

PERSONALITY PROCESSES AND INDIVIDUAL DIFFERENCES

Moral Identity and the Experience of Moral Elevation in Response to Acts of Uncommon Goodness

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Four studies using survey and experimental designs examined whether people whose moral identity is highly self-defining are more susceptible to experiencing a state of moral elevation after being exposed to acts of uncommon moral goodness. Moral elevation consists of a suite of responses that motivate prosocial action tendencies. Study 1 showed that people higher (vs. lower) in moral identity centrality reported experiencing more intense elevating emotions, had more positive views of humanity, and were more desirous of becoming a better person after reading about an act of uncommon goodness than about a merely positive situation or an act of common benevolence. Study 2 showed that those high in moral identity centrality were more likely to recall acts of moral goodness and experience moral elevation in response to such events more strongly. These experiences were positively related to self-reported prosocial behavior. Study 3 showed a direct effect on behavior using manipulated, rather than measured, moral identity centrality. Study 4 replicated the effect of moral identity on the states of elevation as well as on self-reported physical sensations and showed that the elevation mediates the relationship between moral identity, witnessing uncommon goodness, and prosocial behavior.

Keywords: morality, identity, moral identity, moral elevation, prosocial behavior

“The evil that men do lives after them; the good is oft interred with their bones.”—William Shakespeare, *Julius Caesar*

Conventional wisdom and daily experience hold that people remember the painful and traumatic moments in their lives more vividly and with greater accuracy than those that brought pleasure or joy. Most people can readily bring to mind the memory of

having been hurt, betrayed, or unfairly treated by another person. When they do so, they are often able to faithfully summon the feelings, the thoughts, and even the physical sensations that accompanied the event. But ask them to remember a time when someone showed kindness or generosity and they struggle to reclaim the full intensity of these happy moments. The features of human memory and cognition that lead people to recall the bad more easily than the good have been well-documented (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001). Moreover, the propensity of people to attend to the bad more than the good extends into the realm of social perception. When people judge others, they are more sensitive to signs of immorality than morality, both in what information they attend to and how they weigh that information (e.g., De Bruin & Van Lange, 2000; Reeder & Coovert, 1986; Wojciszke, Bazinska, & Jaworski, 1998). The causal attribution literature shows that negative behaviors exhibited by others have a greater impact than positive behaviors on how people perceive them (e.g., Birnbaum, 1974; Reeder & Brewer, 1979; Reeder & Coovert, 1986; Ybarra, 2001), and people often discount positive behaviors by attributing them to normative pressures or social desirability concerns rather than to internal states of goodness or virtue (Ybarra, 2002; Ybarra & Stephan, 1999).

As Shakespeare made plain, the evil that men and women do frequently leaves a more lasting stain on people’s consciousness than the good. But it is also true that people can sometimes be

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This research was supported by grants from the Social Sciences and Humanities Research Council of Canada awarded separately to Karl Aquino and Brent McFerran. We thank Julie Christine Marchand and Shelly Singh of Ipsos Interactive Custom Panels for their assistance, as well as Laurie Barclay, Miranda Abild, Kiran Nagra, David Fiset, and Susan Kuo for their help with data collection.

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moved and even transformed when they witness acts of extraordinary moral goodness. Psychologists have described the experience of being affected by such acts as a state of *moral elevation* (Haidt, 2000, 2003; Keltner & Haidt, 2003). Moral elevation consists of a distinctive feeling of warmth and expansion that is accompanied by admiration, affection, and even love for the person (or people) whose exemplary behavior is being observed (Haidt, 2000, 2003). Moral elevation has been likened to the aesthetic experience felt when one beholds a beautiful object or scene. But unlike purely aesthetic experiences, moral elevation can sometimes lead to behavioral changes, eliciting action tendencies associated with the desire to draw closer to other people and to show greater social responsiveness to the needs and interests of others (Haidt, 2000, 2003). Notably, this orientation characterizes what ethicists (e.g., Kant, 1959; Singer, 1981) and psychologists (e.g., Eisenberg, 2000; Gilligan, 1982; Kohlberg, 1969) have described as the defining feature of morality.

Our goal with the present research was to investigate whether some persons may be more susceptible than others to experiencing a state of moral elevation following exposure to examples of uncommon moral goodness. The variable we examine as a possible source of this increased susceptibility is *moral identity*. Moral identity has been defined as the degree to which a person's moral character is experienced as a central part of his or her overall self-concept (Aquino & Reed, 2002; Blasi, 1984). Moral identity has emerged as a useful construct in developmental, social, and organizational psychology for explaining various aspects of moral functioning (e.g., Aquino, Freeman, Reed, Lim, & Felps, 2009; Aquino, Reed, Stewart, & Shapiro, 2005; Blasi, 1980, 1984; Deter, Treviño, & Sweitzer, 2008; Hardy, Bhattacharjee, Reed, & Aquino, 2010; Lapsley & Lasky, 2001; Reynolds & Ceranic, 2007; Skarlicki, Van Jaarsveld, & Walker, 2008; Weaver, 2006). Several writers (e.g., Aquino & Freeman, 2009; Aquino & Reed, 2002; Blasi, 1984; Lapsley & Lasky, 2001) have argued that moral identity is a reliable determinant of moral behavior, and a growing body of empirical evidence supports this claim (see Shao, Aquino, & Freeman, 2008, for a review). There is also evidence that people for whom moral identity is an important basis for self-definition (vs. those for whom moral identity is of low importance) evaluate helping behaviors exhibited by others as being more caring, moral, and socially responsible (Reed, Aquino, & Levy, 2007). On the basis of empirical evidence and recent theoretical elaborations of moral identity's role in moral functioning (e.g., Aquino & Freeman, 2009), there are reasons to believe that it can partly explain people's responses to witnessing acts of uncommon moral goodness. We tested this possibility in four studies using different operationalizations of an act of uncommon goodness and measuring several internal states that theorists have associated with the experience of moral elevation.

Moral Elevation and Moral Identity

Haidt (2003) suggested that moral elevation, along with gratitude, is one of the moral emotions that he calls "other praising" (p. 863). Moral elevation shares properties with other emotions. For example, it results from an eliciting event, produces physical changes in the person, is a phenomenological experience, and motivates a certain type of action tendency (Ekman, 1992; Scherer, 1984; Shweder, 1994). Emotions have been described as consist-

ing of a suite of related components that include thoughts, feelings, motivations, and physical changes (Ekman, 1992; Izard, 1991). Among the thoughts and motivations that have been associated with moral elevation are the desire to become a better person and the wish to open one's heart to others (Keltner & Haidt, 2003; Silvers & Haidt, 2008). Algoe and Haidt (2009) also showed that moral elevation involves physical sensations like a warmth or pleasant feeling in the chest or a lump in the throat. Silvers and Haidt (2008) speculated that some of these sensations might be caused by the release of the hormone oxytocin, which rises in levels when people receive signals of trust (Zak, Kurzban, & Matzner, 2005). Arguably, seeing someone perform a virtuous act can be interpreted as a signal of trustworthiness, which could explain the link between witnessing such acts and the physiological sensations associated with moral elevation.

According to Haidt (2003), the components of the moral elevation experience initiate action tendencies like the wish to emulate the moral exemplar and to act prosocially. Algoe and Haidt (2009) provided empirical support for this hypothesis by showing that people who experience elevation are more likely to want to help others, give money to charity, and list prosocial actions when asked to write about their life goals. There is also evidence that moral elevation can suppress the effect of ideological beliefs that might otherwise discourage social responsiveness toward certain people. Freeman and his colleagues (Freeman, Aquino, & McFerran, 2009) showed that exposing people to acts of moral goodness led them to contribute more money to a charitable cause. Notably, they also showed that moral elevation led some White study participants (those high in social dominance orientation, or SDO) to override beliefs that might otherwise lead them to withhold donations to an outgroup cause (the United Negro College Fund, or UNCF). They found that Whites who scored high on SDO donated less money to the UNCF than did those who scored low; however, they also found that this relationship was attenuated when participants were exposed to a morally elevating act. Other prior studies have also established a causal link between moral elevation and prosocial behavior (e.g., Algoe & Haidt, 2009; Schnall, Roper, & Fessler, 2010). Although we expected to replicate this finding in this research, we also sought to learn whether moral identity can influence the intensity of the moral elevation experience and whether this experience mediates the relationship between moral identity and prosocial behavior.

