ORIGINAL PAPER

Identity, Reasoning, and Emotion: An Empirical Comparison of Three Sources of Moral Motivation

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Abstract Prior research on moral motivation has primarily emphasized moral reasoning and moral emotion; however, identity may also play an important role. Therefore, the purpose of the present study was to examine the relative importance of prosocial identity, prosocial moral reasoning, and empathy in predicting prosocial behavior. The sample included 91 university students, ages 19–35 years ($M = 21.89$; $SD = 3.01$; 80% European American; 65% female). Prosocial identity and empathy, but not prosocial moral reasoning, were positively associated with overall prosocial behavior. Exploratory analyses examined how these three sources of prosocial motivation differentially related to six forms of prosocial behavior. Results suggest the importance of considering the roles of all three sources of moral motivation.

Keywords Moral motivation · Prosocial motivation · Moral identity · Moral self · Prosocial behavior

Identity, reasoning, and emotion: Three sources of prosocial motivation in young adulthood

Several theories of morality have been proposed over the last century, each with its own assumptions about what motivates moral action. While most theories have focused on the role of moral reasoning (e.g., Kohlberg, 1969), others have emphasized moral emotion (e.g., Hoffman, 2000). However, an increasing number of scholars have been arguing that moral motivation may be more fully understood by also consider-

ing the centrality of morality to the self, often discussed as *moral identity* (Bergman, 2004; Blasi, 1983, 1995; Gibbs, 2003; Hardy & Carlo, 2005; Hart, 2005). Yet, little research has examined links between moral identity and moral action (Hardy & Carlo, 2005). Moreover, the relative importance of moral reasoning, moral emotion, and moral identity in the motivation of moral behavior remains unclear. Therefore, the purpose of the present study was to examine relations between moral identity and moral action, and to assess whether these relations would remain significant when accounting for individual differences in moral reasoning and moral emotion. These issues were investigated within the prosocial or care domain of morality.

Moral reasoning as a source of moral motivation

Many of the primary theories of morality focus on the role of moral reasoning (e.g., Kohlberg, 1969; Turiel, 2002). For example, Kohlberg's (1969) influential Cognitive Developmental Theory of morality argued that moral principles, when understood, would inherently motivate moral action. Kohlberg posited that, as moral reasoning capacities mature, individuals become more inclined to use moral principles in making judgments in moral situations. As moral reasoning develops, moral principles and their universal and prescriptive nature become more salient, leading individuals to feel more compelled to behave consistent with their moral judgments.

Prior literature has identified two types of moral reasoning: ethical or justice moral reasoning (i.e., reasoning regarding issues of fairness or equality; Kohlberg, 1969) and prosocial or care moral reasoning (i.e., reasoning in situations where one's own needs or desires may be in conflict with the welfare of others, in the absence of formal laws, rules, or societal guidelines; Eisenberg, 1986).

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Literature reviews indicate that, in general, justice moral reasoning (Blasi, 1980; Thoma, 1994) and prosocial moral reasoning (Carlo, 2005) are linked to various moral actions. However, relations between both types of moral reasoning and moral action tend to be small to moderate in strength, suggesting there is more to morality than reasoning alone.

Moral emotion as a source of moral motivation

In contrast to cognitive perspectives on morality, other theories focus on the role of moral emotion (e.g., Batson, 1998; Eisenberg, 1986; Hoffman, 2000). According to Hoffman, moral emotion is the primary source of moral motivation. Specifically,

> . . . abstract moral principles, learned in "cool" didactic contexts (lectures, sermons), lack motive force. Empathy's contribution to moral principles is to transform them into prosocial hot cognitions—cognitive representations charged with empathic affect, thus giving them motive force (Hoffman, 2000, p. 239).

In other words, while moral understanding helps focus and guide moral emotion, it is moral emotion that provides the motivating "spark" that leads to moral action.

Work on behavioral correlates of moral emotion has focused on links between empathy and prosocial behavior, with empathy defined as, "an affective response that stems from the apprehension or comprehension of another's emotional state or condition" (Eisenberg, Fabes, & Spinrad, 2006). A meta-analysis reported that, in general, there are positive associations between empathy and prosocial behavior among children, adolescents, and adults (Eisenberg & Miller, 1987). Findings from more recent work have been consistent with this earlier conclusion (for recent reviews, see Carlo, 2005; Eisenberg et al., 2006). However, as with moral reasoning, relations between empathy and prosocial behavior tend to be small to moderate in magnitude; hence, there seems to be more to moral functioning than moral reasoning and moral emotion.

