

The Jekyll and Hyde of Emotional Intelligence: Emotion-Regulation Knowledge Facilitates Both Prosocial and Interpersonally Deviant Behavior

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Stéphane Côté¹, Katherine A. DeCelles¹, Julie M. McCarthy¹,
Gerben A. Van Kleef², and Ivona Hideg¹

¹Rotman School of Management, University of Toronto, and ²Department of Social Psychology, University of Amsterdam

Abstract

Does emotional intelligence promote behavior that strictly benefits the greater good, or can it also advance interpersonal deviance? In the investigation reported here, we tested the possibility that a core facet of emotional intelligence—emotion-regulation knowledge—can promote both prosocial and interpersonally deviant behavior. Drawing from research on how the effective regulation of emotion promotes goal achievement, we predicted that emotion-regulation knowledge would strengthen the effects of other-oriented and self-oriented personality traits on prosocial behavior and interpersonal deviance, respectively. Two studies supported our predictions. Among individuals with higher emotion-regulation knowledge, moral identity exhibited a stronger positive association with prosocial behavior in a social dilemma (Study 1), and Machiavellianism exhibited a stronger positive association with interpersonal deviance in the workplace (Study 2). Thus, emotion-regulation knowledge has a positive side and a dark side.

Keywords

emotional intelligence, emotion-regulation knowledge, prosocial behavior, interpersonal deviance

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Emotional intelligence has been overwhelmingly associated with prosociality in the popular press and the academic literature. For instance, in a best-selling book, Goleman (1995) proclaimed that “there is an old-fashioned word for the body of skills that emotional intelligence represents: *character* . . . the psychological muscle that moral conduct requires” (p. 285). Under the same assumption, scholars have explored links between prosocial behavior, defined as actions that benefit other people and enhance their welfare (Penner, Dovidio, Piliavin, & Schroeder, 2005), and emotional intelligence. Individuals scoring high on composite measures of emotional intelligence criticized others less (Brackett, Rivers, Shiffman, Lerner, & Salovey, 2006) and acted less aggressively (Brackett & Mayer, 2003) than did individuals with lower scores. In other studies, individuals skilled at recognizing and labeling emotions were more cooperative (Izard et al., 2001), and individuals skilled at regulating emotion helped others more (Lopes, Salovey, Côté, & Beers, 2005), relative in both cases to their lower-ability counterparts.

Yet this literature may provide an unbalanced view of the role of emotional intelligence in social life. Emotional intelligence reflects how well individuals process emotions and

emotional information (Mayer, Roberts, & Barsade, 2008; Salovey & Mayer, 1990). As such, emotional intelligence may facilitate a wide range of social behaviors, and not only socially valued behavior (Austin, Farrelly, Black, & Moore, 2007; Hawley, 1997; Kilduff, Chiaburu, & Menges, 2010). In the article that introduced the concept of emotional intelligence, Salovey and Mayer (1990) noted that “those whose [emotional] skills are channeled antisocially may create manipulative scenes or lead others sociopathically to nefarious ends” (p. 198). In support of this alternative view, findings from one study showed that school bullies obtained higher scores on a test of emotion understanding than did nonbullies (Sutton, Smith, & Swettenham, 1999).

In the research reported here, we strove to reconcile these different views about how emotional intelligence relates to social and antisocial behavior. We propose that a core facet of emotional intelligence—emotion-regulation knowledge—can

Corresponding Author:

Stéphane Côté, University of Toronto, Rotman School of Management, 105 St. George St., Toronto, Ontario, Canada M5S 3E6
E-mail: scote@rotman.utoronto.ca

further both evil and good ends by strengthening associations between personality traits and both interpersonal deviance, defined as actions that benefit the self by contravening norms and harming others' interests (Bennett & Robinson, 2000), and prosocial behavior. Emotion-regulation knowledge involves awareness of the most effective strategies to modify and nurture emotions in particular situations. It is part of the emotion-regulation branch within Salovey and Mayer's (1990) model of emotional intelligence. There is considerable evidence for the validity of this facet of emotional intelligence (see Joseph & Newman, 2010, for meta-analytic evidence, and Mayer et al., 2008, for a review). Drawing from research on the role of effectively regulating emotions in goal achievement (Erber & Erber, 2000; Tamir, Mitchell, & Gross, 2008), we propose that emotion-regulation knowledge can facilitate both prosocial and interpersonally deviant behavior, depending on individuals' personality traits.

