazar et al. 2008). Other work on moral hypocrisy suggests that even when participants do behave badly, for instance, by taking advantage of experimental partners, they are motivated to reinterpret their own behavior as less bad in order to maintain their moral self-concept (Valdesolo and DeSteno 2007, 2008). Making moral codes salient to participants has been shown to decrease cheating (Mazar et al. 2008) as well as increase generosity (Shariff and Norenzayan 2007). Broadly convergent neural evidence has suggested that overt cheating requires conscious override of one's "conscience" (Greene and Paxton 2009), while following one's conscience by engaging in acts of generosity results from unconscious, internal motivations (Moll et al. 2006).

Without a doubt, this prior literature has established the crucial role of self-concept in modulating moral behavior. However, a closer look at the evidence reveals diverse effects. Some studies show that when people are primed to focus on a particular aspect of their self-concept (e.g., helpful), they are motivated to act accordingly (e.g., to be more helpful); these results indicate *moral reinforcement* (Nelson and Norton 2005; Stone and Cooper 2001). By contrast, other studies suggest *moral licensing*: people who have recently engaged in good behavior (and thus see themselves having already earned enough moral credit points) feel licensed to behave badly (Mazar and Zhong *In Press*; Monin and Miller 2001; Sachdeva et al. 2009).

The current study investigates how and whether conscious access to a positive self-concept influences subsequent moral behavior. According to previous proposals, people may make inferences about their own moral character, by observing and reflecting on their own past behavior (Ariely and Norton 2008; Gino et al. 2010). We therefore asked participants to recall their own good deeds, bad deeds, or recent conversations (neutral control); we compared charitable donations made by participants across these three conditions.

As described above, on one account ("reinforcement"), when people recall their own good deeds and perceive themselves as "do-gooders", their positive self-concept or "moral self-consciousness" will reinforce good behavior. Similar reinforcement effects have been observed for behaviors in other domains, for example, in the case of intelligence (Shih et al. 1999), age (Bargh et al. 1996), and conformity (Epley and Gilovich 1999). Specifically, this account predicts higher donations for participants who recall good deeds. On an alternative account ("licensing"), when people are reminded they have done their "good deed for the day", they will feel licensed to behave badly, allowing themselves more moral slack (Sachdeva et al. 2009). This account predicts lower donations for participants recalling good deeds.

## 2 Materials and Methods

One hundred undergraduate students from local universities were recruited via email to participate in a web-based "study on personal narratives" for \$5 Amazon gift cards. (Upon debriefing, a number of participants assumed that our study concerned the role

of demographic variables in charitable behavior.) Participants were directed to a website and assured of anonymity.

Participants were assigned randomly to one of three conditions; they were asked to take some time to think about and then to describe at least five (1) good deeds, (2) conversation topics, or (3) bad deeds. They were required to write at least 400 characters (and a maximum of 1,500 characters), over at least 3 min, before they could continue. Participants were assigned randomly to one of three conditions, accompanied with the following instructions:

- (1) Good deeds: *Please take some time to think about good deeds that you have done recently. Now please list as many of your good deeds as you can, but at least 5, and describe the context in which you performed them. Please also describe whether you felt appreciated or unappreciated for any of these good deeds, by whom, and why.*
- (2) Conversation Topics: *Please take some time to think about the 5 most recent conversations you have had. Now briefly describe the topics of these conversations, and the people involved.*
- (3) Bad Deeds: *Please take some time to think about bad deeds that you have done recently. Now please list as many of your bad deeds as you can, but at least 5, and describe the context in which you performed them. Please also describe whether you felt ashamed, whether someone caused you to feel this way, and why.*

In addition, L.Y. and J.T., blind to donation amount, coded all 43 “good deeds” responses for any mention of participants’ feeling *appreciated or unappreciated* by other people; A.C. resolved one discrepancy.<sup>1</sup>

Participants then read the following instructions with the list of 52 charities (see [Supplementary Material](#) for the full list):

“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. To help us, please identify from the following list a charity to which you would make a donation and the approximate amount you would give, if you had the opportunity.”

After indicating their hypothetical donation amount, participants were told:

“In the meantime, we do offer participants the opportunity to transfer any amount of their payment (up to \$5) to the charity you specified on the previous page. Please indicate any amount from your payment you would like to donate.”

Participants then chose an option (\$0, \$1, \$2, \$3, \$4, \$5) for their actual donation. Finally, participants entered in demographic data (below) and were debriefed.