Identity as a source of moral motivation

In addition to moral reasoning and moral emotion, several models of morality also see moral identity as a key source of moral motivation (e.g., Blasi, 1983, 1995; Colby & Damon, 1992; Gibbs, 2003; Narvaez & Laspley, 2005; Rest, 1983; for reviews see Bergman, 2004, and Hardy & Carlo, 2005). Moral identity is a complex, multi-faceted aspect of morality that has proven difficult to define and operationalize (Hardy & Carlo, 2005). Generally, it entails integration between the moral and self systems such that there is some degree of unity

between one's sense of morality and one's sense of identity (Blasi, 1995; Colby & Damon, 1992). An important part of this conception of moral identity is the extent to which the elements most central to a person's identity (e.g., values, goals, and virtues) are moral (Blasi, 1995). In other words, a person might be said to have a stronger sense of moral identity if he or she centers his or her identity more on moral virtues such as kindness than amoral virtues such as creativity. Thus, for the purposes of the present study, moral identity is conceptualized as the degree to which moral virtues are central and important to one's identity. Although this narrower definition undoubtedly does not capture much of the richness of moral identity as elucidated in qualitative studies of moral exemplarity (e.g., Colby & Damon, 1992), it is consistent with popular definitions of moral identity (e.g., Blasi, 1995; Walker, 2004), it aids operationalization and measurement of moral identity, and it is in line with prior quantitative studies of moral identity and moral action (e.g., Aquino & Reed, 2002; Arnold, 1993; Pratt, Hunsberger, Pancer, & Alisat, 2003).

The ability of moral identity to serve as moral motivation is based on the inherent human tendency to be motivated to act consistent with one's self system (Blasi, 1983, 2004). Hence, when certain virtues become central to one's identity, there is a heightened sense of obligation, responsibility, and desire to live consistent with those virtues. Therefore, when moral virtues are important to one's identity, this yields motivation to behave in line with one's sense of morality.

Efforts to understand how identity may be linked to morality to date have primarily been theoretical and philosophical; few scholars have embarked on empirical investigation of this issue. Some scholars study moral functioning by detailed examination of morally-exemplary individuals, and this research often yields insight regarding the role of identity in moral commitment. For example, Colby and Damon (1992) learned, from their in-depth exploration of adult moral exemplars (nominated by philosophers, scholars, theologians, and religious leaders), that morally-exemplary people experience a great deal of overlap between their sense of identity and their sense of morality. In other words, their personal goals and desires are concordant with their sense of what is right. Additionally, Hart and Fegley (1995), and Reimer and Wade-Stein (2004), found that adolescent moral exemplars (nominated by community leaders) were more likely than comparison, non-exemplary teens, to use moral terminology (as identified by the researchers) when asked to describe their self, personality, and goals.

Other researchers, rather than using moral commitment as a criterion for sample selection (as in moral exemplar studies), measure moral identity as an a-priori predictor of moral behavior (e.g., Aquino & Reed, 2002; Arnold, 1993; Pratt et al., 2003; Reed & Aquino, 2003). Among teens, Arnold (1993) found that those who identified moral virtues

as being more central to their identity (in comparison to amoral virtues), were reported by teachers as exhibiting higher levels of various moral behaviors. Additionally, Pratt et al. (2003) reported correlations between moral identity (assessed using a measure similar to Arnold's) and community involvement in a longitudinal study of late adolescence. Lastly, Aquino and Reed (2002; Reed & Aquino, 2003) have explored links between self-reported moral identity and various morally-relevant behaviors in a series of studies involving late adolescents and young adults. Among a sample of late adolescents, moral identity was positively associated with observed food donations to a charitable cause (Aquino & Reed, 2002). Similarly, among adults, moral identity was positively linked to self-report volunteerism (Aquino & Reed, 2002), and prosocial attitudes and behaviors toward out-group members (Reed & Aquino, 2003).