Moral identity is one of many possible identities that a person can use as a basis for self-definition (Aquino & Reed, 2002). There is growing evidence that this particular identity plays a key role in moral functioning by influencing how people interpret and respond to situations involving moral judgment and choice (Shao et al., 2008). Blasi (1984) described moral identity as an individual difference reflecting the degree to which being moral is a central or defining characteristic of a person's sense of self. According to Blasi (1984), the felt obligation to engage in a moral action is directly related to moral identity through the desire to maintain self-consistency. Aquino and his colleagues (Aquino et al., 2009; Aquino & Reed, 2002; Aquino & Freeman, 2009) proposed a social cognitive model of moral identity that defines this construct as a self-schema organized around a set of moral trait associations (e.g., honest, caring, compassionate). Following other theorists (e.g., Blasi, 1980, 2004; Lapsley & Lasky, 2001), Aquino and Reed (2002) argued that people differ in the degree to which moral

identity is experienced as being central to their overall self-definition. From a social cognitive perspective, this difference implies that the moral self-schema is more cognitively accessible for some persons than others (Lapsley & Narvaez, 2004). Evidence supports the utility of a schema-based conceptualization of moral identity (Aquino & Reed, 2002; Aquino, Reed, Thau, & Freeman, 2007; Olsen, Eid, & Johnsen, 2006; Reed & Aquino, 2003; Reed et al., 2007; Reynolds & Ceranic, 2007).

An assumption of Aquino et al.'s (2009) social cognitive model is that certain situations can increase the cognitive accessibility of a person's moral identity. For example, they showed that priming moral identity by asking people to recall the Ten Commandments made moral identity relatively more salient than other identities, which, in turn, influenced peoples' behavioral intentions to act morally. However, other research (e.g., Aquino & Reed, 2002) also suggests that moral identity is more chronically active for some people than others, meaning that it tends to be readily available for processing and acting on social information. Studies by Aquino and his colleagues (Aquino et al., 2009; Aquino & Reed, 2002) provide empirical evidence supporting both of these claims. What is missing from their social cognitive model is consideration of whether its accessibility can influence reactions to seeing others' behavior. The social cognitive principle that peoples' identity schemas can affect their interpretation of social information (e.g., Fiske, 1992; James, 1890/1983; Smith & Semin, 2007) supports such a possibility, but no previous research has made this argument or tested it empirically in the context of witnessing acts of uncommon goodness. We conduct a first test of this conjecture by hypothesizing that a person's moral identity can influence his or her responses to being exposed to such acts.

Reed and his colleagues (Reed et al., 2007) provided an empirical basis for making this prediction. In one of the studies reported in their article (Study 2), they asked participants to evaluate the actions of a fictional company that organized a program for employees to volunteer 5,000 hr to a community outreach organization that provides free job training to unemployed workers. They showed that people whose moral identity was more rather than less central to their self-concept evaluated the company's actions as being more caring, moral, and socially responsible. One interpretation of their finding is that moral identity influenced the degree to which people saw the company as being concerned about the needs of others. It is interesting that Reed et al. (2007) found that moral identity did not predict evaluations of a fictional company that donated money to the same outreach organization. They interpreted this result as showing that people assign greater moral weight to giving one's time or effort to a moral cause than to simply giving money. We extend Reed et al.'s (2007) findings by proposing that when people are exposed to acts of uncommon moral goodness, those whose moral identity is more central to their self-definition assign greater psychological weight, relevance, and value to these actions compared with people whose moral identity is less self-defining. As a result, the former will experience a heightened state of moral elevation relative to the latter.

By testing whether moral identity can influence peoples' responses to acts of uncommon moral goodness, we make an important theoretical refinement to Aquino et al.'s (2009) social cognitive model by showing how exposure to a particular type of social behavior—extraordinary moral goodness—can elicit a suite of responses from people whose moral identity occupies a central role in their self-

concept. In turn, these responses act as a motivational impetus for prosocial behavior. By testing these relationships, we specify a psychological mechanism (moral elevation) that connects the interaction of moral identity and observations of others behavior to prosocial motivation, a connection Aquino and his colleagues (Aquino et al., 2009) did not make. What our article shares with their social cognitive model is that they both adopt an identity-situation framework as a basis for explaining some aspects of moral functioning.

Aquino and Reed's (2002) conceptualization of moral identity as a chronically accessible schema posits that it consists of two dimensions, one of which reflects a private experience of moral identity centrality,¹ which they call *internalization*, and the other its public expression, which they call *symbolization*. These dimensions correspond to theories of the self that posit that self-awareness can be characterized by an internal introspective awareness of one's inner thoughts and feelings and an externally and active self as a social object that impacts others (Fenigstein, Scheier, & Buss, 1975). Prior research shows that both dimensions of moral identity exhibit positive relationships with various morally relevant constructs. For example, symbolization has been found to be positively related to religiosity, volunteerism, charitable giving, and the willingness to aid outgroups (Aquino & Reed, 2002; Reed & Aquino, 2003; Reynolds & Ceranic, 2007). Internalization has been positively related to moral reasoning, volunteering, satisfaction from volunteering, and donating cans of food to the needy (Aquino & Reed, 2002; Reynolds & Ceranic, 2007). We expected the two dimensions of moral identity to show the same directional relationship to many kinds of moral outcomes; however, in the specific case of peoples' responses to witnessing an act of uncommon moral goodness, we hypothesized that the internalized facet (moral identity centrality) would be a more robust predictor of these responses than the symbolic facet. We speculated that this would occur because the internalized facet should, by logical inference, be more closely connected to subjective, private states or experiences like moral elevation than would symbolization, its publicly oriented counterpart. Accordingly, we hypothesized that the interaction of exposure to acts of uncommon goodness and the internalization dimension of moral identity would explain more variance in moral elevation than would the interaction of exposure to the same act and the symbolization dimension of moral identity.

Overview of Studies

We tested our hypotheses in four studies. In Study 1, we tested whether moral identity interacts with exposure to an act of uncommon moral goodness to predict emotions and thoughts associated with moral elevation. In Study 2, we tested whether moral identity predicted the likelihood that people would recall having witnessed an act of uncommon moral goodness as well as the intensity of moral elevation responses to such acts. Study 2 also tested whether the state of moral elevation mediated the relationship between moral identity and self-reported prosocial motivation. Study 3 provided causal evidence for the role of moral identity centrality by manipulating rather than measuring it. Study 3 also tested

¹ Following Aquino et al. (2009), we treat the internalization dimension of moral identity in Aquino and Reed's (2002) model as being synonymous with the concept of moral identity centrality. Therefore, we use them interchangeably throughout the article.

whether the interaction of moral identity and exposure to an act of moral goodness could motivate actual behavior. Finally, Study 4 provided evidence that moral elevation mediates the relationship between the interaction of moral identity and exposure to acts of uncommon goodness and prosocial behavior.

Study 1

We hypothesized that people high in moral identity would experience a stronger moral elevation experience when exposed to an act of uncommon goodness than would people who were low in moral identity. However, we did not expect moral identity to influence elevation-related responses after exposure to stimuli that elicit positive but nonmoral emotions or to behavior that represents a more common example of moral goodness. Finally, we expected the interaction between the internalization dimension of moral identity and exposure to uncommon goodness to be a stronger predictor of moral elevation than the interaction between symbolization and such exposure.

Method

Sample and procedure. Four hundred thirty-six undergraduate students (226 men, 209 women, 1 not reported) from a Canadian university participated in the study for partial course credit. They averaged 20.2 ($SD = 2.10$) years of age. Data were collected using an online survey. Participants were recruited for a study titled "Understanding Reactions to the Media" and were told the study was investigating "how individuals react to newspaper articles." The study consisted of two parts. In the first part, participants were asked to complete measures of moral identity and demographic information. The second part contained the manipulation, with participants being randomly assigned (between subjects) to one of four groups.

Experimental manipulation. The design was a between-subjects experiment in which participants in each of four conditions read a one-page news story. Two of the stories were taken from a study by Freeman et al. (2009) and were designed to elicit either moral elevation or nonmoral but positive emotions. One of the stories has been shown to more effectively elicit moral elevation than the other (Freeman et al., 2009). In the *uncommon goodness* (UG) story condition, participants read about how an Amish community responded with extraordinary grace and forgiveness after Charles Roberts opened fire in an Amish schoolhouse, killing five girls and injuring another five before killing himself. The story described how hours after their children were killed, several Amish went to see Roberts's widow to offer forgiveness and express sympathy and later offered financial assistance to her and her children. In the *positive emotion* (PE) condition, the news story described the reactions of a couple to viewing a sunset over the ocean that was "absolutely incredible." To ensure that the story seemed newsworthy, the couple was quoted as saying, "I've just never seen anything like that . . . witnessing that kind of thing has the effect of changing people's lives forever."

