Moral Transformation: Good and Evil Turn the Weak Into the Mighty

Social Psychological and Personality Science I(3) 253-258 © The Author(s) 2010 Reprints and permission: sagepub.com/journalsPermissions.nav DOI: 10.1177/1948550610367686 http://spps.sagepub.com



Kurt Gray 1,2

Abstract

Moral transformation is the hypothesis that doing good or evil increases agency—the capacity for self-control, tenacity, and personal strength. Three experiments provide support for this hypothesis, finding that those who do good or evil become physically more powerful. In Experiment 1, people hold a 5 lb. weight longer after donating to charity. In Experiment 2, people hold a weight longer when writing about themselves helping or harming another. In Experiment 3, people hold a hand grip longer after donating to charity. The transformative power of good and evil is not accounted for by affect. Moral transformation is explained as the embodiment of moral typecasting, the tendency to "typecast" good- and evildoers as more capable of agency and less sensitive to experience. Implications for power, aging, self-control, and recovery are discussed.

Keywords

agency, ethics, morality, helping, prosocial behavior, mind perception, person perception, power, self-control, social roles

Anchorage, AK—One spring afternoon, Bruce Anderson was repairing his 1985 Volkswagen station wagon when it slipped off the jacks and pinned him to the ground. Trapped beneath the car, Bruce's cries for help summoned his 17-year-old son, Riley. Realizing that his father was in trouble and that help was far away, Riley did the amazing: he took hold of the bumper and lifted the 2,500 lb vehicle off of his dad.

Breese (2008, p. A1)

Helping others and doing good seem to require agency willpower, tenacity, and personal strength (Bandura, 1997). To help India gain its independence, Gandhi fasted for weeks at a time, and to help the needy, Mother Theresa endured extreme poverty. As willpower appears to be a trait stable from childhood (Mischel, Shoda, & Rodriguez, 1989), it may be that people are predestined for either great or commonplace deeds. It may also be, however, that agency is not a trait conferred at birth but is instead a consequence of doing good; perhaps Mother Theresa was not born agentic but only became so once she started helping others. If helping others confers increased personal strength, it might explain why Riley Anderson, an average kid, could lift a 2,500 lb. car off his father. Moral transformation is the hypothesis that doing or merely attempting to do moral deeds imbues people with agency. Of course, as morality consists of both good and evil, not only virtue but also vice should increase agency.

Moral transformation is suggested by research on morality and mind perception. People perceive the minds of other people, pets, and God, along the two general dimensions of agency (the capacity for self-control and action) and experience (the capacity for sensation and feeling; H. M. Gray, Gray, & Wegner, 2007). Although adults are generally perceived as capable of both agency and experience, those who do moral deeds, whether laudable or heinous, are perceived as relatively higher in agency and lower in experience. For example, goodand evildoers are seen to be relatively more able to endure physical discomfort to achieve a goal—even more so than doers of morally neutral deeds (K. Gray & Wegner, 2009). The fact that people perceive good and evil exemplars such as Mother Theresa and Hitler as more agentic but less able to experience pain (and pleasure) is called moral typecasting because those who help or harm others not only are perceived to be more agentic but also are permanently "typecast" as such (K. Gray & Wegner, 2009).

To date, research on moral typecasting has concerned the perceptions of others; however, this framework may also extend to perceptions of oneself. That is, those who do moral or immoral deeds may perceive themselves to possess increased agency. Research finds that such self-perceptions can be quite powerful, causing people to act in ways that confirm their self-perception (Bem, 1967; Fazio, Effrein, & Falender,

Corresponding Author:

Kurt Gray, Department of Psychology, University of Maryland, College Park, Biology/Psychology Building, College Park, MD 20742 Email: kgray@psyc.umd.edu

¹ University of Maryland, College Park, MD, USA

² Harvard University, Cambridge, MA, USA

1981). Importantly, the perceptual association between moral deeds and agency may have physical effects because many such associations are embodied, extending beyond mind to the body (Barsalou, 1999; Williams & Bargh, 2008). For example, the association between "old" and "slow" causes people to walk more slowly after thinking about the elderly (Bargh, Chen, & Burrows, 1996), and the association between "cold" and "lonely" makes people feel physically colder after social isolation (Zhong & Leonardelli, 2008). The embodiment of moral typecasting would predict moral transformation: Those who help or harm others should become more tenacious and be more able to withstand discomfort.