How Emotion-Regulation Knowledge Facilitates Prosocial Behavior and Interpersonal Deviance

Personality traits are "dimensions of individual differences in tendencies to show consistent patterns of thoughts, feelings, and actions" (McCrae & Costa, 1990, p. 23). Traits shape how individuals direct their attention and activate specific goals (McCrae & Costa, 1995). Certain traits direct attention outwardly toward other people, leading individuals to pay attention to others' needs and recognize opportunities to help others (De Dreu, 2006; Grant & Mayer, 2009). Individuals with high levels of other-oriented traits are motivated to subordinate their own interests to other people's needs (Grant & Mayer, 2009). In the investigation reported here, we examined one such trait, moral identity. In comparison, other traits lead individuals to focus their attention on themselves, thus leading them to place less inherent worth on others' well-being and reduce their commitment to benefitting them (De Dreu, 2006). Individuals with high levels of self-oriented traits are motivated to prioritize their own outcomes. In this research, we examined one such trait, Machiavellianism.

Although personality traits motivate related goals, individuals do not always successfully achieve these goals. For instance, people who are motivated to act prosocially often ultimately prioritize their own interests (Epley & Dunning, 2000). One reason why trait-motivated goals may not always be achieved is that individuals vary on how well they can regulate emotions that facilitate or hinder goal attainment. Some emotions facilitate goal accomplishment by focusing individuals' attention on the goal-relevant features of situations (Frijda, 1986). Other emotions impede goal accomplishment because they are distracting and draining, or because they trigger actions that are unrelated to or incompatible with goals (Metcalf & Mischel, 1999). This implies that individuals must know how to effectively regulate their emotions in order to achieve trait-motivated goals.

There is evidence that individuals exert efforts to amplify and maintain emotions that help them achieve their goals (Erber & Erber, 2000). In one study, individuals who anticipated playing a confrontational video game that involved killing enemies deliberately chose to up-regulate their anger, which, in turn, enhanced their performance in the game (Tamir et al., 2008). Emotion-regulation knowledge should help individuals to identify the most effective strategies to generate and nurture goal-conducive emotions (Salovey & Mayer, 1990). In a situation involving a social dilemma, when individuals must decide whether to benefit the common good or the self, compassion may facilitate prosociality, and pride may stand in the way of cooperation (Oveis, Horberg, & Keltner, 2010). In these situations, other-oriented individuals may try to generate and nurture compassion in the self, and these efforts should be most successful among individuals with high emotion-regulation knowledge. Self-oriented individuals, in contrast, may focus on generating and nurturing pride, and these efforts should succeed to the extent that individuals are aware of the best strategies to do so. Thus, emotion-regulation knowledge may help individuals regulate goal-conducive emotions, so as to channel the motivation provided by traits into greater levels of trait-consistent behavior.

These arguments informed the central hypothesis guiding the two studies presented here: Emotion-regulation knowledge moderates associations between personality traits and behavior, such that individuals with higher emotion-regulation knowledge (relative to those with lower emotion-regulation knowledge) show stronger associations between their traits and both prosocial behavior (Study 1) and interpersonal deviance (Study 2).

Study 1: The Dr. Jekyll of Emotion-Regulation Knowledge: Moral Identity and Prosocial Behavior in a Social Dilemma

In Study 1, we examined whether emotion-regulation knowledge strengthens the association between the trait of moral identity, defined as how central being a moral person is to a person's self-concept (Aquino & Reed, 2002), and prosocial behavior. Individuals with high moral identity should be motivated to act prosocially to ensure that their actions match how they view themselves. We predicted that there would be a positive association between moral identity and prosocial behavior in a social dilemma, and that this association would be stronger among individuals with high emotion-regulation knowledge than among individuals with less emotion-regulation knowledge.

Method

Participants. We recruited 131 participants (59% female, 41% male; age: $M = 20.23$ years, $SD = 1.44$ years, range = 18–26 years) from three sections of an introductory course in organizational behavior. Participants were enrolled in the

undergraduate commerce program at the University of Toronto. All students signed a consent form (approved by the university's Office of Research Ethics), which stated that they agreed to let the researchers use data from class exercises for this study.

Procedure and measures. There were two phases of data collection. In the first phase, participants completed an online survey that included a measure of emotion-regulation knowledge and demographic questions. They were instructed to complete this survey during the first 2 weeks of the course. The second phase took place 1 month after the first phase was completed. Participants completed another online survey that included a measure of moral identity and a measure of prosocial behavior (assessed through reactions to a social-dilemma situation). After completing this second survey, students attended a lecture about research related to this study.