In summary, although research on the role of the identity in morality is limited, it does seem to largely support the notion of moral identity as a possible source of motivation for moral behavior. Moral exemplar studies have found that morally-exemplary individuals, to a greater extent than others, seem to define their identity in moral terms—often to the point that their personal goals and desires are in line with their moral principles. Studies examining moral identity as a predictor of moral action have shown that teens and adults who report moral virtues and traits as being more important or central to their identity score higher on measures of moral behaviors.

The present study

Although some empirical support has been found for links between moral identity and moral action, prior research has not adequately examined the motivational role of moral identity in comparison to moral reasoning and moral emotion. The present study addressed this limitation—focusing on the prosocial domain of morality—by comparing the relative roles of moral identity, moral reasoning, and moral emotion in predicting prosocial behavior. Because more attention has been paid to justice morality (with its focus on issues of fairness and equality) than to prosocial or care morality (which emphasizes issues such as helping and kindness), research on the prosocial domain of morality is strongly encouraged (Carlo, 2005; Eisenberg et al., 2006; Lapsley, 1996). Therefore, to help focus the study analyses, and to further understanding of prosocial morality, the present study specifically examined prosocial identity, prosocial reasoning, and prosocial emotion as three sources of moral motivation within the prosocial domain.

It was hypthesized that prosocial identity would be positively associated with prosocial behavior, even after accounting for individual differences in prosocial reasoning and empathy. This is because it has been suggested that identity

contributes something unique to moral motivation not accounted for by moral reasoning and moral emotion (e.g., Bergman, 2004; Blasi, 1983; Colby & Damon, 1992; Hardy & Carlo, 2005). Analyses were also conducted to explore how prosocial identity, prosocial reasoning, and empathy differentially related to six forms of prosocial behavior. Carlo and Randall (2001) have argued that prosocial behavior is a multidimensional rather than uniform construct. Specifically, they detailed how prosocial behaviors seem qualitatively different across diverse contexts (e.g., emergency, emotional, or anonymous situations) and motives (e.g., altruistic or hedonistic). Thus, based on prior theory and research, Carlo and Randall (2001, 2002) identified six different forms of prosocial behavior, and found that prosocial reasoning and empathy related differentially to these six types of prosocial behavior among college students. In line with this, a recent study found maturity in ethical moral judgment and different components of self-understanding to be differentially linked to three types of moral action: honest, altruism, and supporting civil liberties (Derryberry & Thoma, 2005).

In the primary analyses reported below, age, gender, and social desirability were entered as statistical control variables. Age was included because of the broad age range of study participants (19 to 35 years). Gender was included as a covariate because prior research has shown that women and girls tend to score higher than men and boys on measures of prosocial characteristics such as empathy, prosocial reasoning, and prosocial behavior (Carlo, 2005). Similarly, Arnold (1993) found that girls were higher than boys on moral identity. Lastly, given concern over social desirability bias when using self-report measures of positive attitudes and behaviors, social desirability was also included as a covariate.

Method

Participants

The sample for the proposed study ($N = 91$) included undergraduate and graduate students from a Midwestern university (age range 19–35, $M = 21.89$, $SD = 3.01$; 80% European American; 65% female). Participants were recruited through psychology and sociology classes; participation was completely voluntary, and students were given extra credit for their involvement.

Measures

Prosocial behavior

Prosocial behavior was assessed using the Prosocial Tendencies Measure (Carlo & Randall, 2002), a 25-item self-report measure of prosocial behavioral tendencies that assesses

prosocial behavior across various contexts and motives. Specifically, it taps compliant (helping when asked), public (helping in front of others), anonymous (helping anonymously), dire (helping in emergency situations), emotional (helping in emotional situations), and altruistic (helping without anticipation of reward) prosocial behaviors. Carlo and Randall (2002) conducted factor analyses and pilot testing on the PTM in previous studies, and revealed the following subscales for these six forms of prosocial behavior: 2 items for *compliant* prosocial behavior (sample item: When people ask me to help them, I don't hesitate); 4 items for *public* prosocial behavior (sample item: I can help others best when people are watching me); 5 items for *anonymous* prosocial behavior (sample item: I think that helping others without them knowing is the best type of situation); 3 items for *dire* prosocial behavior (sample item: I tend to help people who are in a real crisis or need); 5 items for *emotional* prosocial behavior (sample item: I respond to helping others best when the situation is highly emotional); and 6 items for *altruistic* prosocial behavior (sample item: I often help even if I don't think I will get anything out of helping). The response scale ranged from 1 (*does not describe me at all*) to 5 (*describes me greatly*).