Three experiments examined whether doing or simply thinking of doing moral deeds increased agency. In Experiment 1, participants held a 5 lb. weight for as long as possible after either keeping some money for themselves or donating it to charity. It was predicted that, after controlling for their pretest strength, people who donated to charity would be able to hold the weight for significantly longer. In Experiment 2, participants completed the same weight task while writing fictional stories of themselves completing either a good, evil, or neutral deed. It was hypothesized that those in the good and evil conditions would be more agentic—that is, hold the weight longer—than those in the neutral condition. Finally, Experiment 3 tested whether participants could hold a hand grip longer after having donated to charity.

Experiment I: The Power of Good

This experiment tested whether doing good increases agency. One potential method to investigate this is to test people's agency in the service of a good or neutral task. For example, in one pilot study, participants were asked to hold up a weight and told that the longer they did so, the more money they would raise for either charity or themselves. This pilot test found that people did indeed hold the weight longer in the charity condition, F(1,56) = 8.69, p = .005, $\eta^2 = .13$. Although this effect is predicted by moral transformation, this paradigm also likely contains differences in motivation. Take the car lifting example at the beginning; there is certainly more need to lift the car off a family member than to do so for money. Thus, a more powerful test of whether helping others makes people more powerful would be an experiment that rules out differences in motivation. Thus, the current experiment tests whether people remain more agentic after doing an act of good.

Participants were asked to twice hold up a 5 lb. weight for as long as possible, first as a baseline strength measure and second as the dependent variable. After the pretest and before the posttest, participants received a dollar, and half were given the opportunity to donate it to charity. It was predicted that, after controlling for pretest differences, participants who donated would be more agentic and would be able to hold the weight up longer. It was further predicted that this effect would not be accounted for by differences in affect between conditions.

Participants and Procedure

From around a nearby subway station, 91 participants (49 female, 42 male, $M_{\rm age} = 32$) were recruited and received a candy bar for compensation. Of these, 5 were excluded for failing to follow instructions. Participants were randomly assigned to either the control or virtuous condition.

In both conditions, participants were instructed to twice hold up a 5 lb. weight for as long as possible. The weight was held directly out from the side of their body, with a fully extended arm. The first time they did this served as a pretest measure of strength, whereas the second time served as the measure of agency. To ensure participants tried their hardest on the pretest, they were not told in advance that there would be holding the weight again, nor anything else about the experiment. In between the pretest and posttest, participants were given a dollar, and those in the virtuous condition—but not the control condition—were given the opportunity to donate it to UNICEF. All participants in the virtuous condition agreed to donate.

Placing the posttest after the manipulation made it so motivation and social pressure worked against the moral transformation hypothesis in two ways. First, after donating to charity, participants should care less about helping out the experimenter by trying hard the second time on the timeconsuming weight task. This is because people have a moral set point (Sachdeva, Iliev, & Medin, 2009), which means that after acting prosocially once, they are free to act selfishly (in this case, but quitting early, taking their candy bar, and leaving). This reduced effort in the virtuous condition would also be predicted by moral credentialing (Monin & Miller, 2001), whereby people feel freed from future responsibility after an initial demonstration of righteousness. Second, equity theory suggests that those who receive more compensation should put forth additional effort (Walster, Walster, & Berscheid, 1978), and as participants in the control condition are more personally benefited (because they keep the money), they should try harder than those in the virtuous condition.

After the weight posttest, participants filled out a modified version of the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988) to assess their emotional state. This was measured because previous research suggests that doing good increases positive affect (Dunn, Aknin, & Norton, 2008), which could make people less sensitive to the discomfort of the weight task. At the conclusion of the experiment, participants received their candy bar, and those in the control condition were given the opportunity to donate their money to UNICEF.