<sup>1</sup> Note that since participants were encouraged to list at least 5 good deeds, a participant could have reported feeling appreciated for one deed, unappreciated for another deed, and neither for the remaining deeds. Participants were coded as feeling appreciated or unappreciated if they mentioned either sentiment for any of the deeds described. In a preliminary analysis, however, we found no difference in donation amount between those participants who noted *only* feeling appreciated ( $M=2.96$ ) and those who noted *only* feeling unappreciated ( $M=2.50$ ;  $t(27)=0.40$   $p=0.70$ ).

### 3 Results

#### 3.1 Word Count

We calculated the number of words in each participant's response. We found a condition effect on response length ( $F(2,99)=3.49$   $p=0.04$ ). Critically, though, there was no difference in response length for the key conditions: "good deeds" ( $M=183$ ,  $S.D.=80$ ) versus "bad deeds" ( $M=183$ ,  $S.D.=75$ ;  $t(69)=0.01$   $p=0.99$ ). The condition effect was driven only by shorter responses for "conversations" ( $M=139$ ,  $S.D.=68$ ).

#### 3.2 Number of Deeds

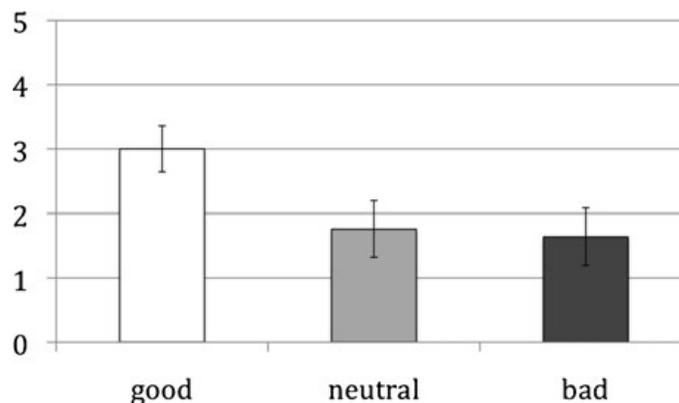
The vast majority of participants listed at least five deeds, as instructed, and in most cases exactly five (good:  $M=4.91$ ,  $S.E.=0.18$ ; bad:  $M=4.89$ ,  $S.E.=0.20$ ). For good deeds, 14 % of participants listed 3 deeds, 4.7 % listed 4, 70 % listed 5, 7 % listed 6, 2.3 % listed 7, and 2.3 % listed 10. For bad deeds, 7.1 % of participants listed 2 deeds, 3.6 % listed 3, 3.6 % listed 4, 64.3 % listed 5, and 21.4 % listed 6. The variance in number of deeds reported was constrained by design; there was no correlation between the number of deeds reported and donation amount for good deeds ( $r(43)=-0.12$   $p=0.45$ ), bad deeds ( $r(28)=-0.25$   $p=0.21$ ), or overall ( $r(71)=-0.15$   $p=0.20$ ).

#### 3.3 Actual Donations

We observed a condition effect on actual donations ( $F(2,99)=3.76$   $p=0.027$ , partial  $\eta^2=0.07$ ; Fig. 1). Participants donated more money after reporting good deeds versus conversations ( $t(70)=2.2$   $p=0.035$ ), or bad deeds ( $t(69)=2.4$   $p=0.019$ ). There was no difference in donation amount between bad deeds versus conversations ( $t(55)=0.19$   $p=0.85$ ). Secondly, more participants donated some amount of money after reporting good deeds versus conversations ( $\chi^2(1, N=72)=4.3$ ,  $p=0.038$ ), although this trend was non-significant for participants reporting good deeds versus bad deeds ( $\chi^2(1, N=71)=1.85$ ,  $p=0.17$ ).

Notably, among participants reporting good deeds, those who noted feeling appreciated or unappreciated by others donated significantly less ( $M=2.76$ ,  $S.E.=0.39$ )

**Fig. 1** Donation amount (\$) by condition (good deeds, neutral conversations, bad deeds). Error bars represent standard error of the mean



than participants who did not take note of others' response to their acts ( $M=4.5$ ,  $S.E.=0.96$ ,  $t(13, \text{corrected d.f.})=2.71$   $p=0.018$ ; Fig. 2).<sup>2</sup> Furthermore, participants who noted others' responses were also less likely to donate any money at all ( $\chi^2(1, N=43)=4.1$ ,  $p=0.04$ ). These participants, however, still gave marginally more than participants in the bad deeds condition ( $t(61, \text{corrected d.f.})=1.9$   $p=0.06$ ) and conversations condition ( $t(64)=1.7$   $p=0.10$ ).