A composite score of overall prosocial behavior was computed by averaging responses to all 25 items ($\alpha = .81$; $M = 3.31$; $SD = .42$). Additionally, composite scores were created for each of the six forms of prosocial behavior by averaging responses to the items corresponding to compliant (2 items; $\alpha = .70$), public (4 items; $\alpha = .83$), anonymous (5 items; $\alpha = .82$), dire (3 items; $\alpha = .80$), emotional (5 items; $\alpha = .90$), and altruistic (6 items; $\alpha = .57$) prosocial behavior subscales. Higher scores indicate greater tendency towards prosocial behavior. Although the PTM is not a measure of the frequency with which individuals engage in prosocial behavior, it has been found to be positively correlated with such measures (Carlo & Randall, 2002).

Prosocial identity

The Adapted Good-Self Assessment was utilized to assess prosocial identity (Barriga, Morrison, Liau, & Gibbs, 2001). Participants were asked to rate 16 virtues on a scale from 1 (*not important to me*) to 4 (*very important to me*) according to how important each virtue was to their self. The response labels were also placed on a diagram of three concentric circles, so the diagram could serve as a visual aid as participants rated each virtue. Of the 16 virtues, 8 were non-moral virtues (imaginative, hard-working, outgoing, intellectual, funny, logical, independent, and energetic; $\alpha = .50$) and 4 were prosocial moral virtues (considerate, kind, sympathetic, and generous; $\alpha = .77$). To compute a score for prosocial identity, the mean of the non-moral items was subtracted from the mean of the prosocial items ($M = .24$; $SD = .62$).

Higher scores indicate greater importance placed on prosocial virtues relative to non-moral virtues.

Empathy

Empathy was assessed using 14 items from Davis' (1983) Interpersonal Reactivity Index (IRI)—seven from the empathic concern subscale (sample item: I often have tender, concerned feelings for people less fortunate than me) and seven from the perspective-taking subscale (sample item: I sometimes try to understand my friends better by imaging how things look from their perspective). Both of these subscales were used because empathy has both cognitive and affective components (Eisenberg et al., 2006). Participants responded to each item according to how well it described them, based on a scale from 1 (*does not describe me well*) to 5 (*describes me very well*). For the present study, an empathy score was computed by taking the mean of the 14 items; higher scores indicate greater empathy towards others ($\alpha = .85$; $M = 3.73$; $SD = .59$).

Prosocial reasoning

The PROM (Carlo, Eisenberg, & Knight, 1992), modeled after Rest's (1979) Defining Issues Test (DIT), was used as a self-report measure of prosocial reasoning. Participants were presented five care-based moral dilemmas, each involving a protagonist faced with a decision to help, or not help, a needy individual. Next, participants were prompted to indicate whether the protagonist should help the needy person, and then asked to rate six different factors according to how important they were to the participants' decision (sample item: It depends whether Lucy thinks that helping is nice or not), using a scale from 1 (*not at all*) to 5 (*greatly*).

The PROM assesses five forms of prosocial reasoning proposed by Eisenberg (1986): hedonistic ($\alpha = .64$), approval-oriented ($\alpha = .87$), needs-oriented ($\alpha = .77$), stereotypic ($\alpha = .74$), and internalized ($\alpha = .78$). Although Eisenberg (1986) does not refer to them as "stages" of prosocial reasoning, some forms tend to be more prosocial or sophisticated than others. Hedonistic and approval-oriented are the least advanced, needs-oriented and stereotypic are somewhat more developed, and internalized is the most mature and prosocial type of reasoning. Each of the five care-based moral dilemmas includes an item corresponding to each of the five types of prosocial reasoning. Additionally, each dilemma includes a nonsense item to help identity respondents who are either inattentively or dishonestly answering the items.

For the present study, a composite for overall prosocial reasoning was created by first calculating a mean score for each type of prosocial reasoning. Then, the scores for the five types of reasoning were summed, with hedonistic and approval-oriented reasoning being weighted by a value of

"1," needs-oriented and stereotypic by a value of "2," and internalized reasoning by a value of "3." Higher scores indicate the individual prefers using higher forms of prosocial reasoning over lower forms ($M = 1.94$; $SD = .09$).