The Amish story of forgiveness is an act of uncommon goodness that is rare by definition. However, it may be that exposure to more common forms of benevolence might be sufficient to elicit elevation, particularly among people high in moral identity. We tested this possibility by including two additional story conditions

in our design. The first was a *common goodness non-Amish* (CGNA) condition where participants read a real news story about Goodness Grows, a group that created and maintains a community garden for their neighborhood and has a plot set aside to grow food for another group that cooks meals for the homeless. The second was a *common goodness Amish* (CGA) condition where participants read a real article about how the Kentucky Amish helped their neighbors during an extended power outage, providing kerosene lamps and making their neighbors coffee each morning. Featuring the Amish engaging in an act of common goodness made this story more directly comparable to the UG story. After they read each story, participants completed several measures assessing the extent to which they experienced moral elevation.

Measures.

Moral identity. We measured moral identity using a 10-item instrument developed by Aquino and Reed (2002) that was designed to assess the importance of this identity to the self. Their instrument is based on a conceptualization of moral identity as a schema organized around a set of moral trait associations (e.g., compassionate, kind, honest) and loads consistently on two dimensions, which they labeled *internalization* and *symbolization*. Respondents answered each item on a 7-point Likert-type scale (1 = *strongly disagree*, 7 = *strongly agree*). Sample items for the internalization subscale include "Being someone who has these characteristics is an important part of who I am" and "I strongly desire to have these characteristics." The symbolization subscale consists of items that include "I am actively involved in activities that communicate to others that I have these characteristics" and "The types of things I do in my spare time (e.g., hobbies) clearly identify me as having these characteristics." Reliabilities were $\alpha = .85$ and $\alpha = .80$ for internalization and symbolization, respectively.

Moral elevation. The state of elevation consists of several related components (Haidt, 2000, 2003). We assessed the *emotional component* by asking participants to rate on a 5-point scale (1 = *not at all*, 5 = *very much*) how much they felt the following emotions after reading the news story: compassion, inspired, awe, and admiration. The scores were then averaged ($\alpha = .78$). The items have been used previously (Freeman et al., 2009) and are consistent with the emotions that Haidt (2000, 2003) described as resulting from witnessing acts of uncommon moral goodness. We also assessed whether reading the story influenced participants' views of humanity in general and whether it increased their desire to be a better person (Freeman et al., 2009). It has been suggested that exposure to morally virtuous acts can lead people to adopt a more positive view of humanity (Haidt, 2000, 2003). *Views of humanity* were assessed with the following items: "There is still some good in the world," "People are really good," "The world is full of kindness and generosity," "The actions of most people are admirable," and "What a nice person (or what nice people)." Respondents answered on a 5-point scale (1 = *never*, 5 = *always*), and their responses were averaged ($\alpha = .86$). According to Haidt (2000, 2003), the state of moral elevation is likely to involve at least a temporary desire to be a better person, and higher levels should be indicative of having experienced a more intense state of moral elevation. *Desire to be a better person* was assessed with six items: "I want to be more like the person/people in the story," "The person/people in the story have shown me how to be a better person," "I am going to try to follow the story's example," "I need to do more to help other people," "I can learn a lot from the

person/people in the story,” and “The person/people in the story are my new role models.” Participants responded to these items by indicating on a 5-point scale, ranging from 1 = *never* to 5 = *always*, how often they had (or were still having) these thoughts while reading the story. Items were averaged to form a scale ($\alpha = .90$).

Positive emotions. We assessed whether participants experienced the following positive but nonmoral emotions: joy, pleasure, and enthusiasm (1 = *not at all*, 5 = *very much*). We assessed these emotions to demonstrate that the effects of moral identity on the emotional component of elevation would occur only for moral emotions and not positive emotions in general. The three nonmoral emotions were averaged to form a scale ($\alpha = .84$).

Control variables. In this and all subsequent studies, we controlled for gender (1 = male, 2 = female) to account for possible differences in the value men and women place on acts of caring or benevolence (Gilligan, 1982). We included the measure of positive emotions as a control variable so that we could examine whether the moral elevation components explained additional variance in our dependent variables above and beyond these emotions.²

Results

Descriptive statistics for the study variables are shown in Table 1. We tested the effectiveness of our manipulations by creating an aggregated moral elevation variable consisting of the three measured components. The three elevation measures were on different scales, so we first standardized them before summing them for analysis. An analysis of variance involving the four story conditions performed on the aggregate moral elevation variable revealed only a difference between the merely positive story ($M_{PE} = -.22$, $SD = .86$) and all three treatment conditions ($M_{CGNA} = .23$, $SD = .75$; $M_{CGA} = .03$, $SD = .82$; $M_{UGA} = .01$, $SD = .82$; all $ps < .04$; ds ranged from 0.28 to 0.55), none of which differed significantly from each other.

Hierarchical regression analysis was used to test the hypothesized interaction of moral identity and exposure to uncommon goodness. Gender and positive emotions measures were entered in Step 1. The internalization and symbolization subscales and the dummy-coded main effects for the CGNA, CGA, and UG stories were entered in Step 2. The PE condition was treated as the reference category. In Step 3, we entered the two-way interactions involving the two dimensions of moral identity and the CGNA story. Step 4 added the two-way interactions involving the moral identity dimensions and the CGA story. Finally, we entered the two interactions involving the moral identity dimensions and the UG story in Step 5. We entered and tested the interaction terms in this order to conduct a conservative test of our hypothesis. By entering the focal interaction terms last in our model, we can conclude that any variance explained by the focal interactions is above and beyond that which is accounted for by general positive emotion and the other interactions involving common goodness (measured by ΔR^2 and significant coefficients). All interaction terms were mean centered to reduce multicollinearity (Aiken & West, 1991). Results are shown in Table 2.³

We first performed separate regression analyses for each of the elevation components. In all of these regressions, the incremental variance in R^2 in the final step of the regression was significant (all $ps < .04$). Inspection of the individual interaction terms in the final step showed that the hypothesized Internalization \times UG Story interaction was significant in all four models (all $ps < .03$). Analysis of

simple slopes (Aiken & West, 1991) of the significant interactions revealed that the general pattern among the components of elevation was identical, namely, a stronger relationship among those high versus low in moral identity centrality. For this reason, and to simplify the presentation of our results, we performed regression analysis on the aggregated moral elevation measure. Aggregation is further justified by the relatively high intercorrelations among the components, which ranged from .52 to .54 (all $ps < .001$).

A five-step regression analysis on the aggregated measure found that the interactions involving internalization or symbolization and the two conditions featuring stories of common goodness did not explain significant incremental variance. However, in the final step, significant additional variance was explained ($\Delta R^2 = .02$, $p < .001$). Inspection of the individual interaction terms showed that the interaction between internalization and the elevating story manipulation was significant, $B = 0.39$, $SE = 0.10$, $t = 3.79$, $p < .001$. The results of this analysis are shown in Table 2.

Analysis of simple slopes for the interaction predicting the aggregated measure of moral elevation replicated the patterns found when we analyzed each elevation component separately. Participants who were high in internalization experienced greater moral elevation after reading the UG story than the merely positive one ($B = 1.03$, $SE = 0.13$, $t = 8.17$, $p < .01$), whereas those low in internalization experienced significantly less elevation, but the slope was still positive ($B = 0.34$, $SE = 0.13$, $t = 2.71$, $p < .01$).

We conducted a hierarchical regression on the positive but nonmoral emotions to see whether our findings for elevation would replicate. They did not. Results showed that moral identity and the story about uncommon goodness did not interact to predict positive emotions ($p > .33$), indicating that participants high in internalization were not simply experiencing more general positive emotion in response to the uncommon goodness story.

Discussion

Study 1 supported our hypothesis that when exposed to an act of uncommon moral goodness, people whose moral identity was more central to their self-definition, as indicated by their score on the internalization dimension of Aquino and Reed's (2002) measure, would report stronger moral elevation responses than would those whose moral identity was less central. It is important to note that the interaction of moral identity and experimental condition was found only when people were presented with a story of uncommon moral goodness and not when they read a story about more mundane moral behaviors or a beautiful sunset.⁴ Of the two dimensions of moral identity measured by Aquino and Reed's

² Removing positive emotions as a covariate does not alter the interpretation of the results across the studies.

³ For brevity, we present only the aggregated variable. Full results at each step of the regression are available from the authors. Only the Internalization \times UG Story interaction replicates and explains incremental variance for each subcomponent. Full results are available on request.

⁴ Because the UG story did not elicit higher baseline levels of elevation as a main effect, it remains possible that those low in moral identity view the UG story through the lens of tragedy (the massacre) rather than the uplifting act, which is why the this condition's main effect mean is not higher than that in the CGNA or CGA treatment conditions. Future research should examine this possibility.