Emotion-regulation knowledge (Phase 1). To test participants' emotion-regulation knowledge, we asked them to complete the 30-item Situational Test of Emotion Management (STEM; MacCann & Roberts, 2008). The STEM assesses the degree to which respondents are aware of the most effective strategies to regulate emotions in situations. Each item describes an emotional situation and presents four potential courses of action to amplify, maintain, or suppress an emotion in that situation. Respondents select the course of action that is most effective, and they receive credit to the extent that their choices match those of experts (psychologists, life coaches, and counselors). The following is a sample item:

Lee's workmate fails to deliver an important piece of information on time, causing Lee to fall behind schedule also. What action would be the most effective for Lee?
 (a) Work harder to compensate, (b) Get angry with the workmate, (c) Explain the urgency of the situation to the workmate, and (d) Never rely on that workmate again.
 [Option c is the best answer.]

The STEM is not strongly correlated with cognitive abilities and personality traits, and this supports its discriminant validity (MacCann, 2010). Criterion validity is supported by correlations with life satisfaction and grades (MacCann & Roberts, 2008). In past research, the STEM exhibited acceptable internal reliability (MacCann & Roberts, 2008).

Moral identity (Phase 2). To measure moral identity, we administered Aquino and Reed's (2002) well-validated 10-item measure of moral identity. Respondents read a list of characteristics (e.g., caring, compassionate) and then indicated their agreement with 10 statements about these characteristics on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*). A sample statement is "I strongly desire to have these characteristics."

Prosocial behavior (Phase 2). To measure prosocial behavior, we adapted a social-dilemma situation from past research (Brewer & Kramer, 1986). Participants read a statement explaining that the continued existence of many resources that

exist in a fixed amount, such as water, depends on people's reasonable consumption. The statement indicated that the less each person consumes, the more there is for everyone, and that it is possible to consume so much that there is nothing left. Participants were asked to decide how much of the resources they wanted to take for themselves by selecting a number of points between 0 and 10 from a common pool of 500 points. They read that 1 participant would receive a \$100 gift certificate from a lottery (which was actually conducted), and that the more points each person took, the higher his or her chances were of winning the lottery. However, there would be no lottery if there were no more points in the common pool, and nobody would receive the gift certificate. Thus, participants had to decide between increasing their own chances of winning money and maximizing the common good by increasing the chances that the lottery occurred. The lottery occurred at the end of the course.

Participants could act prosocially by taking a small number of points to increase the chances that the lottery occurred and benefited one of the participants. The measure of prosocial behavior thus consisted of the number of points participants left in the common resource pool, between 0 and 10. Participants left an average of 3.73 points ($SD = 2.24$; range = 0 to 9).

Control variables. In some past research, women (Lopes et al., 2005) and older individuals (Mayer, Salovey, & Caruso, 2002) exhibited more emotion-regulation knowledge than men and younger individuals, respectively. Thus, there could be interactions that look essentially the same as the hypothesized interaction between moral identity and emotion-regulation knowledge, so that the positive association between moral identity and prosocial behavior is stronger among women (relative to men) and older individuals (relative to younger individuals). We verified that this was not the case by controlling for gender, age, and their interactions with moral identity (Hull, Tedlie, & Lehn, 1992).

Results and discussion

Table 1 shows descriptive statistics, correlations, and reliabilities from Study 1. As expected, there was a positive correlation between moral identity and prosocial behavior. Emotion-regulation knowledge was not significantly correlated with prosocial behavior.

We used the hierarchical multiple-regression procedures described by Aiken and West (1991) to test our hypothesis that emotion-regulation knowledge accentuates the positive association between moral identity and prosocial behavior. We centered all continuous predictors to reduce potential problems of multicollinearity among the variables. We conducted the hierarchical regression analysis in three steps. In the first step ($\Delta R^2 = .04$, $p = .07$), we regressed prosocial behavior on gender (coded as 1 for female and 0 for male), $\beta = 0.20$, $p < .05$, and age, $\beta = 0.02$, $p = .81$. In the second step ($\Delta R^2 = .02$, $p = .58$), we added the predictor variable, moral identity, $\beta = 0.11$, $p = .40$, the moderator variable, emotion-regulation

Table 1. Descriptive Statistics, Correlations, and Reliabilities in Study 1 ($N = 131$)

Variable	<i>M</i>	<i>SD</i>	Correlations			
			1	2	3	4
1. Gender	.59	.49				
2. Age (years)	20.23	1.44	-.01			
3. Moral identity ($\alpha = .84$)	5.04	0.87	.15	.11		
4. Emotion-regulation knowledge ($\alpha = .61$)	0.50	0.09	.25**	.07	.26**	
5. Prosocial behavior	3.73	2.24	.20*	.02	.17 [†]	.10

Note: Gender was coded 1 for female and 0 for male.