Assessing Moral Transformation

During pretest, participants held the weight for an average of 76 s. Pretest times did not differ by condition. Posttest times were submitted to an ANCOVA with condition (control or virtuous) as the independent variable and the pretest time as the covariate. The ANCOVA found a significant effect of condition, F(1, 82) = 4.48, p = .04, $\eta^2 = .13$, and the estimated

Gray 255

posttest marginal means (evaluated at pretest = 75.9 s) revealed that those in the virtuous condition held the weight for 7 s longer (M = 52.9, SD = 14.6) than those in the control condition (M = 46.1, SD = 14.6).

Assessing Affect

An ANOVA revealed no significant effect of condition on either positive (p = .77) or negative affect (p = .17), suggesting that longer weight time in the moral transformation cannot be accounted for by differences in affect.

Discussion

In the pilot study, those who were doing good appeared to possess more agency; in this experiment, those who *did* good seemed to possess more agency. This experiment helps to rule out alternative explanations of moral transformation (e.g., motivation and affect) and suggests that acting morally can imbue people with increased personal strength. This experiment, however, used good deeds to test the moral transformation hypothesis. As noted in the introduction, the moral domain consists of both good and evil, and although it is affirming that virtue increases agency, moral transformation should occur for evil as well. The following experiment tested this idea and used a different method to induce moral transformation.

Experiment 2: Stories of Heroism and Villainy

In this experiment, participants were asked to hold up a weight while they wrote a fictional story about themselves either helping, harming, or having a neutral interaction with another person. It was predicted that, after controlling for pretest weight times, participants who imagined themselves doing a moral or immoral act would hold the weight significantly longer than those in the control condition. No strong prediction was made concerning the difference between participants who wrote about helping versus harming, although there is reason to suspect that those who imagine themselves committing evil might become even more agentic.

In a comprehensive review of the literature, Baumeister, Bratslavsky, Finkenauer, and Vohs (2001) consistently found that bad events are psychologically more powerful than good events. An embodiment perspective provides the possibility that this may happen physically as well, such that imagining bad acts could increase agency more than imagining good acts. Evil may evoke more agency because, in contrast to helping others, harming people requires overcoming societal pressures and squelching the voice of conscience.

Similar to the Experiment 1, this experiment measured affect but also measured two discrete emotions (guilt and pride) to investigate whether differences in affective experience could account for moral transformation.

Participants and Procedure

A total of 151 participants (83 female, 68 male, $M_{\rm age} = 32$) were recruited as in Experiment 1. Of these, 5 were excluded for failing to follow directions, and 3 were removed for being statistical outliers.

Participants completed the weight pretest and were then assigned to one of the three conditions: help, harm, and control. In each condition, participants wrote a brief fictional story that featured them and another person. In the help condition they described themselves helping another person, in the harm condition they described themselves harming another person, and in the control condition they described themselves as doing some work. The stories were fictional because we did not want them stirring up feelings of guilt or pride associated with actual past events. Nonetheless, feelings of guilt and pride were assessed. Importantly, in all conditions, the instructions asked participants to write a story in which they also "used all their physical strength." This was done to control for possible differences in the physical agency inherent in the different conditions. For example, getting work done might initially conjure imagines of typing, whereas harming another might conjure imagines of physical assault.

Participants wrote their story while simultaneously completing the weight posttest. Because of this, participants completed both the pretest and the posttest with their nondominant hand. Once participants dropped the weight, the experimenter informed them that they could stop writing the story. Stories were generally very short, consisting only of a sentence or two. Nevertheless, as a manipulation check, a coder blind to condition was able to categorize 95% of the stories into the correct condition based on content.

One other possible concern is that writing a story in the help and harm conditions would be significantly more engaging than the control condition and that that difference alone could account for any observed differences in weight-holding time. To assess this hypothesis, participants were asked, immediately after completing the writing task, to indicate on 5-point scale "How engaging did you find the writing task?" with anchors not at all and extremely.

To assess the emotional state of participants at the end of the experiment, all people filled out a PANAS and also indicted the extent to which they were feeling guilt and pride on the 5-point scale from *none at all* to *extreme guilt* (or *pride*).

