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Moral Compensation and the Environment: Affecting individuals' moral intentions through how they see themselves as moral

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The paper is followed by a **discussion**

Most individuals highly-value their moral identity (Aquino & Reed, 2002) – that is, they value a moral self-image and engage in behaviors to maintain such an image. This motivation is challenged by temptations to transgress and the cost of moral action. To maintain a positive moral self-image, individuals engage in compensation: current moral behavior licenses future immoral behavior and current immoral behavior stimulates future moral behavior (Jordan et al., 2010; Monin & Miller, 2001; Nisan, 1991; Zhong & Liljenquist, 2006). For example, Monin and Miller (2001) found that a previous gender egalitarian act licensed subsequent gender discriminatory behavior. Similarly, Sachdeva, Iliev, and Medin (2009) demonstrated that reminding people of their humanitarian traits reduced charitable donations. And Mazar and Zhong (2009) found that purchasing green products established people's moral credentials and, as a result, licensed their selfish and morally-questionable behavior.

On the opposite side of the moral spectrum, other studies have demonstrated that people compensate for their previously immoral behaviors. Carlsmith and Gross (1969), for example, noted that compliance with requests for help increased after moral values had been violated, even when such compliance in no way rectified the previous damage. Similarly, Wallington (1973) found that people who violated moral rules actively inflicted pain and punishment on themselves (i.e., by administering electric shocks to themselves). Those who had previously been induced to lie to the experimenter delivered more severe shocks to themselves than those who had not been given the opportunity to lie.

Based on this research, in the present study, we investigate the relationship between one's moral or immoral behaviors and his or her intentions to behave ethically in

the future. We propose, and find support for the hypothesis that people engage in moral compensation and that such compensatory mechanisms affect moral intentions (specifically those related to the preservation of environmental resources). However, we argue that moral compensation is more complicated than previously studied. While individuals do indeed engage in moral compensation, we assert that the magnitude with which one's prior (im)moral behavior affects his or her moral self-image will affect the moral compensation process. In investigating this relationship we examine two dimensions of moral self-image via the recall of moral actions: the valence (moral or immoral behavior) and magnitude (few versus many items recalled) of that recall.

The hypotheses associated with this assertion are described in a following section.

Moral behavior and the environment. One domain of moral behavior that is at the forefront of managers' minds and agendas is the environment. In corporate boardrooms across the country, organizations are considering how to reduce their impact on the environment. Under pressure from the media and the threat of government intervention, change is occurring rapidly and voluntarily. One of the best-known examples of this type of effort is Lee Scott, the CEO of Wal-Mart, who in 2005 made a major speech to shareholders declaring Wal-Mart's commitment to improve the company's environmental performance by investing up to $500 million annually in cutting energy use, using renewable energy sources, and pushing more sustainable practices through its supply chain (Esty & Winston, 2006). Thanks to this shift, Wal-Mart, often portrayed by the media as a corporate villain, harnessed its market leverage to encourage manufacturers to reduce packaging materials. Another piece of evidence of a

shift in industry-thinking is the multinational UN conference on climate change that occurred in Copenhagen, Denmark earlier this year. It brought together leaders from government and industry to discuss collective efforts towards combating global warming.

We use the domain of environmental conservation as the forum in which to examine our hypotheses.

Hypotheses

Individuals wish to see themselves as moral (Monin & Jordan, 2008; Nissan, 1992). Thus, an immoral action is likely to stimulate later moral behavior in order to rectify the individual's wounded moral self (Liljenquist & Zhong, 2006; Sachdeva et al., 2009). Conversely, engaging in moral behavior often requires significant effort on the part of the actor – either causing him or her to set aside self-interest for the sake of a common good or expending significant amounts of enervating self-control. Thus, just as immoral behavior is found to lead to subsequent increased moral behavior, moral behavior is often followed by a relaxation of one's moral strivings and hence an increase of immoral behavior (Jordan et al., 2010).

With increasingly dismal news about the state of the environment and human beings' roles in its destruction (e.g., melting of the polar ice caps, the British Petroleum spill in the Gulf of Mexico), actions towards the environment have adopted a moral tone. How individuals choose to commute to work, use disposable plastic products like cups or grocery bags, and run their air conditioners, all have implications for a collective well-being, bringing these actions into the purview of what is considered a moral issue (Jones, 1990). Thus, we predict that making salient actions that harm versus help the

environment will affect individuals' moral self-images and hence their subsequent behavioral intentions in the moral domain.

> ***Hypothesis 1:*** Individuals' recall of their environmentally-related behavior will affect their subsequent environmental intentions in a compensatory fashion, with moral recollections leading to a reduction in environmental conservation intentions and immoral recollections leading to an increase in environmental conservation intentions.