[†] $p = .05$. * $p < .05$. ** $p < .01$.

knowledge, $\beta = 0.02$, $p = .81$, the interaction between moral identity and gender, $\beta = 0.04$, $p = .73$, and the interaction between moral identity and age, $\beta = 0.03$, $p = .70$. In the final step ($\Delta R^2 = 0.04$, $p < .05$), we added the interaction between moral identity and emotion-regulation knowledge; this interaction was significant, $\beta = 0.24$, $p < .05$.

We followed the approach recommended by Aiken and West (1991) to interpret the interaction. As Figure 1 reveals, the expected positive association between moral identity and prosocial behavior became more pronounced as emotion-regulation knowledge increased. We also tested simple slopes for the association between moral identity and prosocial behavior. As expected, at 1 standard deviation above the mean in emotion-regulation knowledge, the simple slope for this association was positive and significant, $\beta = 0.36$, $p < .01$. An increase of 1 unit in the moral identity of individuals with high emotion-regulation knowledge was associated with leaving

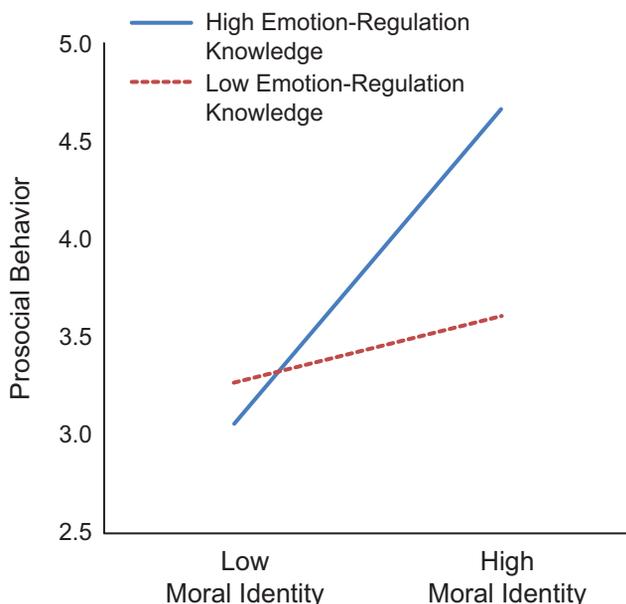


Fig. 1. Results from Study 1: the interactive effect of moral identity and emotion-regulation knowledge in predicting prosocial behavior. For both predictors, "high" refers to values 1 standard deviation above the mean, and "low" refers to values 1 standard deviation below the mean.

0.92 more points in the lottery pool. At 1 standard deviation below the mean in emotion-regulation knowledge, the simple slope for this association was not significant, $\beta = 0.08$, $p = .43$.

In Study 1, we found that emotion-regulation knowledge acted as a moderating variable that strengthened the association between moral identity and prosocial behavior, the latter being operationalized as the degree to which individuals refrained from depleting a common pool of resources. We extended these findings in Study 2 by examining whether emotion-regulation knowledge strengthens the positive association between Machiavellianism and interpersonal deviance.

Study 2: The Mr. Hyde of Emotion-Regulation Knowledge: Machiavellianism and Interpersonal Deviance in the Workplace

The trait of Machiavellianism reflects mistrust in human nature and a desire to manipulate other people for personal gain, often at their expense (Christie & Geis, 1970). Machiavellians are particularly motivated to assert their power over other people and feel superior to them; they are intransigent during bargaining, give orders, and adopt leadership roles in groups (Wilson, Near, & Miller, 1996). Denigrating other people helps Machiavellians accomplish these goals. Consistent with these arguments, data from past research has shown that Machiavellianism is positively correlated with interpersonal deviance (Bennett & Robinson, 2000). Our conceptual analysis suggested that emotion-regulation knowledge should help Machiavellians generate and nurture emotions to meet a goal of asserting dominance. We thus predicted that the positive relation between Machiavellianism and interpersonal deviance would be stronger when emotion-regulation knowledge was high rather than when it was low.

Method

Participants. Participants were 252 employees of the University of Toronto (73% female, 27% male; ages: $M = 39.29$ years, $SD = 10.16$ years, range = 22–64 years). They had an average of 16 full years of work experience ($SD = 10$) and held a variety of occupations (e.g., finance officer, manager, accountant). Sixty-two percent had a university undergraduate degree, 20% had less than a university degree, and 16% had a master's degree or a more advanced degree (education data for 2% of the sample were unavailable). We recruited participants via an e-mail message sent to managerial, administrative, and professional staff of the university. This message invited full-time employees who had been working in their job for at least 3 months to participate in a study of the workplace.

Procedure and measures. There were two phases of data collection. In the first phase, participants completed a consent form (approved by the university's Office of Research Ethics);

measures of emotion-regulation knowledge, Machiavellianism, and cognitive ability; and demographic information in a laboratory room. In the second phase, 1 week later, participants completed a measure of interpersonal deviance online.