Because our primary hypotheses targeted the effect of condition on generous giving and not the impact of demographic variables on moral behavior, we did not expand our sample beyond undergraduates from local universities. We note the lack of relationship between donation amount and age ( $p=0.30$ ), education ( $p=0.14$ ), religiosity ( $p=0.51$ ), religion ( $p=0.98$ ), political party ( $p=0.93$ ), and ethnicity ( $p=0.12$ ). We also note several unpredicted trends: women donated more than men ( $t(50, \text{corrected d.f.})=4.8$   $p<0.001$ ); there was no difference in the proportion of women by condition ( $\chi^2(2, N=88)=3.18$ ,  $p=0.20$ ). Political and fiscal liberals donated more than conservatives (political:  $r(88)=-0.331$   $p=0.002$ ; fiscal:  $r(88)=-0.181$   $p=0.09$ ; political-fiscal correlation:  $r(88)=0.361$   $p=0.001$ ). Higher donations were marginally associated with strength of political identification ( $r(88)=0.19$   $p=0.08$ ) and involvement ( $r(88)=0.20$   $p=0.06$ ), which in turn were correlated: ( $r(88)=0.48$   $p<0.001$ ).

### 3.4 Hypothetical Donations

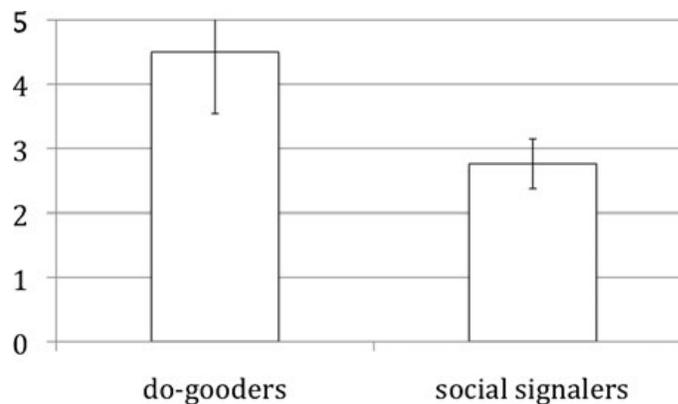
The pattern was similar but non-significant for hypothetical donations ( $F(2,99)=1.8$   $p=0.17$ , partial  $\eta^2=0.04$ ; Mean and S.E. for "good": 10.19, 1.80; "neutral": 5.59, 2.19; "bad": 5.71, 2.23). We found no correlation between hypothetical donations (dollar amount between \$0 and \$20) and actual donations (dollar amount between \$0 and \$5) in the overall sample ( $r(100)=0.043$   $p=0.67$ ), or in each of the key conditions (good, neutral, bad) separately (all  $p's>0.50$ ). In fact, hypothetical and actual donations did not correlate significantly in any sub-sample of interest: political party, gender, and religion (all  $p's>0.50$ ). It is important to note that a simple foot-in-the-door effect (Beaman et al. 1983) would not explain the pattern obtained for actual donations, given the lack of correlations between hypothetical and actual donations. In other words, it was not the case that participants had simply anchored themselves to their "pledges", donating whatever amount they had stated that they would hypothetically donate. Furthermore, it's not clear why such a foot-in-the-door effect would emerge selectively for the good deeds condition.

Nevertheless, some patterns were shared across hypothetical and actual donations. Like actual donations, hypothetical donations were less for participants who characterized themselves as fiscal conservatives than fiscal liberals ( $r(88)=-0.297$   $p=0.005$ ), and we observed the same marginal positive correlation between general political involvement and hypothetical donation amount ( $r(88)=0.192$   $p=0.073$ ).

Differences emerged as well. First, we found a marginal negative correlation between religiosity and hypothetical donations ( $r(88)=-0.204$   $p=0.056$ ) – a pattern

<sup>2</sup> To control for possible effects of mood, eighteen participants in the "good deeds" condition also indicated 'how happy they felt at the moment' (1=very, 3=moderately, and 7=not at all). There was no difference between donation amounts for these participants and the "good deeds" participants from whom we did not collect mood data ( $F(1,42)=0.16$   $p=0.90$ ). Importantly, there was no effect of mood on the inclination to donate or not donate ( $t(16)=0.84$   $p=0.42$ ) or donation amount ( $r(18)=0.28$   $p=0.26$ ).