Social desirability

The 25-item version of Crowne and Marlowe's (1964) self-report social desirability scale was used in the present study. Participants indicated whether each item was true or false as it pertained to themselves (sample item: I have almost never felt the urge to tell someone off). Responses were recoded as "0" or "1," to indicate lower or higher social desirability, respectively. A composite score was computed by taking the mean of the 25 items ($\alpha = .80$; $M = .43$; $SD = .19$). Higher scores reflect greater tendency for individuals to portray themselves positively.

Results

Preliminary analyses

Descriptive statistics were obtained for all continuous study variables, and are reported in Table 1. Additionally, distribution statistics (skewness and kurtosis) for all study variables except age were within acceptable range (less than ± 2.0); age was moderately positively skewed.

Bivariate correlation analyses were conducted on all continuous study variables (see Table 2). Age was not significantly linked to any of the study variables, but social desirability was positively associated with empathy and overall prosocial behavior as well as compliant and dire prosocial behavior. Prosocial identity was not significantly associated with age, social desirability, prosocial reasoning, or public prosocial behavior, but was positively related to all other variables. Similarly, empathy was not significantly linked to age, prosocial reasoning, or public prosocial behavior, but was positively associated with all other variables. Interestingly, prosocial reasoning was positively related to altruistic prosocial behavior, negatively linked to public prosocial behavior, but not significantly associated with any of the other variables.

ANOVAs were conducted to assess gender differences in the primary study variables (see Table 2). Women were higher than men on prosocial identity, $F(1,88) = 15.26$, $p < .001$; empathy, $F(1,89) = 13.41$, $p < .001$; and overall prosocial behavior, $F(1,89) = 4.90$, $p < .05$, as well as dire, $F(1,89) = 4.75$, $p < .05$, emotional, $F(1,89) = 6.70$, $p < .05$, and altruistic prosocial behaviors, $F(1,89) = 6.37$, $p < .05$. However, there were no significant gender differences on compliant, $F(1,89) = 2.43$, ns, public, $F(1,89) = 2.83$, $p < .10$, and anonymous prosocial behavior, $F(1,89) = .01$, ns, or on prosocial reasoning, $F(1,88) = 2.17$, ns.

Primary analyses

Regression predicting overall prosocial behavior

A hierarchical regression analysis was used to test the hypothesis that prosocial identity would be a positive predictor of prosocial behavior, even after accounting for the effects of empathy and prosocial reasoning (see Table 3). Age, gender, and social desirability were entered as statistical control variables in the first step, $R^2 = .09$, $F(3,85) = 2.94$, $p < .05$. Empathy and prosocial reasoning were then entered in the second step, $\Delta R^2 = .26$, $\Delta F(2,83) = 16.37$, $p < .001$. Finally, prosocial identity was entered in a third step, $\Delta R^2 = .05$, $\Delta F(1,82) = 6.80$, $p < .05$. As hypothesized, prosocial identity was positively related to overall prosocial behavior. Thus, individuals who based their identity more extensively on prosocial virtues also reported greater tendency to engage in prosocial behavior across various situations. Further, prosocial identity explained a significant amount of variance in prosocial behavior above that accounted for by prosocial reasoning and empathy.

Regressions predicting the six sub-types of prosocial behavior

Additional analyses were conducted to assess the relative importance of posocial identity, empathy, and prosocial reasoning in predicting the six forms of prosocial behavior. However, due to concern over alpha inflation (i.e., an increased likelihood of a Type I error) when conducting multiple analyses, prior to conducting the regression analyses separately for the six forms of prosocial behavior a canonical correlation was conducted as an omnibus test of the relation between the two domains (prosocial motivation sources and prosocial behavior). Empathy, prosocial reasoning, and prosocial identity were entered as the first variable set, and the six forms of prosocial behavior were entered as the second variable set. One significant canonical variate was returned, $\chi^2(18) = 68.46$, $p < .001$), indicating the two variable sets were significantly related.

Next, six regression analyses were conducted using the subscales of the PTM—one for each form of prosocial behavior (see Table 4). For these analyses, all the variables were entered simultaneously. In each regression analysis, age, gender, and social desirability were entered as statistical control variables, and empathy, prosocial reasoning, and prosocial identity were entered as predictors.