Table 1
Study 1 Descriptive Statistics and Correlations Among Key Variables

Variable	<i>M</i> (scale max)	<i>SD</i>	1	2	3	4	5	6	7	8
1. Moral elevation (aggregate measure)	0.00 (<i>Z</i> score)	0.83	—	.82**	.83**	.83**	.54**	.16**	.30	.26**
2. Elevation emotions	3.22 (5)	0.96		—	.52**	.53**	.53**	.14**	.23**	.18**
3. Views	3.41 (5)	0.78			—	.54**	.44**	.12*	.29**	.24**
4. Desire	2.60 (5)	0.92				—	.37**	.11*	.25**	.23**
5. Positive emotions	2.57 (5)	1.13					—	.09*	.22**	.21**
6. Internalization	6.15 (7)	0.89						—	.43**	.26**
7. Symbolization	4.50 (7)	1.00							—	.24**
8. Gender	1.48 (2)	0.50								—

Note. *N* = 436. For gender, 1 = male, 2 = female.

* *p* < .05. ** *p* < .01.

(2002) instrument, we found that only the internalization dimension amplified the elevation states of participants who we exposed to an act of uncommon moral goodness. This finding is consistent with our theoretical expectations and makes logical sense given that the internalization dimension has been conceptualized by Aquino and Reed (2002) as representing the private aspect of moral identity. It should therefore be more closely associated with constructs that are experienced internally rather than projected externally.

Study 1 supported our hypothesized interaction of moral identity and exposure to an act of uncommon moral goodness, but a limitation of the study is that it did not provide any evidence for the possible consequences of moral elevation, namely, that it should motivate people to be more prosocial. We conducted Study 2 to investigate this possibility using a representative sample of adults who recalled a time when they witnessed an act of uncommon moral goodness. We also explored whether the two dimensions of moral identity predict whether people whose moral identity was more central to their self-definition would more easily recall such an act. If so, it would suggest that moral identity can explain not only immediate responses to uncommon goodness but perhaps the longer term encoding and cognitive accessibility of exemplary moral behaviors in memory.

Study 2

We tested three hypotheses in Study 2. First, we hypothesized that people who are high rather than low in moral identity internalization would be more likely to recall witnessing an act of uncommon moral goodness. Second, we expected moral identity internalization to be positively and more strongly related to the intensity of the moral elevation experience for people who recalled witnessing uncommon goodness compared with symbolization. Third, we hypothesized that moral elevation would be positively related to the motivation to act prosocially as a result of witnessing the elevating act.

Method

Sample and procedure. The sample for Study 2 was obtained from the Ipsos Opinion Panel, which includes 1,450 Canadian adult panelists. The sample is representative of the Canadian population on the basis of gender, age, region, income, and language. By using a representative sample, we increase the potential generalizability and external validity of our findings. Respondents were invited to join the panel by completing a short online profiling questionnaire. An invitation to complete the survey online was

Table 2
Study 1 Hierarchical Multiple Regression Results (Aggregate Elevation Measure Only)

Predictor	Step 1	Step 2	Step 3	Step 4	Step 5
Gender	.26**	.19**	.19**	.20**	.18**
Positive emotions	.37**	.45**	.45**	.46**	.47**
Common goodness non-Amish (CGNA)		.41**	.42**	.42**	.43**
Common goodness Amish (CGA)		.04	.04	.04	.05
Uncommon goodness (UG)		.68**	.69**	.68**	.69**
Internalization (Int)		.00	-.04	.02	-.16*
Symbolization (Sym)		.13**	.15**	.11*	.13
Int × CGNA			.15	.09	.27**
Sym × CGNA			-.08	-.04	-.06
Int × CGA				-.22**	-.04
Sym × CGA				.13	.11
Int × UG					.39**
Sym × UG					.05
ΔR^2		.13**	.00	.01	.02**
Model <i>R</i> ²	.32	.45	.45	.46	.48

Note. Unstandardized regression weights are presented.

* *p* < .05. ** *p* < .01.

sent to all panelists with the opportunity to win a \$500 cash prize, which was awarded through a random draw of the individuals who participated in the survey. Ipsos fielded the questionnaire and made the results available to us for analysis. Four hundred forty-three panelists fully completed the survey, which is a response rate of approximately 31%. The response rate may have been slightly lower than average given the longer length of the survey and because it was launched around the mid-December holiday season.

Respondents ranged in age from 21 to 74 years ($M = 48.7$ years, $SD = 11.6$). Of the sample, 51.9% were female and 73.8% were currently employed (60.0% full time, 13.8% part time). Of the two official languages, respondents primarily identified themselves as English speaking (83.3%), with the remainder (16.7%) indicating that they primarily spoke French. Most respondents had at least some postsecondary education (77.6%).

Participants were first asked the following question:

At one time or another many of us have witnessed an unexpected and extraordinary act of human goodness, kindness, or compassion. We are often exposed to such events in movies, television, news magazines, or books. In this study, we are interested in finding out whether people also witness such events in their own lives. If you have witnessed such an act of goodness, it may have left you feeling more or less positive about yourself and your environment, or it may have had no effect at all.

Take a moment to think of the most recent time you observed such an act being performed. Try to imagine the place, the circumstances, and the person or persons involved in the event. When you have brought these images to mind, answer the following questions about your experience. Please be as specific as possible when providing your answers. Have you ever experienced such an event?

Participants who recalled a morally elevating event were asked to provide further details about the elevating event to increase its salience; namely, when it occurred, a brief description of the event, and information—such as gender, age, and relationship to the respondent—about the primary person(s) who performed the act. This was followed by measures of moral elevation and various prosocial behaviors they might have engaged in as a result of witnessing the event they described. Finally, participants completed the moral identity scale and questions regarding basic demographic information (including age, gender, occupation, and education).

Measures.

Event experience. Participants were asked to indicate whether they had witnessed an event that fit the description of a morally elevating experience (0 = no, 1 = yes). They were also given space to type a short description of the event.

Moral identity. We used the same measure as we did in Study 1. Cronbach's alpha reliabilities were .86 and .77 for the internalization and symbolization subscales, respectively.

Moral elevation. We assessed whether the event participants described elicited the emotional component of elevation with the same four emotions items used in Study 1 ($\alpha = .74$). To reflect the more general events participants described, the items for views of humanity and desire to be a better person were modified slightly. Four items regarding views of humanity were assessed on a 5-point Likert-type scale (1 = *never*, 5 = *always*): "What a nice person," "There are still a few good people out there," "That was an extremely charitable act," and "There is still some good in the world." Items were averaged to form a scale ($\alpha = .82$). Desire to be a better person was assessed with five items: "I want to follow

that example," "Would I have done the same?" "How good a person am I?" "Are my priorities in order?" and "I want to be a better person." Items were answered on a 5-point Likert-type scale (1 = *never*, 5 = *always*) and averaged ($\alpha = .82$).

Positive emotions. The items used in Study 1 were also used in this study to measure positive emotions ($\alpha = .86$).

Motivation to act prosocially. We assessed whether participants felt motivated to engage in prosocial behavior as a direct result of witnessing the morally elevating event with three items: "As a result of this experience, I felt more (or less) like doing good for others/helping someone in need/caring for people less fortunate than me" (1 = *much less*, 5 = *much more*). Items were averaged to form a scale ($\alpha = .84$).

We performed a confirmatory factor analysis on all of the items described above to assess the dimensionality of our measures of elevating emotions, views of humanity, desire to be a better person, prosocial behavior, and positive emotions. The results of the CFA showed that all of the items loaded on their expected factors, and the five-factor model exhibited adequate fit, $\chi^2(142) = 316.33$, $p < .05$, comparative fit index (CFI) = .91, root-mean-square error of approximation ($RMSEA$) = .05.

Control variables. Our sample consisted of a diverse group of adults, so we controlled for a number of variables that might influence the likelihood of an elevating experience in the IPSOS panel. As in Study 1, we controlled for gender and positive emotions. We controlled for age because developmental differences in moral maturity and life experience might make older people more sensitive to moral acts (Kohlberg, 1969; Puka, 1994). Age could also be associated with the probability of witnessing such acts, because it is logical to assume that the longer one is alive, the greater one's chances of having observed a wide range of social behaviors. Finally, we controlled for the length of time that had lapsed since the event occurred, given that it may be that events that occurred in the more distant past might be recalled as being less impactful. This variable was measured with the single item "If you can recall such an act, how long ago did it occur?" (1 = *less than one week ago*, 2 = *two weeks to three months ago*, 3 = *four to eight months ago*, 4 = *nine to twelve months ago*, 5 = *more than twelve months ago*).⁵

Results

Table 3 shows the descriptive statistics and correlations for the Study 2 variables.