Emotion-regulation knowledge (Phase 1). To measure emotion-regulation knowledge, we administered the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT; Mayer et al., 2002), and we drew on the 29 items assessing emotion-regulation knowledge for our study. Like the STEM does, this section of the MSCEIT assesses respondents' awareness of how to best regulate emotions in specific situations. The items ask respondents to evaluate the effectiveness of various strategies to generate, maintain, or suppress emotions in the situations described. Participants receive credit to the extent that their ratings of the effectiveness of each strategy match the ratings provided by expert emotion researchers.¹

Past studies have established the discriminant validity of the MSCEIT with personality traits and cognitive ability (Côté & Miners, 2006) and criterion validity with the quality of social relationships (Lopes et al., 2005). The test also exhibited adequate test-retest reliability and internal reliability (Brackett & Mayer, 2003; Lopes et al., 2005).

Machiavellianism (Phase 1). To test participants' degree of Machiavellianism, we administered the MACH-IV scale (Christie & Geis, 1970), which asks respondents to indicate their agreement with 20 items on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*; see Wilson et al., 1996, for a review of research demonstrating the validity of this instrument). A sample item is "Anyone who completely trusts anyone else is asking for trouble."

Cognitive ability (Phase 1). We measured cognitive ability with the Wonderlic Personnel Test, a widely used and well-validated 12-min, 50-question paper-and-pencil test (Wonderlic, 1992).

Interpersonal deviance (Phase 2). To measure interpersonal deviance, we administered Bennett and Robinson's (2000) scale. Respondents indicated how often they engaged in seven behaviors on a scale from 1 (*never*) to 7 (*daily*). A sample item is "I publicly embarrassed someone at work." Although the content is sensitive, we are confident for four reasons that

participants responded honestly. First, in past research, people were surprisingly willing to report engaging in interpersonal deviance (Bennett & Robinson, 2000). Second, self-reports are correlated with supervisor reports of these behaviors ($r = .48$; Mount, Ilies, & Johnson, 2006). Third, meta-analytic research on interpersonal deviance has found the same results when self-reports were included than when they were excluded (Berry, Ones, & Sackett, 2007). Finally, we emphasized that the survey was confidential and solely for research purposes, a procedure that tends to increase the accuracy of self-ratings of behavior (Fletcher & Baldry, 1999). Further, any error due to the self-report nature of this instrument would have made it more difficult to discern effects due to underreporting and restriction of range, and this limitation would have rendered our tests more conservative.

Control variables. As in Study 1, we controlled for gender, age, and their respective interactions with Machiavellianism. We also controlled for cognitive ability and its interaction with Machiavellianism because cognitive ability has exhibited moderate correlations with emotion-regulation knowledge in some past research (e.g., MacCann & Roberts, 2008). Thus, there could be an interaction that looks essentially the same as the hypothesized interaction between Machiavellianism and emotion-regulation knowledge, so that the positive association between Machiavellianism and interpersonal deviance becomes more pronounced as cognitive ability increases.

Results and discussion

Table 2 shows descriptive statistics, correlations, and reliabilities from Study 2. Machiavellianism was positively correlated with interpersonal deviance. Emotion-regulation knowledge was not directly associated with interpersonal deviance.

We used hierarchical regression analysis with centered variables to test our hypothesis. In the first step ($\Delta R^2 = .07$, $p < .001$), we regressed interpersonal deviance on gender (coded as 1 for female and 0 for male), $\beta = -0.14$, $p < .05$, age, $\beta = -0.16$, $p < .05$, and cognitive ability, $\beta = 0.10$, $p = .12$. In the second step ($\Delta R^2 = .04$, $p = .07$), we added the predictor

Table 2. Descriptive Statistics, Correlations, and Reliabilities in Study 2 ($N = 246\text{--}252$)

Variable	M	SD	Correlations				
			1	2	3	4	5
1. Gender	.73	.45					
2. Age (years)	39.29	10.16	.13*				
3. Cognitive ability ($\alpha = .87$)	22.67	6.34	-.24***	-.03			
4. Machiavellianism ($\alpha = .73$)	3.27	0.62	-.19**	-.20**	.05		
5. Emotion-regulation knowledge ($\alpha = .61$)	98.44	14.37	.05	.00	.30***	-.28***	
6. Interpersonal deviance ($\alpha = .77$)	1.58	0.71	-.19**	-.18**	.15*	.23***	-.04

Note: Gender was coded 1 for female and 0 for male.
* $p < .05$. ** $p < .01$. *** $p < .001$.

variable, Machiavellianism, $\beta = 0.23$, $p = .06$, the moderator variable, emotion-regulation knowledge, $\beta = -0.02$, $p = .75$, and the interactions between Machiavellianism and gender, $\beta = -0.08$, $p = .49$, Machiavellianism and age, $\beta = -0.05$, $p = .43$, and Machiavellianism and cognitive ability, $\beta = 0.06$, $p = .30$. In the final step ($\Delta R^2 = .03$, $p < .01$), we added the interaction between Machiavellianism and emotion-regulation knowledge; this interaction was significant, $\beta = 0.16$, $p < .01$.