For the analysis predicting compliant prosocial behavior, $R^2 = .23$, $F(6,82) = 4.17$, $p < .01$, prosocial reasoning was negatively associated, while empathy and prosocial identity were not significantly associated with compliant prosocial behavior. The regression predicting public prosocial behavior, $R^2 = .12$, $F(6,82) = 1.89$, $p < .10$,

Table 1 Descriptive statistics for continuous study variables

Variable	Overall		Males (ns 31 to 32)		Females ($n = 59$)	
	M	SD	M	SD	M	SD
Age	21.89	3.01				
Social desirability	.43	.19				
Empathy	3.73	.59	3.44***	.56	3.89***	.54
Prosocial reasoning	1.94	.09	1.92	.09	1.95	.09
Prosocial identity	.24	.62	−.08***	.67	.42***	.51
Overall prosocial behavior	3.31	.42	3.18*	.47	3.38*	.38
Complaint prosocial behavior	3.82	.83	3.64	.94	3.92	.76
Public prosocial behavior	1.63	.70	1.80+	.84	1.54+	.59
Anonymous prosocial behavior	2.77	.85	2.75	.94	2.77	.81
Dire prosocial behavior	3.58	.84	3.32*	.95	3.72*	.75
Emotional prosocial behavior	3.65	.95	3.31*	1.04	3.84*	.86
Altruistic prosocial behavior	4.30	.51	4.13*	.51	4.40*	.49

Note. $N = 91$; ns range from 90–91.

Gender differences indicated as follows: $^+p < .10$; $^*p < .05$; $^{**}p < .10$; $^{***}p < .001$.

found prosocial reasoning was negatively associated with, but prosocial identity and empathy were not significant predictors of, public prosocial behavior. In the regression for anonymous prosocial behavior, $R^2 = .15$, $F(6,82) = 2.31$, $p < .05$, prosocial identity positively predicted anonymous prosocial behavior, but empathy and prosocial reasoning were not significantly associated with anonymous prosocial behavior. The analysis for dire prosocial behavior, $R^2 = .18$, $F(6,82) = 3.02$ $p < .01$, found empathy a positive predictor of, but prosocial identity and prosocial reasoning not significantly linked with, dire prosocial behavior. In the analysis with emotional prosocial behavior as the outcome, $R^2 = .45$, $F(6,82) = 11.01$, $p < .001$, empathy and prosocial identity were positive predictors of emotional prosocial behavior, while prosocial reasoning was not a significant predictor. Finally, the regression analysis predicting altruistic prosocial behavior, $R^2 = .17$, $F(6,82) = 2.73$, $p < .05$, prosocial reasoning was positively associated with altruistic prosocial behavior, but prosocial identity and empathy were not significant predictors of the outcome.

Discussion

The purpose of this study was to examine the relative roles of three sources of prosocial motivation—prosocial identity, empathy, and prosocial reasoning—in predicting prosocial action among a young adult sample. Consistent with prior research, prosocial identity positively predicted overall prosocial behavior (Arnold, 1993; Aquino & Reed, 2002; Pratt et al., 2003; Reed & Aquino, 2003). However, unique to this study was that the effects of prosocial reasoning and empathy were partialled out, leaving the independent effect of prosocial identity on prosocial behavior. This finding provides additional empirical support for the conceptual notion that the centrality of moral virtues to one's identity may serve as an important source of motivation to behave morally, and that moral identity provides unique information about moral functioning not elucidated by accounts of moral reasoning and moral emotions alone (Blasi 1983; Bergman, 2004; Colby & Damon, 1992; Gibbs, 2003; Hardy & Carlo, 2005; Hart, 2005; Lapsley & Narvaez,

Table 2 Bivariate correlations between continuous study variables

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Age											
2. Social desirability	−.09										
3. Empathy	−.002	.33**									
4. Prosocial reasoning	−.12	.04	.17								
5. Prosocial identity	−.03	.08	.61***	.15							
6. Overall prosocial behavior	−.05	.27*	.58***	.04	.51***						
7. Compliant prosocial behavior	−.09	.33**	.35**	−.14	.24*	.61***					
8. Public prosocial behavior	−.14	.06	−.14	−.31**	−.11	.04	.09				
9. Anonymous prosocial behavior	.10	.08	.26*	.04	.32**	.62***	.18+	−.12			
10. Dire prosocial behavior	.03	.24*	.40***	.06	.27*	.75***	.39***	−.05	.33**		
11. Emotional prosocial behavior	−.17	.19+	.61***	.06	.52***	.76***	.46***	−.07	.17	.56***	
12. Altruistic prosocial behavior	.11	.08	.29**	.26*	.27*	.41***	.19+	−.52***	.21*	.26*	.18+

Note. ns ranged from 89 to 91.