Assessing Moral Transformation

During pretest, participants held the weight for an average of 71 s. Pretest times did not differ by condition. Posttest times were submitted to an ANCOVA with condition (help, harm, control) as the independent variable and the pretest time as the covariate. The ANCOVA found a significant effect of condition, F(2, 139) = 3.25, p = .04, $\eta^2 = .05$, and confidence intervals of the estimated posttest marginal means (evaluated at pretest = 70.5 s) revealed that those in the help condition held the weight for significantly longer (by 5 s, M = 58.2,

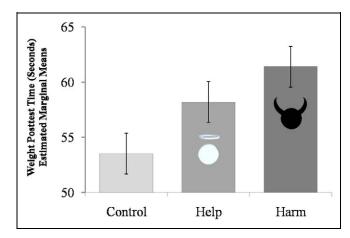


Figure 1. Weight holding while writing about getting work done (control), helping another, or harming another (Experiment 2)

SD = 15.0) than those in the control condition (M = 53.5, SD = 14.9, p < .05; see Figure 1). Those in the harm condition held the weight significantly longer (M = 61.4, SD = 14.9) than those in the control condition (by approximately 8 s; p < .05). Participants in the harm condition also held the weight somewhat longer than those in the help condition (by approximately 3 s), though this difference was not significant (p = .22).

Assessing Engagement and Emotion

An ANOVA revealed no significant effect of the engagingness of the writing task by condition (p = .67), and there were no differences between condition in either positive (p = .10) or negative affect (p = .63). In addition, neither positive (p = .22) nor negative affect (p = .89) was linked to weight times, suggesting that affect does not account for the effects of moral transformation.

An ANOVA revealed that feelings of pride did not differ by condition (p=.13) but feelings of guilt did, F(2, 140) = 3.68, p=.03, $\eta^2=.05$, with those in the harm condition feeling significantly guiltier than those in the other conditions (ps<.05). Importantly, however, guilt (p=.15) was not significantly linked to weight times. Additional evidence to suggest that task performance was not accounted for by guilt is that when it was added as a covariate to the ANCOVA model, the effect of condition remained significant, F(2, 138) = 4.29, p=.02, $\eta^2=.06$ (and in fact became larger).

Discussion

These results provide additional support for moral transformation; not only does doing good increase agency, but also does simply thinking of oneself as a hero. What is more, thinking of oneself as a villain also increases agency, demonstrating that these effects extend across the moral spectrum. These results also hint that doing evil may provide even more agency than doing good, though the difference between these conditions was not significant. Moral transformation also does not appear to be accounted for by affect or specific emotions.

Experiment 3: The Grip of Heroism

The previous studies use weight holding to measure moral transformation, and it would be reassuring to test this with another dependent variable. One measure frequently used in studies of self-control is grip strength (Muraven, Tice, & Baumeister, 1998), and so this experiment seeks to replicate Experiment 1 using this alternate measure. This experiment also contains another methodological change, measuring affect immediately after the manipulation rather than at the end. Given that previous research finds that doing good induces positive affect (Dunn et al., 2008), it is surprising this was not found in previous experiments. Perhaps differences in affect are washed out by the end of the experiment, and by measuring affect directly after participants donate (or not) to charity, differences in positive affect may be revealed. However, it is still expected that differences in affect will not account for the effects of moral transformation.

Participants and Procedure

In on-campus dining halls, 40 participants (18 female, 22 male, $M_{\rm age}=22$) were recruited and compensated as in Experiment 1. Of these, 4 were removed for being statistical outliers, via an iterative procedure of excluding those with difference times (posttest–pretest) more than 3 standard deviations from the mean. The results remain unchanged if these outliers are included, however.

The procedure was identical to Experiment 1, where half of the participants were given a chance to donate to charity, save for two differences. First, instead of twice holding a weight aloft, participants twice squeezed a hand grip (http://www.hand-helper.com/) for as long as they could. Second, positive and negative affect was assessed directly after participants donated (or not) to charity.