As Figure 2 reveals, the expected positive association between Machiavellianism and interpersonal deviance became stronger as emotion-regulation knowledge increased. At 1 standard deviation above the mean in emotion-regulation knowledge, the simple slope for the association between Machiavellianism and interpersonal deviance was positive and significant, $\beta = 0.36$, $p < .001$. An increase of 1 unit in Machiavellianism was associated with a 0.41 increase in interpersonal deviance among participants with high emotion-regulation knowledge. At 1 standard deviation below the mean in emotion-regulation knowledge, the simple slope for this association was not significant, $\beta = 0.09$, $p = .30$.

Exploratory analyses further revealed that neither cognitive ability nor any of the other emotional-intelligence abilities (perceiving, using, or understanding emotions) measured with the MSCEIT moderated the association between Machiavellianism and interpersonal deviance, ΔR^2 s = .00 to .01, β s = -0.03 to 0.07 , p s = .29 to .92. This increases confidence that the results were driven by emotion-regulation knowledge and thus lends additional support to our theory.

The results of our second study paralleled those of Study 1. Emotion-regulation knowledge was not directly associated

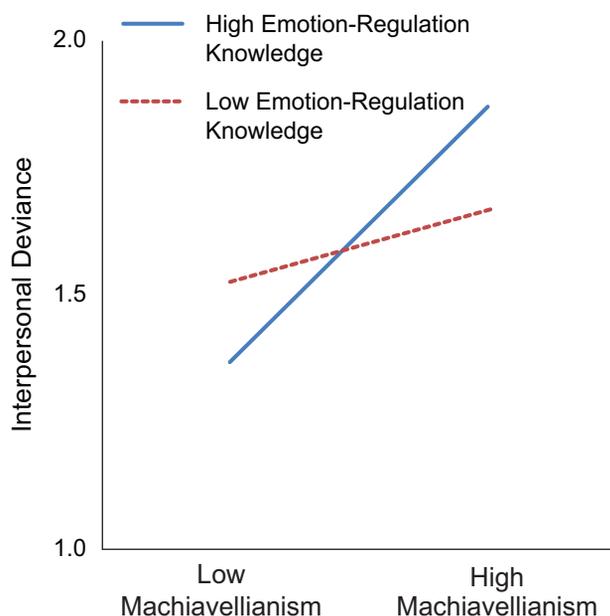


Fig. 2. Results from Study 2: the interactive effect of Machiavellianism and emotion-regulation knowledge in predicting interpersonal deviance. For both predictors, “high” refers to values 1 standard deviation above the mean, and “low” refers to values 1 standard deviation below the mean.

with interpersonal deviance. Rather, it strengthened the positive association between Machiavellianism and interpersonal deviance. Although the studies employed different populations, we do not think this explains why emotion-regulation knowledge facilitated prosocial behavior in Study 1 and interpersonal deviance in Study 2. There is no strong theoretical or empirical rationale to anticipate that emotion-regulation knowledge would play a stronger role in interpersonal deviance among older individuals, such as the Study 2 participants, than among younger individuals, such as the Study 1 participants. Instead, research on social-value orientation and social motivation has documented that individuals tend to become more prosocial as they get older (Van Lange, De Bruin, Otten, & Joireman, 1997).

General Discussion

Claims in the popular press and in past research have highlighted the prosocial manifestations of emotion-regulation knowledge. Our research presents a more balanced view, and demonstrates that such knowledge has a dark side as well. We developed and tested a new model that positions emotion-regulation knowledge as a moderator variable that enhances the effects of moral identity and Machiavellianism on social and antisocial behavior, respectively. Our results show that emotion-regulation knowledge is itself neither positive nor negative, but can facilitate the objectives of individuals whose interests are in doing harm as well as those interested in benefiting the greater good.