$^+p < .10$; $^*p < .05$; $^{**}p < .01$; $^{***}p < .001$.

Table 3 Regression of empathy, prosocial reasoning, and prosocial identity predicting overall prosocial behavior

Variable	Step 1		Step 2		Step 3	
	β	SE	β	SE	β	SE
Age	−.01	.02	−.05	.01	−.05	.01
Gender	.16	.10	.01	.09	−.06	.09
Social desirability	.21[+]	.25	.08	.22	.13	.22
Empathy			.56***	.07	.39**	.08
Prosocial reasoning			−.07	.45	−.08	.43
Prosocial identity					.30*	.08
R^2		.09*		.35***		.40***
ΔR^2		.09*		.26***		.05*

Note. $n = 89$.
[+]$p < .10$; *$p < .05$; **$p < .10$;
***$p < .001$.

2004; Moshman, 2005; Walker, 2004; Youniss & Yates, 1997).

In terms of the other two sources of prosocial motivation examined (empathy and prosocial reasoning), empathy was positively related to overall prosocial behavior, consonant with previous research (for reviews, see Carlo, 2005, and Eisenberg et al., 2006). Indeed, the strength of the present findings regarding the unique effect of empathy on the outcome provide support for conceptualizations of empathy as a strong prosocial motivator (Batson, 1998; Hoffman, 2000). On the other hand, prosocial reasoning was not significantly related to overall prosocial behavior. Although unexpected, prior research has sometimes reported inconsistent links between prosocial reasoning and global prosocial behavior measures (Carlo & Randall, 2002).

When analyses were conducted to examine relations between the predictors and the six forms of prosocial behavior, there were positive associations between prosocial identity and anonymous and emotional prosocial behavior, between empathy and dire and emotional prosocial behavior, and between prosocial reasoning and altruistic prosocial behavior, but negative links between prosocial reasoning and compliant and public prosocial behavior. Thus, each of the three sources of prosocial motivation was significantly related to at least two of the specific types of prosocial behavior independent of the effects of the other sources of prosocial mo-

tivation. Given the findings for overall prosocial behavior, it was particularly intriguing to find that altruistic prosocial behavior was predicted by prosocial reasoning but not prosocial identity. The positive association between prosocial reasoning and altruistic behavior is consistent with prior studies using the same measures, and might be expected, given that research suggests it is the form of prosocial behavior most likely motivated by more sophisticated or internalized prosocial reasoning (Carlo & Randall, 2002). However, the nonsignificant relation for prosocial identity is somewhat puzzling. Although prosocial identity was bivariately associated with altruistic prosocial behavior, it was not a significant predictor in the full model. The bivariate association may be due to gender differences in the two variables. Moreover, it is possible that prosocial identity did not contribute anything unique to understanding altruistic prosocial behavior beyond prosocial reasoning because altruistic prosocial behavior as assessed in the present study may require a certain level of understanding of prosocial principles in addition to seeing prosocial virtues as self-important.

Future directions

For the present study, moral identity was conceptualized as the extent to which moral values, moral goals, and moral virtues are important to one's identity. Although the objective

Table 4 Regressions of empathy, prosocial reasoning, prosocial identity predicting six forms of prosocial behavior

	Prosocial behavior subscales												Overall prosocial behavior	
	Compliant		Public		Anonymous		Dire		Emotional		Altruistic			
Variable	β	SE	β	SE	β	SE	B	SE	β	SE	β	SE	β	SE
Age	−.11	.03	−.16	.02	.08	.03	.06	.03	−.17[+]	.03	.15	.02	−.05	.01
Gender	−.05	.20	−.13	.17	−.19	.21	.07	.21	.003	.19	.16	.12	−.06	.09
Social desirability	.26*	.48	.12	.41	.10	.52	.12	.50	−.008	.47	−.03	.31	.13	.22
Empathy	.24[+]	.19	−.08	.16	.07	.20	.31*	.20	.49***	.18	.15	.12	.39**	.08
Prosocial reasoning	−.22*	.96	−.27**	.82	−.02	1.04	−.01	1.00	−.06	.94	.21*	.61	−.08	.43
Prosocial identity	.12	.18	.02	.15	.35*	.19	.05	.18	.22*	.17	.09	.11	.30*	.08
R^2	.23**		.12[+]		.15*		.18*		.45***		.17*		.40***	

Note. $n = 89$.