However, we propose that moral compensation depends on the ability of the actions that are recalled to impact a person's moral self-image. In other words, it is not the mere priming of a moral or immoral frame via recall of one's actions that leads to compensatory effects. But rather, such a recall must be sufficient enough to impact one's moral self-image in order to lead to compensatory effects. Small magnitudes of recall within the moral or immoral domain are unlikely to have an impact on one's self-image (Baumeister, 1999). Thus, we propose an interactive effect between the moral valence of one's recall and the magnitude of that recall, such that in recall of smaller magnitudes, individuals' subsequent domain-relevant behavioral intentions will be unaffected. In contrast, under high magnitudes of recall, individuals' subsequent domain-relevant behaviors will be affected in a compensatory direction: a large number of moral recalls will be associated with decreased environment-related intentions and a large number of immoral recalls will be associated with increased environment-related intentions.

> ***Hypothesis 2:*** The valence and magnitude of one's recall will interact to affect one's environmental intentions. Recalls of a low magnitude will not affect individuals' subsequent domain-relevant intentions. However, recalls at high

magnitudes will affect subsequent, domain-relevant intentions in compensatory directions.

Method

We used a field-based experimental study to investigate the relationship between one's moral recalls and subsequent intentions to behave ethically.

Participants and design. Through a partnership with myclimate (the NGO responsible for airline customer CO^2 offset payments), we surveyed 186 individuals (67% women, M_{age} = 37.80, SD = 10.70) who had offset their flight emissions. These participants first recalled their past (im)moral behavior, after which they were asked about their support for programs encouraging CO^2 emission offsetting, constituting our dependent variable. Moral self-image was manipulated via a 2 x 2 between-participants design: the valence of participants' recalled behavior (moral/immoral behaviors) and the magnitude of their recalled behavior (either asked to recall two or eight environment-related activities). For example, in the "Moral-Few" condition, individuals were asked to name two things they do that contribute to environmental preservation; in the "Immoral-Many" condition, individuals were asked to name eight things they do that contribute to environmental destruction. To measure ethical behavioral intent, individuals were then asked to indicate how likely they would be to (1) support regulations for mandatory CO^2 offsetting premiums, (2) how willing they would be to pay a mandatory premium for CO^2 offsetting, and (3) how much they support corporate initiatives to offset CO^2 emissions even if it meant them having to pay higher prices. All items were accompanied by 7-point Likert scales (1 = *very unlikely*; 7 = *very likely*). We averaged across these items (α = .81) to generate an ethical intention scale.

Results

In support of Hypothesis 1, we found a main effect of recall, $F(1, 185) = 4.87$, $p = .03$. Individuals who recalled environmental conservation activities reported lesser intentions to engage in activities to offset their CO^2 emissions ($M = 6.36$, $SD = 0.91$) than did those who recalled environmental destruction activities ($M = 6.55$, $SD = 0.52$).

In support of Hypothesis 2, results also demonstrated an interaction between the valence of recall and the magnitude of recall, $F(1, 185) = 8.06$, $p = .005$. Those who recalled eight moral items (i.e., those that elicited a more positive moral self-image) were significantly less likely to support programs to offset CO^2 emissions than were those who recalled eight immoral items (i.e., those that elicited a more negative moral self-image), $t(185) = 3.31$, $p = .001$. However, there was no difference between individuals who recalled two moral versus two immoral items, $t(185) = 0.49$, $p = .63$.

See Table 1 for means and standard deviations for these four conditions.

Table 1

Descriptive statistics for moral intentions by moral valence and magnitude of recall

	Valence Recalled Action	
	Moral	Immoral
2 items	6.52 (0.54)	6.45 (0.58)
8 items	6.14 (1.26)	6.68 (0.41)

Discussion

These findings provide support for our hypothesis on the role that moral compensation plays in behavioral intentions, specifically moral intentions targeted towards environmental preservation. Taken together, they demonstrate a negative relationship between the state of one's moral self-image and one's conservation intentions. They also support our prediction that moral compensation operates through changes to individuals' moral self-image. One's moral or immoral self-recalls must be substantial enough to impact how much he or she sees him or herself as a moral person.

These findings contribute to the literature on ethical behavior in several ways. First, they provide support for the theory of moral compensation, demonstrating a negative relationship between moral self-image and ethically-responsible behaviors. Second, by examining both the magnitude and valance of recalled past behavior, they provide a two-dimensional picture of the effects on moral intentions, demonstrating that these two dimensions interact with one another to affect individuals' intentions toward the environment. Finally, through the use of a field experiment, this study demonstrates the generalizability of the theory of moral compensation and its practicality for affecting behaviors that have consequential, real-world impact.

Limitations and future research. These contributions considered, the study possesses a few limitations. First, the nature of its participants may limit the conclusions that we can draw from the results. All participants were individuals who had already chosen to offset their flight emissions. On the one hand, this characteristic makes the findings even more significant, suggesting that moral compensation occurs even for those who are ethically-responsible and environmentally-minded. On the other hand, this

sample may restrict the findings to individuals who share similar characterstics. Future research should extend these findings by investigating the applicability of this relationship to a broader participant pool and, in doing so, identify the boundary conditions of the observed relationship.