Emotion-regulation knowledge was positively correlated with moral identity in Study 1 ($r = .26$). In contrast, emotion-regulation knowledge was negatively correlated with Machiavellianism in Study 2 ($r = -.28$). The latter result is consistent with two findings of a previous investigation (r s = $-.22$ and $-.25$; Austin et al., 2007, Studies 1 and 2). These small correlations (using Cohen’s, 1988, standard) are not inconsistent with our assertion that emotion-regulation knowledge can bring out good or bad behaviors, depending on individuals’ traits. In particular, not all Machiavellians have low emotion-regulation knowledge, as suggested by the small overlap between the variables ($r^2 = .08$) in Study 2. Some Machiavellians have high emotion-regulation knowledge, and these individuals tend to be more interpersonally deviant. Although individuals who score high on Machiavellianism tend to have lower emotion-regulation knowledge than individuals who score low on Machiavellianism, Machiavellians who know how to regulate emotions effectively are especially harmful.

The reliability of the measures of emotion-regulation knowledge was somewhat low ($\alpha = .61$ in both studies), although typical for these measures. For example, the reliability of the subtest of the MSCEIT used in Study 2 of our investigation was .63 in Lopes et al. (2005). These low levels of reliability likely made our hypothesis tests more conservative.

Our research offers valuable contributions to theories on prosocial behavior and interpersonal deviance. Emotions have

become central to our understanding of these behaviors (e.g., Kilduff et al., 2010; Oveis et al., 2010). Our study introduces emotion-regulation knowledge to this research, paving a fresh path for understanding how individual variation in such knowledge enables traits to be expressed in both social and antisocial behavior. Our research also places boundary conditions on the effects of traits on social and antisocial behavior by showing that these effects depend on emotion-regulation knowledge.

In future research, it would be interesting to examine whether emotion-regulation knowledge channels the effects of structural variables, such as social power, on behavior. For instance, compared with individuals in low-power conditions, individuals in high-power conditions could be expected to claim more for themselves than for others in negotiations, but perhaps especially when they have sufficient knowledge about how to precisely regulate their emotions to accomplish this.

Contrary to some previous beliefs (e.g., Goleman, 1995), emotion-regulation knowledge facilitates both prosocial and interpersonally deviant behavior by enhancing the motivational effects of traits. Saints can behave more prosocially in proportion to their knowledge of emotion regulation. Likewise, evil geniuses can perform more interpersonally deviant actions in proportion to the same knowledge.

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Declaration of Conflicting Interests

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

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Note

1. The test publisher does not authorize reproduction of actual items from the MSCEIT. Abridged examples of items considered during the development of the MSCEIT appear in Lopes et al. (2005, pp. 114–115).

References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Aquino, K., & Reed, A., II. (2002). The self-importance of moral identity. *Journal of Personality and Social Psychology, 83*, 1423–1440.
- Austin, E. J., Farrelly, D., Black, C., & Moore, H. (2007). Emotional intelligence, Machiavellianism and emotional manipulation: Does EI have a dark side? *Personality and Individual Differences, 43*, 179–189.
- Bennett, R. J., & Robinson, S. L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology, 85*, 349–360.
- Berry, C. M., Ones, D. S., & Sackett, P. R. (2007). Interpersonal deviance, organizational deviance, and their common correlates: A review and meta-analysis. *Journal of Applied Psychology, 92*, 409–423.
- Brackett, M. A., & Mayer, J. D. (2003). Convergent, discriminant, and incremental validity of competing measures of emotional intelligence. *Personality and Social Psychology Bulletin, 29*, 1147–1158.
- Brackett, M. A., Rivers, S., Shiffman, S., Lerner, N., & Salovey, P. (2006). Relating emotional abilities to social functioning: A comparison of self-report and performance measures of emotional intelligence. *Journal of Personality and Social Psychology, 91*, 780–795.
- Brewer, M. B., & Kramer, R. M. (1986). Choice behavior in social dilemmas: Effects of social identity, group size, and decision framing. *Journal of Personality and Social Psychology, 50*, 543–549.
- Christie, R., & Geis, F. L. (1970). *Studies in Machiavellianism*. New York, NY: Academic Press.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Côté, S., & Miners, C. T. H. (2006). Emotional intelligence, cognitive intelligence, and job performance. *Administrative Science Quarterly, 51*, 1–28.
- De Dreu, C. K. W. (2006). Rational self-interest and other orientation in organizational behavior: A critical appraisal and extension of Meglino and Korsgaard (2004). *Journal of Applied Psychology, 91*, 1245–1252.
- Epley, N., & Dunning, D. (2000). Feeling “holier than thou”: Are self-serving assessments produced by errors in self or social prediction? *Journal of Personality and Social Psychology, 79*, 861–875.
- Erber, R., & Erber, M. W. (2000). The self-regulation of moods: Second thoughts on the importance of happiness in everyday life. *Psychological Inquiry, 11*, 142–148.
- Fletcher, C., & Baldry, C. (1999). Multi-source feedback: A research perspective. In C. L. Cooper & I. T. Robertson (Eds.), *International review of industrial and organizational psychology* (Vol. 14, pp. 149–193). London, England: Wiley.
- Frijda, N. H. (1986). *The emotions*. Cambridge, England: Cambridge University Press.
- Goleman, D. (1995). *Emotional intelligence*. New York, NY: Bantam.
- Grant, A. M., & Mayer, D. M. (2009). Good soldiers and good actors: Prosocial and impression management motives as interactive predictors of affiliative citizenship behaviors. *Journal of Applied Psychology, 94*, 900–912.
- Hawley, P. H. (2007). Social dominance in childhood and adolescence: Why social competence and aggression may go hand in hand. In P. H. Hawley, T. D. Little, & P. C. Rodkin (Eds.), *Aggression and adaptation: The bright side to bad behavior* (pp. 1–29). Mahwah, NJ: Erlbaum.
- Hull, J. G., Tedlie, J. C., & Lehn, D. A. (1992). Moderator variables in personality research: The problem of controlling for plausible alternatives. *Personality and Social Psychology Bulletin, 18*, 115–117.