Event experiences. Of the 443 participants, 214 (48.3%) witnessed an event of moral goodness, with the majority of them occurring within the past 3 months (47.2%). After indicating whether they recalled such an event, participants briefly described it. Examples of event descriptions are as follows:

My aunt met a man at work (she barely knew him) who had just found out he had AIDS—he had no family at all. When he started getting ill and was in the hospital, she went to see him regularly until he passed away.

⁵ The inclusion (or exclusion) of the control variables has no impact on any of our findings and does not significantly improve model fit. Of the control variables, only gender had any effect, $B = 0.12$, $SE = 0.07$, $p < .05$ (women had stronger reactions), and so, for clarity and parsimony, we present the model without the controls.

Table 3
Study 2 Descriptive Statistics and Correlations Among Key Variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11
1. Moral elevation	0.00	0.80	—	.75**	.87**	.78**	.55**	.51**	.20**	.18**	.29**	.21**	-.03
2. Elevation emotions	3.86	0.89		—	.53**	.30**	.40**	.57**	.10	.11	.10	.21**	.18**
3. Views	4.16	0.81			—	.58**	.47**	.43**	.23**	.30**	-.09	.26**	.17*
4. Desire	3.48	0.86				—	.47**	.30**	.16*	.15*	-.08	.22**	.16*
5. Prosocial behavior	3.91	0.62					—	.29**	.23**	.13	-.10	.26**	.14*
6. Positive emotions	3.46	1.21						—	.09	.10	-.11	.13*	.15*
7. Gender	1.58	0.50							—	-.08	-.21**	.26**	.23**
8. Age	48.05	11.34								—	.06	.20**	.13
9. When occurred	3.07	1.62									—	-.02	-.16*
10. Internalization	6.23	0.84										—	.45**
11. Symbolization	4.54	1.10											—

Note. *N* = 443. For gender, 1 = male, 2 = female.
* *p* < .05. ** *p* < .01.

One of our compatriots has had to take a leave without pay to look after her dying daughter. She has no savings and is a single mother who works hard to look after her family. One of us, who is very shy and rarely takes part in anything of a social nature, took it upon herself to make sure this woman has enough for rent and necessities.

A good friend [. . .] who had plans to travel the world and live life big has taken custody of [a] 5-month-old baby whose natural parents was on heroin. I thought she was crazy, but this baby has brought a new meaning to her life.

Hypothesis tests. We performed a logistic regression with the control variables of gender and age included and the two moral identity subscales to test the likelihood of recalling or experiencing the event. Results indicated that high scores on internalization increased the likelihood of reporting an elevating event ($B = 3.14$, $SE = 0.12$, $p = .01$), but neither scores on symbolization nor any of the control variables were significant predictors of recall. This result supported our hypothesis that examples of uncommon moral goodness were more readily accessible for people higher versus lower in moral identity centrality.

We conducted a path analysis using simultaneous regression to test our hypotheses that moral identity internalization is positively related to the experience of moral elevation and that moral elevation is positive related to the motivation to act prosocially. We chose path analysis as our method for testing these hypotheses because we wanted to account for the interrelationship between the two dimensions of moral identity when testing for mediation.⁶ We used manifest indicators rather than taking a latent structural model approach because our relatively small sample size (only the people who reported witnessing a morally elevating event could be included) would result in a ratio of respondents to indicators of less than 10:1, which can reduce the power of our tests in an structural equation modeling framework (Chin, 1998).

We estimated a path model that included the three elevation components as mediators of the two dimensions of moral identity and prosocial behavioral intentions (see Figure 1). The two dimensions of moral identity were permitted to covary, as were the disturbance terms for the three mediating variables. This model fit the data well, $\chi^2(2) = 3.65$, $p = .16$, $CFI = .995$, $RMSEA = .04$. The paths from internalization to elevating emotions ($B = 0.19$, $SE = 0.07$, $p < .01$), views of humanity ($B = 0.22$, $SE = 0.06$, $p <$

.001), and desire to be a better person ($B = 0.19$, $SE = 0.07$, $p < .01$) were all significant, whereas none of the paths from symbolization reached significance (all $ps > .14$). It is important to note that the paths from these variables to prosocial behavior were all significant ($B = 0.13$, $SE = 0.05$, $p < .01$, for elevating emotions; $B = 0.16$, $SE = 0.06$, $p < .05$, for views of humanity; $B = 0.21$, $SE = 0.06$, $p < .001$, for desire to become a better person), supporting our hypotheses.

We tested for mediation in a path-analytic framework by comparing the proposed path model with alternative models that specified a direct path from internalization to prosocial behavior and from symbolization to prosocial behavior. The results of these analyses showed that neither of the additional paths significantly improved the fit of the model over the original structural model. Including a direct path from internalization did not statistically improve the fit, $\chi^2(1) = 0.218$, χ^2 difference test $p > .05$, nor did a second model that included a direct path from symbolization to behavior, $\chi^2(1) = 3.53$, χ^2 difference test $p > .70$. These results indicate that the relationship between the internalization dimension of moral identity and prosocial behavior was fully mediated through the states associated with moral elevation. Results from Sobel tests verified this conclusion and were significant for each of the three paths: emotional component (Sobel $Z = 2.02$, $p = .04$), views of humanity (Sobel $Z = 2.14$, $p = .03$), and desire to be a better person (Sobel $Z = 2.37$, $p = .02$).⁷

Discussion

Study 2 supported our hypothesis that people who witnessed an example of uncommon moral goodness would report stronger elevation-related reactions to the event if they were high rather

⁶ The results are identical if conducted when the parameters are estimated separately and mediation conducted sequentially, using the methods described by Baron and Kenny (1986).

⁷ Standardizing and combining the three elevation components into the aggregated measure reported in Study 1 and running the mediation test results in even stronger effects (Sobel $Z = 3.68$, $p < .001$) that are consistent with treating the components separately. We chose to present the path analytic model involving individual components so that interested readers would be able to see the specific relationship between moral identity and each of the components.

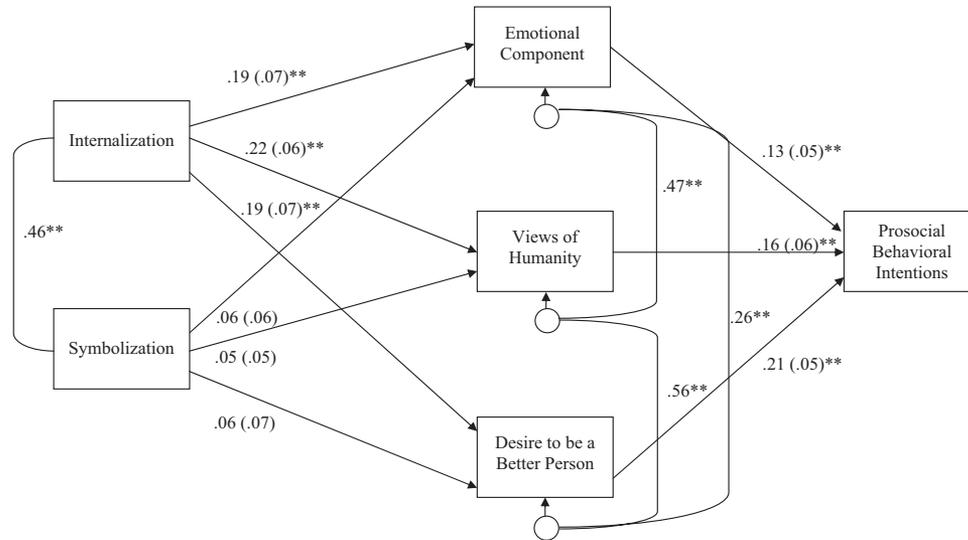


Figure 1. Study 2 model. * $p < .05$. ** $p < .01$.

than low in moral identity internalization. Study 2 also showed that these elevation states were associated with the motivation to engage in prosocial behavior as a result of the elevating event. Finally, Study 2 showed that people who were higher in moral identity internalization were more likely to recall an event that fit the description of a morally elevating act. Together, these results provide evidence that experiencing moral elevation is positively related to behaviors that demonstrate social responsiveness to the needs and interests of others but that the susceptibility to experience the states associated with elevation are influenced by moral identity.