Second, while we based our "few" versus "many" recall prompts on pre-testing data, which demonstrated that individuals found two environmental behaviors to be "few" and eight to be "many," we do not know the boundary conditions of these items. If two is "few," is three also "few"? When does "few" become "many"? And does one's perception of "few" versus "many" also depend on the impact of each of the recalled behaviors? For example, does volunteering one day of one's week to working in the community garden (i.e., one action) impact one's moral self-image the same, or possibly even more, than recalling eight small things that a person does, such as recycling one's light bulbs and batteries or being mindful to turn off the lights? The current study does not address this important question.

Third, we measured individuals' *intentions* to engage in future environmental conservation activities – not their actual behavior. Although we know that intentions closely linked to one's target behavior is a good predictor of actual behavior (Fishbein & Azjen, 1974), assessing individuals' intentions is not the same as observing the individual's actual behavior. Thus, future research should seek to measure individuals' actual environmentally friendly (e.g., recycling, purchasing green products, biking to work) or unfriendly (e.g., using disposable cups, patronizing environmentally unfriendly businesses) behaviors.

Lastly, we claim that the observed effects on individuals' intentions towards environmental conservation were a function of either positive or negative effects on their moral self-images. However, the current study did not directly assess individuals' moral self-images, nor the changes to these as a consequence of our manipulations. Thus, we cannot make empirically-based claims about these effects. Future research needs to disentangle this question, as well as to create a measure to assess the state of one's moral self. While no measure of moral self-image exists, there is some suggestive evidence that moral compensation occurs because of changes to how a person sees him or herself (Khan & Dhar, 2006).

Practical implications. The current findings have practical implications for how corporations and non-profit organizations shape their public messages in order to increase individuals' willingness to support environmentally-conscious initiatives. For example, they suggest that highlighting an individual's selfish acts related to environmental conservation through advertising campaigns or surveys, can, for example, assist a corporation in getting customers to pay a premium for more environmentally-friendly packaging or to participate in cause-related product campaigns. However, they also suggest that the mere highlighting of individuals' selfishness may not be enough to enact the strongest possible conservation behavior. Rather, selfish behavior of a high magnitude is needed. Conversely, corporations or environmental organizations may not need to worry about bringing solitary or minute acts of environmental conservation behavior to consumers' attentions. As demonstrated in the current study, these small reminders are unlikely to impact their behavior in a positive or negative direction.

Conclusions

This study highlights the effects of moral and immoral recall on individuals' subsequent, real-world moral behavioral intentions. It demonstrates that moral valence alone does not affect individuals' subsequent environmental behaviors but that the magnitude of one's recall is important: thinking about one's few moral or immoral behaviors does not affect individuals' subsequent behavioral intentions. However, thinking about one's many moral and immoral behaviors provide people with the credentials necessary to relax their moral strivings or increase the moral efforts, respectively.

References

Aquino, K., & Reed, A. (2002). The self-importance of moral identity. *Journal of Personality and Social Psychology*, 83, 1423-1440.

Baumeister, R. (1999), Editor. *The self in social psychology.* Philadelphia, PA: Psychology Press.

Carlsmith, J. M., & Gross, A. E. (1969). Some effects of guilt on compliance. *Journal of Personality and Social Psychology*, 11, 232-239.

Esty, D. & Winston, A. (2006). *Green to gold: How smart companies use environmental strategy to innovate, create value, and build competitive advantage*. New York: Wiley.

Fishbein, M., & Azjen, I. (1974). Attitudes toward objects as predictive of single and multiple behavior criteria. *Psychological Review, 81*, 59-74.

Jordan, J. M., Mullen, E., & Murnighan, J. K. (2010). On the pendulum of moral action: Contrasting effects of own and others' past moral actions on future moral behavior. *Manuscript under review.*

Khan, U., & Dhar, R. (2006). Licensing effect in consumer choice. *Journal of Marketing Research, 43*, 259-266.

Mazar, N., & Zhong, C. (2009). Do green products make us better people? *Psychological Science*, Forthcoming.

Monin, B., & Miller, D. T. (2001). Moral credentials and the expression of prejudice. *Journal of Personality and Social Psychology*, 81(1), 33-43.

Nisan, M. (1991). The moral balance model: Theory and research extending our understanding of choice and deviation. In W. M. Kurtines & J. L. Gerwitz (Eds.), *Handbook of Moral Behavior and Development*, Vol. 3. Hillsdale, NJ: Lawrence Erlbaum.

Sachdeva, S., Iliev, R., & Medin, D. L. (2009). Sinning Saints and Saintly Sinners: The Paradox of Moral Self-Regulation. *Psychological Science*, 20(4), 523-528.

Wallington, S. A. (1973). Consequences of transgression: Self-punishment and depression. *Journal of Personality and Social Psychology*, 28, 1-7.

Zhong, C., & Liljenquist, K. (2006). Washing away your sins: Threatened morality and physical cleansing. *Science, 313*, 1451-1452.