- Izard, C., Fine, S., Schultz, D., Mostow, A., Ackerman, B., & Youngstrom, E. (2001). Emotion knowledge as a predictor of social behavior and academic competence in children at risk. *Psychological Science, 12*, 18–23.
- Joseph, D. L., & Newman, D. A. (2010). Emotional intelligence: An integrative meta-analysis and cascading model. *Journal of Applied Psychology, 95*, 54–78.
- Kilduff, M., Chiaburu, D. S., & Menges, J. I. (2010). Strategic use of emotional intelligence in organizational settings: Exploring the dark side. *Research in Organizational Behavior, 30*, 129–152.
- Lopes, P. N., Salovey, P., Côté, S., & Beers, M. (2005). Emotion regulation abilities and the quality of social interaction. *Emotion, 5*, 113–118.
- MacCann, C. (2010). Further examination of emotional intelligence as a standard intelligence: A latent variable analysis of fluid intelligence, crystallized intelligence, and emotional intelligence. *Personality and Individual Differences, 49*, 490–496.
- MacCann, C., & Roberts, R. D. (2008). New paradigms for assessing emotional intelligence: Theory and data. *Emotion, 8*, 540–551.
- Mayer, J. D., Roberts, R., & Barsade, S. G. (2008). Human abilities: Emotional intelligence. *Annual Review of Psychology, 59*, 507–536.
- Mayer, J. D., Salovey, P., & Caruso, D. R. (2002). *Manual for the MSCEIT (Mayer-Salovey-Caruso Emotional Intelligence Test)*. Toronto, Ontario, Canada: MultiHealth Systems.
- McCrae, R. R., & Costa, P. T., Jr. (1990). *Personality in adulthood*. New York, NY: Guilford.
- McCrae, R. R., & Costa, P. T., Jr. (1995). Trait explanations in personality psychology. *European Journal of Personality, 9*, 231–252.
- Metcalfe, J., & Mischel, W. (1999). A hot/cool system analysis of delay of gratification: Dynamics of willpower. *Psychological Review, 106*, 3–19.
- Mount, M., Ilies, R., & Johnson, E. (2006). Relationship of personality traits and counterproductive work behaviors: The mediating effects of job satisfaction. *Personnel Psychology, 59*, 591–622.
- Oveis, C., Horberg, E. J., & Keltner, D. (2010). Compassion, pride, and social intuitions of self-other similarity. *Journal of Personality and Social Psychology, 98*, 618–630.
- Penner, L. A., Dovidio, J. F., Piliavin, J. A., & Schroeder, D. A. (2005). Prosocial behavior: Multilevel perspectives. *Annual Review of Psychology, 56*, 365–392.
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality, 9*, 185–211.
- Sutton, J., Smith, P. K., & Swettenham, J. (1999). Social cognition and bullying: Social inadequacy or skilled manipulation? *British Journal of Developmental Psychology, 17*, 435–450.
- Tamir, M., Mitchell, C., & Gross, J. J. (2008). Hedonic and instrumental motives in anger regulation. *Psychological Science, 19*, 324–328.
- Van Lange, P. A. M., De Bruin, E. M. N., Otten, W., & Joireman, J. A. (1997). Development of prosocial, individualistic, and competitive orientations: Theory and preliminary evidence. *Journal of Personality and Social Psychology, 73*, 733–746.
- Wilson, D. S., Near, D., & Miller, R. R. (1996). Machiavellianism: A synthesis of the evolutionary and psychological literatures. *Psychological Bulletin, 119*, 285–299.
- Wonderlic. (1992). *Wonderlic Personnel Test & Scholastic Level Exam user's manual*. Libertyville, IL: Author.