**Fig. 2** Donation amount (\$) by participants who did not report feeling others' response to their acts (do-gooders) and participants who did report others' response (social signalers). Errors bars represent standard error of the mean



we did not observe for actual donations: people who reported themselves as highly religious predicted that they would donate less, though they did *not* actually donate less. Second, the effect of gender observed for actual donations disappeared for hypothetical donations ( $t(86)=0.03$   $p=0.97$ ).

#### 4 General Discussion

When people consciously reflect on their own good deeds, they may consequently perceive themselves as “do-gooders” (Ariely and Norton 2008). As a result, people may do more good, in line with their newly reinforced positive self-concept. In the current study, participants who recalled their own good deeds donated more than half of their earnings, and nearly twice as much as participants in the other conditions.

##### 4.1 Moral Reinforcement and Positive Self-Concept

What is the underlying mechanism by which moral self-concept guides moral behavior? One account is that when people are made consciously aware that they are by nature “do-gooders” and are then faced with an opportunity to do good, they recognize that failing to do good would be dissonant with their self-concept (Stone and Cooper 2001). For instance, participants in the “good deeds” condition could have considered not donating, anticipated the aversive experience of dissonance, and then adjusted their behavior accordingly. Alternatively, primed as “do-gooders”, people experience the “warm glow” of moral pride, of aiming for and meeting internal standards (Dunn et al. 2008; Moll et al. 2006) and consequently feel more motivated to do more good. Future behavioral and neuroimaging work may help disambiguate between these potential mechanisms for the precise role of moral self-concept.

The current results may be understood in the context of previous research on priming moral concepts. Prior work has shown that instructing people to think about helping-related words (Macrae and Johnston 1998) or helpful people (Nelson and Norton 2005) motivates helping behavior (e.g., moral reinforcement). In one study, people primed with the category superhero, but not the exemplar Superman, thought of themselves as more helpful and were also actually more helpful (Nelson and

Norton 2005). Compared to Superman, people may feel unhelpful, but to the extent that the general superhero prime elicits thoughts of one's own helpful behavior, more helpful behavior ensues. Consistent with this is the finding that labeling someone as a helpful person leads that person to be more helpful (Miller et al. 1975) (but see Monin and Miller 2001). The current study suggests additionally that the prime need not be specific to the target behavior. Instead, priming people to think of themselves as good people generally (rather than charitable, specifically) motivated charitable giving.

Future work should continue to illuminate the mechanisms by which moral self-concept can be invoked. While the present study instructed participants to recall past deeds, other studies (as described above) primed participants by asking them to reflect on particular character traits (e.g., helpful). A further related question is whether seeing *oneself* as moral across situations and seeing one's particular *actions* as moral have differential effects on behavior.

#### 4.2 Moral Reinforcement Versus Moral Licensing

In the current study, among participants reporting “good deeds”, the ones who did not report whether these deeds were recognized or unrecognized, appreciated or unappreciated, by others donated the most. These participants may have been the most effectively primed as “true” do-gooders, that is, people who do good “for goodness’ sake”, and not to obtain credit from others. In fact, these participants may be the true do-gooders even outside the context of the experiment, doing good simply to do good. By contrast, other participants within the “good deeds” condition explicitly noted whether their deeds were appreciated or unappreciated by others. These participants appeared to be more conscious of or sensitive to how their actions were perceived by others – perhaps because they either performed or remembered performing good deeds at least in part for reputational benefit. Indeed, social signaling, rather than doing good for its own sake, requires keeping track of who's paying attention (Barclay and Willer 2007). Consistent with this interpretation, the “social signalers” donated significantly less than the true do-gooders, albeit still qualitatively more than participants reporting bad deeds and conversation topics.