[+]$p < .10$; *$p < .05$; **$p < .01$; ***$p < .001$.

measure of moral identity used in the present analysis seems consonant with this definition, is similar to measures used in prior research (Arnold, 1993; Barriga et al., 2001; Pratt et al., 2003), and has the benefit of being relatively straightforward, it does not seem to fully capture the complexity of interrelations between identity and morality (Hardy & Carlo, 2005). Measures such as this do not account for subjective and structural dimensions of identity, such as agency, continuity, and coherence (Blasi, 2004; Hardy & Carlo, 2005), nor do they capture much of the richness of moral identity shown by more qualitative approaches (Colby & Damon, 1992). Therefore, future studies should seek to develop and use measures that grasp more of what is involved in moral identity, in order to better assess the role of identity in moral functioning.

A second key limitation of the present study was that it relied on self-report data. Self-report data brings concern over social-desirability bias, particularly in research on the moral domain of human functioning. Given this concern, social desirability was accounted for in all the present analyses. Still, future examinations of prosocial motivation should seek to incorporate other measurement formats, such as implicit, behavioral, observational, and other-report measures.

A third important limitation is that the present study was correlational and cross-sectional. This limited the ability of the study to piece apart causal directionality. Thus, it is unclear based on the present results whether prosocial identity actually causes prosocial behavior. In fact, some studies suggest prosocial behavior may predict moral identity, or that there may be bidirectional links (e.g., Pratt et al., 2003; Youniss & Yates, 1997). Hence, more longitudinal work on moral identity is needed, over longer periods of time (e.g., adolescence through young adulthood). Additionally, attempts should be made to test links between moral identity and moral action experimentally. Such research may be possible, for example, by building on current work being conducted within the social cognitive framework (Narvaez, Lapsley, Hagele, & Lasky, in press).

Conclusions and implications

There are several salient "take home messages" to be gleaned from the present analysis. First, the concept of moral identity, oft eluded to but seldom researched, and not yet conceptually refined, is deserving of more attention from moral psychology—for it may hold keys to better understanding moral motivation and predicting moral and immoral action (for reviews, see Bergman, 2004; Hardy & Carlo, 2005, and Hart, 2005). Second, the present analyses suggest that identity, reasoning, and emotion may all contribute to moral motivation. This reminds us that morality is not unidimensional, but should be viewed within a more holistic personality per-

spective (Colby & Damon, 1992; Lapsley & Narvaez, 2004; Walker & Hennig, 1997). For, various aspects of personality, such as identity, cognitive processes, and emotions, may play different roles in moral functioning, and may each relate in important ways to certain types of moral actions but not others. Third, the present pattern of results support Carlo and Randall's (2001) call for greater specificity in conceptualizing and assessing moral action, rather than viewing moral action as a unitary phenomenon.

The present findings regarding the potentially important role of identity in morality have applied implications. In particular, youth development and moral education programs may more effectively promote moral development and behavior if they include a focus on facilitating moral identity development (Gibbs, 2003; Lapsley & Power, 2005). Many programs emphasize promoting the development of moral reasoning capacities or empathic perspective-taking, but few include programming directed at helping individuals develop a morally-based identity. However, by doing so, the ability of these programs to have lasting effects on the morality of youth may be improved (Gibbs, 2003; Lapsley & Power, 2005; Youniss & Yates, 1997).

This study was the first to simultaneously explore the relative roles of moral identity, moral reasoning, and moral emotion in the motivation of moral behavior. It is hoped that this research will help lay the groundwork for future investigation of the potentially important role of moral identity in moral functioning. As work progresses in this area, a fuller picture of moral motivation should emerge which will serve more useful in understanding both moral and immoral behaviors of individuals and societies, and in helping us better understand how to promote moral behavior and development.

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