Despite evidence supporting our hypotheses, Study 2 has limitations. First, it relied on peoples' retrospective accounts to assess the relationship between moral identity and the states associated with elevation. This approach does not provide strong causal evidence that witnessing an act of uncommon goodness elicits these states of elevation or, if they do, that they are likely to be stronger among people whose moral identity is more rather than less self-defining. Second, although the use of a highly representative field sample of citizens increases the generalizability of our findings, it introduces the possibility that unmeasured variables associated with the contexts in which these respondents frequently interact with others could influence our results. Third, the kind of act of uncommon goodness that people experienced was not identical across respondents because we asked them to select their own example of the event. This feature of Study 2 raises the question of whether our findings might be explained by the kind of experience people recalled rather than by the theoretical mechanisms we hypothesized. Finally, we did not measure actual behavior but only the self-reported motivation to act prosocially. Study 1 addresses the first three limitations. We conducted Study 3 to address all four concerns by using an experimental design and measuring actual behavior. We also wanted to demonstrate that our findings would be replicated when we experimentally manipulated the accessibility of moral identity via a priming manipulation (see Aquino et al., 2009) rather than measuring it.

Study 3

The purpose of Study 3 was to test whether priming moral identity would increase prosocial behavior when people were exposed to an act of uncommon goodness but not when they were exposed to a positive but nonmoral event. We hypothesized that people would be most likely to act prosocially when (a) their moral identity is highly accessible and (b) they are exposed to an act of uncommon goodness. That is, we expected that exposure to the act of uncommon goodness (as compared with a merely positive story) would motivate prosocial behavior to a greater degree when people's moral identity was primed than when it was not.

Method

Sample and procedure. Sixty-three undergraduate students (32 men, 31 women) from a Canadian university participated in the study for partial course credit. They averaged 19.62 ($SD = 1.77$) years of age. Participants were recruited for a study titled "Stories and People" and were told they would be participating in two unrelated studies. The first study contained the experimental manipulations, both for moral identity centrality and for the story. The experiment was a 2 (prime: moral identity vs. control) \times 2 (story: uncommon goodness vs. control) between-subjects design. In the ostensibly unrelated second study, participants were told that they would be playing an economic game with an unknown partner; in actuality, the game contained the measure of prosocial behavior.

Experimental manipulations. Participants were told they would be completing two separate studies, which we refer to as Part 1 and Part 2. Part 1 contained the experimental manipulations. We first manipulated the accessibility of moral identity using a modified priming technique adapted from Srull and Wyer (1979). In this task, participants completed a word search puzzle for up to 3 min. Each crossword contained 10 words to search for, either the items from Aquino and Reed's (2002) moral identity scale (e.g., *kind, caring, compassionate*) or control words (e.g., *desk, car,*

chair). Note that the word *moral* does not appear as a word or in any of the words in the moral prime word search, which minimizes the likelihood that responses to the accessibility question were influenced by exposure to this particular word. We validated the effectiveness of the word search manipulation in a separate pretest of 63 participants (42 women, 21 men). The accessibility of moral identity was assessed with the item “Being a moral person is an important part of who I am” (1 = *completely disagree*, 7 = *completely agree*), which was asked after participants completed the word search. Results showed that those who were assigned to complete the moral word search scored higher ($M = 6.13$, $SD = 0.85$) on this measure than did those who completed the control word search ($M = 5.41$, $SD = 1.58$), $F(1, 60) = 5.12$, $p = .03$, $d = 0.55$, indicating that the manipulation was effective.

After the word search manipulation, participants read either the Amish UG story used in Study 1 or the control story featuring the beautiful sunset. After the two manipulations, participants were asked to recall the words in the word search and to briefly summarize the story to reinforce the manipulations. In Part 2, participants were given a separate booklet for a silent negotiation game containing the dependent measure of interest.

Measures.

Prosocial behavior. We measured prosocial behavior by having participants play a modified dictator game. Participants were told that they would be randomly assigned to role of either allocator or receiver. The allocator was to decide how to divide \$20 between him- or herself and the receiver. The receiver would have to accept whatever division the allocator proposed. Participants were run in groups of up to 12 people and told that they would be playing the dictator game with another participant in the session, either from among those in their room or from among participants in a different room. Participants were told that one in 10 dyads would get to keep the money, chosen at random after the experiment was completed. In reality and unknown to participants, all were assigned to the role of allocator. We expected the dictator game to present participants with a powerful incentive to act selfishly because the allocator has total control over the distribution of benefits. In the context of the game, a relatively more prosocial response would therefore be one where the allocator chooses to give more money to the receiver; hence, we treated the amount allocated to the receiver as our measure of prosocial behavior. After the experiment was completed, participants were debriefed, and those who were randomly selected were given the full \$20 to keep.

Control variable. We again controlled for gender in the analysis.

Results

We performed an analysis of covariance on the dependent measure to test our hypotheses. Results revealed a marginally significant interaction between story and prime, $F(1, 58) = 3.09$, $p = .08$, $\eta_p^2 = .05$. Planned contrasts revealed that the uncommon goodness condition lead those primed with moral identity to allocate more money to their partner ($M = \$8.88$, $SD = 5.79$) than the merely positive story did ($M = \$6.75$, $SD = 4.30$), $F(1, 24) = 6.63$, $p = .01$, $d = 0.29$. However, among those in the control prime condition, the story manipulation produced no differences in allocation behavior ($M = \$6.47$, $SD = 4.49$, in the uncommon goodness condition and $M = \$7.47$, $SD = 5.64$, in the positive emotion condition, $F < 1$). The pattern of this effect

is shown graphically in Figure 2 and supports our hypothesis that people would be influenced by the presentation of an act of uncommon goodness only when they were primed to make their moral identity accessible.

Discussion

Study 3 extends our previous studies by showing that priming moral identity using a word search procedure resulted in a pattern of results similar to the results found when measuring moral identity. The findings of Study 3 allow us to make stronger causal inferences about the relationship between moral identity and exposure to uncommon goodness than was possible in our previous studies. We also show that the interaction between these variables predicts actual behavior. A limitation of Study 3 is that we did not measure the suite of responses associated with moral elevation to show that they were directly related to behavior in the dictator game. We conducted our final study to test this relationship. In addition, we wanted to see if we could replicate the results of Study 1 using a different, sensory-rich example of moral goodness that we expected would arouse stronger reactions than reading a story.

Study 4

We hypothesized that moral elevation responses to a music video depicting an act of uncommon moral goodness would be stronger than such responses to a video that did not depict an act of moral goodness and that this effect would be stronger for those who were high (vs. low) in moral identity. Further, we hypothesized that moral elevation would mediate the relationship between the interaction of moral identity and exposure to uncommon goodness and subsequent prosocial behavior.

Method

Sample and procedure. One hundred twenty-nine undergraduate students (39 men, 90 women) from a Canadian university

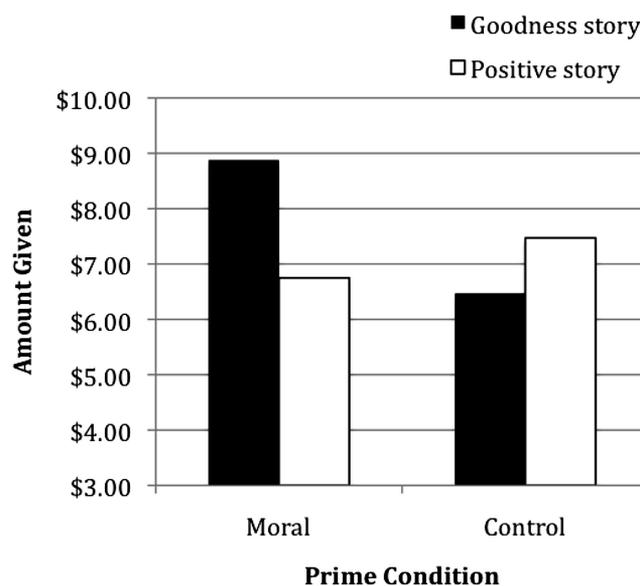


Figure 2. Study 3: Amount given to partner by condition.

participated in the study for \$15 remuneration. They averaged 21.2 ($SD = 3.03$) years of age. Participants were recruited for a study titled "Brands and the World" and told the study was investigating "brands, products, and the media." The study consisted of three parts. In the first part, participants were asked to complete the measure of moral identity and demographic information. The second part contained measures unrelated to the present study. In the third part of the study was the manipulation, with participants being randomly assigned (between subjects) to either an experimental group or a control group, after which they completed a postmanipulation questionnaire.

Experimental manipulation. Participants in both groups watched a music video chosen to elicit either moral elevation or general positive but nonmoral emotion. Both videos were from the same Canadian artist, Sarah McLachlan; were approximately the same length (4 min); and featured music of the same tempo. In the experimental group (uncommon goodness condition), participants watched *World on Fire* (McLachlan & Marchand, 2003). The video describes how all but \$15 of the \$150,000 budget for the video was donated to various charitable causes around the world. The video then chronicles how the money benefited the impoverished communities that received the money versus how it could have been spent creating a regular music video. In the control condition, participants watched *Adia* (McLachlan & Marchand, 1997). This video depicts McLachlan singing to the camera with various city scenes in the background. After watching the video, participants completed measures assessing the extent to which they experienced moral elevation responses as a result of watching the video, including a measure of self-reported physical sensations.