Assessing Moral Transformation

During pretest, participants held the hand grip for an average of 128 s. Pretest times did not differ by condition. Posttest times were submitted to an ANCOVA with condition (control, virtuous) as the independent variable and the pretest time as the covariate. The ANCOVA found a significant effect of condition, F(1, 33) = 5.00, p = .03, $\eta^2 = .13$, and the estimated posttest marginal means (evaluated at pretest = 132.2 s) revealed that those in the virtuous condition held the grip for 23 s longer (M = 137.8, SD = 41.6) than those in the control condition (M = 114.6, SD = 45.9).

Assessing Affect

In contrast to Experiment 1, an ANOVA revealed a significant effect of condition on positive affect, F(1, 34) = 13.4, p = .001, $\eta^2 = .28$, such that those in the virtuous condition reported

Gray 257

feeling more positive (M = 2.92, SD = 0.81) than those in the control condition (M = 1.98, SD = 0.68). Importantly, however, positive affect did not account for moral transformation. When positive affect was entered as a predictor in the ANCOVA model, it did not predict hand grip posttest times (p = .61), and the effect of condition remained significant, F(1, 32) = 4.67, p = .04, $\eta^2 = .13$. There was no difference in negative affect between conditions (p = .33).

Discussion

These results provide additional evidence for moral transformation by replicating the findings of Experiment 1 with a different task. Consistent with previous research, doing good did indeed increase positive affect; however, this effect did not account for the effect of moral transformation. It appears that virtuous deeds are linked to positive affect and agency through different routes, which is perhaps not surprising considering moral transformation also occurs for the evil stories in Experiment 2. It appears that whether you feel better or not, good deeds increase personal power.

General Discussion

Three studies provide evidence for the phenomenon of moral transformation. In Experiment 1, individuals who did good possessed more agency. Experiment 2 found that those who imagined themselves doing good or evil were more agentic than those who imagined themselves doing something neutral. Experiment 3 again demonstrated moral transformation with a different dependent variable. Moral transformation does not appear to be explained by differences in motivation, affect, pride, or guilt.

These results overturn lay notions that only those with exceptional amounts of agency can act heroically. Instead, the very act of doing good increases agency, perhaps explaining how normal people can do the extraordinary in the service of others. There also, however, seems to be power in evil deeds, suggesting why those who harm others appear to be especially tenacious.

This research extends work on moral typecasting (K. Gray & Wegner, 2009), demonstrating that typecasting not only describes perceptions of others but also influences one's own behavior. These findings also have implications for research on power, suggesting that in addition to power stemming from personal freedom and controlling others (Galinsky, Gruenfeld, & Magee, 2003; Lammers, Stoker, & Stapel, 2009), there may also be a kind of power in moral deeds. The power inherent in doing good and evil deeds could easily transfer into the domain of self-control, where people struggle to resist temptations in the service of their goals. Moral transformation suggests that perhaps the best way to pass by the donut box at work is to give away your spare change on the way to the office.

These findings also have implications for aging, suggesting a possible explanation for why those in caregiver roles live longer (Brown et al., 2009). Just as Rodin and Langer (1977) found

that elderly patients with more control live longer, it may be that those who do more moral deeds (e.g., by taking care of others) are imbued with agency not only for specific deeds but also for life in general. Future research should thus examine the power of moral deeds to improve not only instantaneous agency but also dispositional agency. Research might also examine whether moral deeds can encourage recovery in instances of depression by counteracting feelings of listlessness and powerlessness.

In sum, doing good does more than just makes us feel better: It gives people the personal strength to act more effectively and better achieve their goals. Of course, this research suggests that doing evil is also a route to agency, but whether one seeks to be an angel or a devil, there would appear to be power in moral deeds.

Acknowledgments

I thank the Social Sciences and Humanities Research of Council of Canada and the Institute for Humane Studies fellowships for financial support. For assistance with data collection, I thank Lillian Asaph, Stav Atir, Jordan Axt, Matthew Benage, David Caparrelli, Mika Chance, Angela Chouinard, Katherine Flaschen, Alex Hacker, Bridget Haley, Jason Popps, Traci Schneider, Dan Schreff, Julianne Smith, Mike Spinelli, Dorian Storbeck, Liz Victor, and Adrian Ward. For helpful advice, I thank Wendy Mendes, Kristen Lindquist, Lisa Barrett, Anna Jenkins, Dan Wegner, and three anonymous reviewers.