The difference between the putative social signalers and true do-gooders in the present study may also help to resolve discrepant findings in the existing literature: moral reinforcement (positive and negative) on the one hand, and moral licensing (and compensation) on the other. A number of studies support *moral reinforcement* by showing people act in accordance with their self-concept (Nelson and Norton 2005; Stone and Cooper 2001) – for better or, surprisingly, even for worse. For example, perceiving oneself as inauthentic (e.g., “the counterfeit self”) actually results in more dishonest behavior (Gino et al. 2010). It is worth noting though that the current work revealed *reinforcement* only in the case of a *positive* moral self-concept. Recalling bad deeds did not lead to worse (or better) behavior in the present participants. By contrast, other work reveals the effects of *moral licensing and moral compensation*: people who have engaged in good behavior are subsequently *licensed* to engage in bad behavior (Mazar and Zhong *In Press*; Monin and Miller 2001; Sachdeva et al. 2009), while people who have acted badly *compensate* with subsequent good behavior (Czopp et al. 2006; Zhong and Liljenquist 2006).

One possible account of this discrepancy is that seeing *oneself* as a good person reinforces good behavior, but seeing that *other people* see one as good and as doing good may license worse behavior; similarly, compensatory behavior (i.e., behaving well to compensate for having behaved badly) may also be performed primarily in a public context (actual or implied). For example, in one study, participants who were accused of being racist by an experimental confederate were more likely to later suppress similar views that could be interpreted by others as racist (Czopp et al. 2006). Conversely, once participants have established themselves as neither racist nor sexist, they were more comfortable providing answers on a survey that could be interpreted to show prejudice (Monin and Miller 2001). In another study, participants describing how they exemplify a specific set of good traits donated less money to charity (Sachdeva et al. 2009). This approach might have prompted participants to search for external evidence, in others' eyes, as in the example provided by the authors: "most people would say that I am a caring person" (see pilot data in [Supplementary Material](#)). Therefore, a conscious focus on reputational or external credit (versus true self-concept) (Carlson et al. 2011), might yield moral licensing (versus reinforcement).

Our interpretation of the current results, as well as how they might be reconciled with prior work on moral licensing, must be taken with caution, however, for several reasons. First, even though the "social signalers" donated significantly less than the "true do-gooders", they still donated qualitatively more than participants reporting bad deeds and conversation topics. Moral licensing typically leads to worse behavior, whereas the "social signalers" in the present study simply showed a diminished effect of reinforcement. Future work should explore the possibility that multiple distinct influences are at play for these participants – and not simply the lone effects of reinforcement or licensing.

Second, extensive work on gratitude and pride suggests that recognition or appreciation by others can motivate certain forms of pro-social behavior (though notably we found no difference in donation amounts between participants who noted feeling *only* appreciated versus *only* unappreciated). In particular, being grateful to one person leads participants to behave pro-socially toward a different person (Bartlett et al. 2012; Bartlett and DeSteno 2006; DeSteno et al. 2010), and being primed to experience pride likewise leads to pro-social behavior (Williams and DeSteno 2008, 2009). Of course, the "recognition" that may be associated with gratitude (e.g., seeing that someone recognizes your needs) and pride (e.g., seeing that someone recognizes your talents) may be distinct from the "recognition" associated with moral credit (e.g., seeing that someone recognizes your moral deeds). Furthermore, to the extent that pride reflects how one sees oneself – self-concept – these studies also reveal the reinforcing effects of self-concept. Indeed, the duration of the effects of gratitude and pride (e.g., will participants continue to behave pro-socially after the initial instances?) will be an important topic for further investigation.

Finally, some behaviors may also be associated more robustly with moral licensing, while other behaviors may be associated more with moral reinforcement. Engaging in the kinds of actions for which one usually obtains social credit (e.g., buying green products) may lead to licensing (Mazar and Zhong [In Press](#)). By contrast, automatic or routine behaviors (e.g., helping the ones we love), like many of the deeds reported by our participants, may be more internally motivated and "closer to one's conscience". More broadly, it may be worth

revisiting the observed valence asymmetry in this context. The current work revealed only *positive* moral reinforcement; recalling bad deeds did not lead to worse behavior in the present participants (but see Gino et al. 2010). Thus, certain types of positive moral acts may more effectively bring one's positive self-concept into conscious access, and result in moral reinforcement.

## 5 Conclusions

In line with recent work revealing the importance of a moral self-concept in motivating behavior, the current results suggest that reinforcing a person's positive self-concept or "moral self-consciousness" motivates that person to be better, in this case, to be more generous. Together, these results suggest the self-reinforcing nature of a moral self-concept: consciously reflecting on one's good deeds improves one's moral self-concept, which in turn leads to greater moral motivation and more good deeds. Thus, when people become conscious of themselves as good moral agents, who do good even when no one is looking, they may consequently do even more good.

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