A pretest was conducted to validate the video manipulation. One hundred two students (59 men, 42 women) were randomly assigned to one of the two video conditions and rated their emotional responses on the same 7-point scale used in Study 1. Following Silvers and Haidt (2008), we find that participants who viewed *World on Fire* felt more inspired than did those who viewed *Adia* ($M_{World} = 3.92$, $SD = 1.15$; $M_{Adia} = 2.56$, $SD = 1.07$), $F(1, 98) = 37.61$, $p < .001$, $d = 1.05$. They also reported feeling more admiration ($M_{World} = 3.65$, $SD = 1.32$; $M_{Adia} = 2.44$, $SD = 1.21$), $F(1, 98) = 22.50$, $p < .001$, $d = 0.86$; awe ($M_{World} = 3.71$, $SD = 1.29$; $M_{Adia} = 2.17$, $SD = 1.02$), $F(1, 98) = 43.95$, $p < .001$, $d = 1.15$; and gratitude ($M_{World} = 3.49$, $SD = 1.36$; $M_{Adia} = 2.38$, $SD = 1.01$), $F(1, 98) = 21.10$, $p < .001$, $d = 0.85$. However, the two were deemed equally happy ($M_{World} = 2.13$, $SD = 1.12$; $M_{Adia} = 2.27$, $SD = 1.24$), pleasuring ($M_{World} = 2.29$, $SD = 1.50$; $M_{Adia} = 2.29$, $SD = 1.19$), and joyful ($M_{World} = 2.22$, $SD = 1.34$; $M_{Adia} = 2.08$, $SD = 1.05$), all $ps > .62$.

Measures.

Moral identity. The same items used in our previous studies measured internalization ($\alpha = .82$) and symbolization ($\alpha = .82$) in Study 3.

Moral elevation. The emotional component ($\alpha = .80$), views of humanity ($\alpha = .79$), and desire to be a better person ($\alpha = .90$) were measured using the same items as were used in Study 1. In addition to these components, we included a fourth measure of moral elevation—physical sensations—to more fully capture the range of experiences as described by Haidt (2001, 2003). The physical sensations measure consisted of five *yes* or *no* items from Freeman et al. (2009) and Algoe and Haidt (2009) pertaining to

sensations that participants "may have experienced while watching the video (or may still be experiencing)." The sensations included "lightness or feeling 'bouncy,'" "warmth in your chest," "tears in your eyes," "a lump in your throat," and "chills or tingles." *Yes* responses were summed for analysis. As in Study 1, we created a higher order (aggregated) measure of moral elevation by standardizing and then summing the scores for the four measures of the elevation components.⁸

Controls. We controlled for gender (1 = male; 2 = female) and positive emotions ($\alpha = .88$). The positive emotions items were identical to those used in our previous studies.

Prosocial behavior. We measured behavior by giving participants an opportunity to donate to a local charity any part of the \$15 remuneration they received for participating in the experiment. The charity we selected was Walk Bravely Forward, a nonprofit organization dedicated to assisting Canadian First Nations (Aboriginal) peoples who have been incarcerated to reintegrate into society and become productive citizens. We chose this organization for two reasons. First, it was unlikely that any of the study participants would socially identify with the persons that the organization attempts to help, thereby increasing the psychological distance between themselves and the intended beneficiaries of their donation. Second, the beneficiaries were unlikely to elicit high levels of sympathy because they were former criminal offenders. We believe that these two features of the beneficiary group served by Walk Bravely Forward allowed us to conduct a fairly strong test of the possible influence of moral elevation and moral identity on prosocial behavior. The opportunity to donate money was presented to participants immediately after they completed the measures of moral elevation. Participants were told that they could donate any amount from \$0 to \$15 to the charity and that the researchers would send this amount on their behalf. Participants indicated their preference by checking one of 15 options on a sheet of paper (e.g., *\$15 for myself \$0 to Walk Bravely Forward*, *\$14 for myself \$1 to Walk Bravely Forward*, etc.). Donations were made in \$1 increments. After the experiment, all donations made by participants were sent to Walk Bravely Forward by the researchers.

Results

Descriptive statistics are shown in Table 4.

Hypothesis tests. Bootstrapped estimation of conditional indirect effects (see Preacher, Rucker, & Hayes, 2007) was used to test whether the interaction of moral identity and video predicted prosocial behavior through the mediating construct of moral elevation. This approach offers several advantages over the conventional procedures for assessing moderated mediation detailed by Baron and Kenny (1986). Among these are that it directly estimates the size of the indirect effects; provides confidence intervals (CIs) for the estimated effects; demonstrates higher power and greater control over Type I error rates; and relies on fewer assumptions about the sampling distribution, especially for smaller

⁸ A regression run on these five items results in the same significant interaction and slope pattern (stronger relationship for high vs. low on internalization), and omitting these items from the aggregate elevation measure does not change our results.

Table 4
 Study 4 Descriptive Statistics and Correlations Among Study Variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1. Gender	1.69	0.46	—	-.10	.29**	.18*	-.04	.04	.27**
2. Positive emotions	2.06	0.89		—	-.22*	.07	-.16	.41**	.27**
3. Internalization	6.01	0.82			—	.23**	.03	.12	.30**
4. Symbolization	4.47	0.99				—	-.05	.28**	.12
5. Video	.56	.50					—	.32**	.21*
6. Moral elevation	-0.04	3.05						—	.34**
7. Charitable donation	2.89	4.38							—

Note. *N* = 129. For gender, 1 = male, 2 = female. For video, 0 = *Adia*, 1 = *World on Fire*.
 p* < .05. *p* < .01.

samples like ours (see Bollen & Stine, 1990; MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002; MacKinnon, Lockwood, & Williams, 2004; Preacher & Hayes, 2004; Shrout & Bolger, 2002). The approach maintains the required observation of significant relationships between the independent variable and the mediator, as well as the mediator and the dependent variable. However, the observation of a significant, direct effect of the independent variable on the dependent variable is not required (see Collins, Graham, & Flaherty, 1998; MacKinnon, Krull, & Lockwood, 2000; Shrout & Bolger, 2002). Following the recommendations of Preacher et al. (2007), our analysis specified a moderated mediation model where we tested (a) whether moral identity interacted with video to predict an increase in moral elevation and (b) whether moral elevation was positively related to donations to the charitable organization. It also involved a formal assessment of the indirect effect of video on prosocial behavior among participants who were high versus low in moral identity. We controlled for gender and positive emotions in all analyses. The experimental conditions were dummy coded (1 = *World on Fire*, 0 = *Adia*). Results of the regressions are shown in Table 5.

The first hierarchical regression in Table 5 tests the joint effect of the interactions of the two moral identity dimensions and videos on the aggregated measure of moral elevation.⁹ Step 1 results showed a positive effect of the uncommon goodness video on moral elevation ($B = 2.47, SE = 0.43, p < .01$). Internalization ($B = 0.61, SE = 0.28, p < .05$) and symbolization ($B = 0.68, SE = 0.22, p < .01$) were both positively related to moral elevation. Step 2 results show that the Internalization \times Video interaction significantly predicted moral elevation ($B = 2.47, SE = 0.47, p < .01$). This result satisfies the first condition for establishing mediation according to Preacher et al. (2007). The Symbolization \times Video interaction was not significant.

The second hierarchical regression model in Table 5 predicts prosocial behavior. Step 1 results showed a significant effect of the video ($B = 2.03, SE = 0.72, p < .01$) such that participants who watched *World on Fire* donated more money to the charitable organization than did those who watched *Adia*. Step 1 results also showed that women donated more money than men did ($B = 1.97, SE = 0.82, p < .05$), as did people who scored higher in internalization ($B = 1.38, SE = 0.47, p < .01$). Step 2 results showed that the interactions involving each dimension of moral identity and video did not significantly predict donation behavior. However, as noted above, finding a significant effect of the interaction on the dependent variable is not required to establish mediation (Preacher

et al., 2007; Shrout & Bolger, 2002). When moral elevation was added in Step 3, it was positively related to donations to the charitable organization ($B = 0.40, SE = 0.17, p < .05$). This finding satisfies the second condition for moderated mediation because the mediator (moral elevation) was associated with the dependent variable (prosocial behavior) in the hypothesized manner (positive).