Declaration of Conflicting Interests

The author(s) declared no conflicts of interest with respect to the authorship and/or publication of this article.

Financial Disclosure/Funding

The author(s) disclosed receipt of the following financial support for the research and/or authorship of this article: The Social Sciences and Humanities Research Council of Canada and the Institute for Humane Studies provided financial support.

References

Bandura, A. (1997). Self-efficacy: The exercise of control. New York, NY: Freeman.

Bargh, J. A., Chen, M., & Burrows, L. (1996). Automaticity of social behavior: Direct effects of trait construct and stereotype activation. *Journal of Personality and Social Psychology*, 71(2), 230-244.

Barsalou, L. W. (1999). Perceptions of perceptual symbols. *Behavioral and Brain Sciences*, 22(4), 637-660.

Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology*, 5(4), 323-370.

Bem, D. J. (1967). Self-perception: An alternative interpretation of cognitive dissonance phenomena. *Psychological Review*, 74(3), 183-200.

Breese, D. (2008, May 29). Son lifts car off father's chest. *Alaska Star*, p. A1.

- Brown, S. L., Smith, D. M., Schulz, R., Kabeto, M. U., Ubel, P. A., Poulin, M., & Langa, K. M. (2009). Caregiving behavior is associated with decreased mortality risk. *Psychological Science*, 20(4), 488-494.
- Dunn, E., Aknin, L. B., & Norton, M. I. (2008). Spending money on others promotes happiness. Science, 319(5870), 1687-1688.
- Fazio, R. H., Effrein, E. A., & Falender, V. (1981). Self-perceptions following social interactions. *Journal of Personality and Social Psychology*, 41(2), 232-242.
- Galinsky, A. D., Gruenfeld, D. H., & Magee, J. C. (2003). From power to action. *Journal of Personality and Social Psychology*, 85(3), 453-466.
- Gray, H. M., Gray, K., & Wegner, D. M. (2007). Dimensions of mind perception. *Science*, 315(5812), 619.
- Gray, K., & Wegner, D. M. (2009). Moral typecasting: Divergent perceptions of moral agents and moral patients. *Journal of Personality and Social Psychology*, 96(3), 505-520.
- Lammers, J., Stoker, J. I., & Stapel, D. A. (2009). Differentiating social and personal power: Opposite effects on stereotyping, but parallel effects on behavioral approach tendencies. *Psychological Science*, 20(12), 1543-1549. doi:10.1111/j.1467-9280.2009. 02479.x.
- Mischel, W., Shoda, Y., & Rodriguez, M. L. (1989). Delay of gratification in children. Science, 244(4907), 933-938.
- Monin, B., & Miller, D. T. (2001). Moral credentials and the expression of prejudice. *Journal of Personality and Social Psychology*, 81(1), 33-43.

- Muraven, M., Tice, D. M., & Baumeister, R. F. (1998). Self-control as limited resource: Regulatory depletion patterns. *Journal of Personality and Social Psychology*, 74(3), 774-789.
- Rodin, J., & Langer, E. J. (1977). Long-term effects of a controlrelevant intervention with the institutionalized aged. *Journal of Personality and Social Psychology*, 35(12), 897-902.
- Sachdeva, S., Iliev, R., & Medin, D. L. (2009). Sinning saints and saintly sinners: The paradox of moral self-regulation. *Psychologi*cal Science, 20(4), 523-528. doi:10.1111/j.1467-9280.2009. 02326.x.
- Walster, E., Walster, G. W., & Berscheid, E. (1978). *Equity Theory and Research*. New York, NY: Allyn & Bacon.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development of validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063-1070.
- Williams, L. E., & Bargh, J. A. (2008). Experiencing physical warmth promotes interpersonal warmth. *Science*, 322(5901), 606-607.
- Zhong, C.-B., & Leonardelli, G. J. (2008). Cold and lonely: Does social exclusion literally feel cold? *Psychological Science*, *19*(9), 838-842.

Bio

Kurt Gray completed his PhD at Harvard University and is an Assistant Professor at the University of Maryland, College Park. He studies morality and mind perception, and their real-world implications.