Formal assessment of conditional indirect effects. We conducted a moderated mediation analysis (Preacher et al., 2007) using an SPSS macro written by Hayes (2009) to assess the indirect effect of experimental condition on prosocial behavior at different levels of internalization (i.e., ± 1 standard deviation from the mean), which was the dimension of moral identity that significantly interacted with video to predict moral elevation. The estimation of each CI for the indirect effect involved generating 5,000 resamples of the data (with replacement) to derive empirical distributions for assessing statistical significance, which is indicated by an interval that does not include zero (see Shrout & Bolger, 2002). Gender and positive emotions were treated as covariates, moral elevation was treated as the mediator, and internalization was treated as a moderator of the effect of the video on prosocial behavior. The resulting 95% CI for the indirect effect of video among participants who were high in internalization ranged from 0.21 to 2.57. Because the lower bound of the CI is above zero and the direction of the effect is positive, we concluded that people who watched the *World on Fire* video donated more money to the charitable organization than did people who watched *Adia* if they scored high in internalization. Furthermore, this effect is mediated through moral elevation. For participants who were low in internalization, the 95% CI ranged from -0.05 to 1.73. Because this interval includes zero, we concluded that there was no indirect effect of video on charitable donations among those low in internalization.

Discussion

Study 4 provided evidence that experiencing a state of moral elevation is associated with prosocial behavior. These results are consistent with what we found in Studies 2 and 3. They extend Study 2 by showing that the state of elevation is a joint function of

⁹ Regressions run on the individual elevation components produce the same significant interaction pattern for all components.

Table 5

Study 4: Model Estimation Results for Assessing Mediated Moderation Wherein Exposure to Uncommon Goodness and Moral Identity Interact to Influence Donation Behavior Through Moral Elevation

Predictor	Model 1		Model 2		
	Step 1	Step 2	Step 1	Step 2	Step 3
Gender	0.13	0.15	1.97*	1.93*	1.87*
Positive emotions	1.70**	1.83**	0.64	0.68	-0.05
Internalization (Int)	0.61*	0.69**	1.38**	1.40	1.13*
Symbolization (Sym)	0.68**	0.53**	0.10	0.00	-0.21
Video	2.47**	2.52**	2.03**	2.01**	1.01
Video × Int		2.47**		0.91	-.07
Video × Sym		0.38		0.71	0.55
Moral elevation					0.40*
ΔR^2		.12**		.02	.04*
Model R^2	.41	.53	.19	.20	.24

Note. The dependent variable for Model 1 is aggregate elevation and for Model 2 is charitable donation. Unstandardized regression weights are presented. * $p < .05$. ** $p < .01$.

witnessing an act of moral goodness and moral identity (internalization). It also extends Study 2 by showing an effect of these variables on actual behavior. Our final study extends Study 3 by showing that the effects of moral identity and exposure to uncommon goodness on behavior were mediated through moral elevation.

General Discussion

Current theory and empirical research on moral elevation has distinguished it from other types of moral emotions (Haidt, 2003). The studies reported in our article contribute to research on the moral elevation construct by showing that some persons might be more susceptible than others to having this experience. Across four studies, we showed that moral identity, as both a measured and a manipulated variable, partly explains why some persons are more likely than others to be affected by exposure to acts of uncommon moral goodness. We also showed that people whose moral identity is experienced as more central to their self-concept recall witnessing such acts more frequently. Finally, we replicate the results of previous studies (e.g., Algoe & Haidt, 2009; Freeman et al., 2009; Schnall et al., 2010) showing that the states associated with moral elevation can motivate prosocial behavior, thereby testifying to its efficacy as a mechanism for promoting such behavior.

Much has been written about how people pay more attention to the bad events in their lives than the good. What our studies suggest is that when people are confronted with behavior that is extraordinarily good, it can lead some to experience a set of related responses that leave a lasting imprint in their memory. Other researchers (e.g., Algoe & Haidt, 2009; Freeman et al., 2009) have shown that the response to witnessing uncommon goodness is perhaps best conceptualized as a related suite of thoughts, emotions, and physical sensations. The complexity of the total elevation experiences makes it difficult to identify a specific process through which moral elevation motivates prosocial behavior. We speculate that several processes can be implicated, including heightened positive affect; a change in goal orientation; a desire to emulate a moral exemplar; and, for

people who are high in moral identity centrality, a desire to act in a manner consistent with their sense of self. Our data do not permit us to test which of these processes best explains the relationship between moral elevation and prosocial behavior, but they do show that both the emotional and the cognitive components of moral elevation matter.

A key theoretical implication of our studies is that acts of uncommon goodness are not universally valued or appreciated. We showed that one boundary condition for producing a state of elevation is when moral identity is neither chronically nor temporarily accessible. Previous research using Aquino and Reed's (2002) measure of the chronic accessibility of moral identity has shown that it predicts a variety of morally relevant cognitions, emotions, and behaviors (see Shao et al., 2008). Our studies add to this body of work by showing that moral identity as measured by Aquino and Reed's (2002) instrument predicts how people evaluate the behavior of others. But we also showed that when moral identity is made temporarily salient (Study 3), it can produce similar effects. It is important to note that the temporal salience of moral identity is not conceptually identical to its being chronically accessible (Aquino et al., 2009), which implies that its effects on moral functioning can occur through different mechanisms, one dispositional, the other situationally induced.

Our findings support our argument that when moral identity is experienced as an important part of the self-concept, it can lead people to assign greater weight to morally virtuous acts. However, the precise mechanism is not directly tested in our studies. Perhaps people high in moral identity are motivated to scan their environment for evidence of morality. Our finding that that internalization was positively related to the ability to recall a morally elevating act (Study 2) supports this conjecture. However, it may also be that people who are high in moral identity centrality experience heightened moral elevation states because doing so is identity reinforcing; that is, they feel that it is how a person whose moral character is a defining aspect of the self should respond. It was beyond the scope of the present study to empirically test the different possible explanations for why people whose moral identity is more self-

definitional are more likely to experience heightened states of elevation when exposed to acts of uncommon goodness. Having established that the relationship exists, we leave it for future research to isolate the specific process that account for it.

A second limitation of our study would seem to be the practical value of our results. Acts that elicit the state of elevation are, by definition, rare and fall into the category of what philosophers (e.g., Flescher, 1994) describe as “supererogatory,” meaning they are praiseworthy to do but not worthy of blame if avoided. For this reason, many of the prosocial acts typically studied by psychologists—such as donations to charity, volunteerism, or a willingness to help others—are unlikely to produce the intense emotional responses in observers that are associated with moral elevation. Further, a fair percentage of people in Study 2 reported never having observed an act that fit our description of an act that was morally elevating. However, even if many people might never witness extraordinary acts firsthand, Studies 1 and 4 showed that it is possible to elicit the emotions, thoughts, and physical sensations associated with moral elevation by presenting people with examples of morally exceptional behavior in either written or visual–auditory form and that doing so has implications for subsequent behavior (Study 4). Indeed, Thomas Jefferson (1771/1975) noted that stories in literature or fiction may be more potent elicitors of elevation than witnessed action, meaning that people need not be present to observe the acts firsthand (nor do the events need to have actually occurred) to experience elevation. Thus, we have reason to believe that even a seemingly weak stimulus, like a story of moral goodness, can evoke moral elevation responses in nonexperimental settings. Whether doing so produces sustained or lasting change in a person’s thinking or behavior is a question for future research.

Conclusion

People have often looked to the lives of moral exemplars like Desmond Tutu, Mahatma Gandhi, or the Dalai Lama to provide lessons on how they should treat others. Fortunately, one does not have to be in the presence of the saintly to be uplifted by moral acts. The world’s literature and cinema are replete with examples of uncommon goodness. Think of Sydney Carton sacrificing his life to save the husband of the woman he loves in *A Tale of Two Cities* or of Liam Neeson portraying Oskar Schindler in the cinematic depiction of the German businessman’s effort to save Jews during the Holocaust. But we also found that people from diverse backgrounds were able to recall at least one real-life example of uncommon goodness and to report that it had some influence on their emotions, thoughts, and behavior. This finding tells us that it is not only the evil that men (and women) do that survives them, but sometimes also the good.

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Received August 6, 2009

Revision received October 6, 2010

Accepted October 25, 2010 ■

Correction to Frazier et al. (2011)

In the article “Perceived past, present, and future control and adjustment to stressful life events” by Patricia Frazier, Nora Keenan, Samantha Anders, Sulani Perera, Sandra Shallcross, and Samuel Hintz (*Journal of Personality and Social Psychology*, 2011, Vol. 100, No. 4, pp. 749–765), there is an error on page 758. In the sentence “Present control predicted later event-specific distress in Sample 1 ($\beta = .17, p < .01$) but did not predict later general distress ($\beta = .00$) in Sample 2, controlling for earlier distress” the value .17 should have been $-.17$.

DOI: 10.1037/a0023239