

Being “in Control” May Make You Lose Control: The Role of Self-Regulation in Unethical Leadership Behavior

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Abstract In the present article, we argue that the constant pressure that leaders face may limit the willpower required to behave according to ethical norms and standards and may therefore lead to unethical behavior. Drawing upon the ego depletion and moral self-regulation literatures, we examined whether self-regulatory depletion that is contingent upon the moral identity of leaders may promote unethical leadership behavior. A laboratory experiment and a multisource field study revealed that regulatory resource depletion promotes unethical leader behaviors among leaders who are low in moral identity. No such effect was found among leaders with a high moral identity. This study extends our knowledge on why organizational leaders do not always conform to organizational goals. Specifically, we argue that the hectic and fragmented workdays of leaders may increase the likelihood that they violate ethical norms. This highlights the necessity to carefully schedule tasks that may have ethical implications. Similarly, organizations should be aware that overloading their managers with work may increase the likelihood of their leaders transgressing ethical norms.

Keywords Unethical leadership · Ego depletion · Moral identity

One critical challenge that organizational leaders face is to remain focused on the display of ethical behavior during the course of their fragmented, hectic, and disorderly work days. In fact, the many ethical failures within organizations that have emerged in the media over the past decade, such as fraud and corruption, clearly highlight the need for organizational leaders to act in an ethical manner. Indeed, if leaders focus on behaving ethically, then they will serve as an important source of ethical guidance for their employees (Brown et al. 2005; Walumbwa et al. 2011). Conversely, when leaders act unethically, employees will usually follow suit (Mayer et al. 2009). Yet, acting in ethical ways is not necessarily easy for leaders because they often have busy and demanding work schedules. Leaders are responsible for a great variety of complex decisions and actions that range from multi-million dollar decisions to more trivial ones; thus, they must constantly decide which decisions are worthy of their attention and which are not (e.g., Ganster 2005; Hambrick et al. 2005; Mintzberg 1973).

In the present paper, we argue that the constant pressure that organizational leaders face can limit the willpower that is required to act ethically. This lack of mental energy can potentially result in negative consequences, such as discriminating against employees based on gender or race, discussing confidential company information with unauthorized others, and theft of company property. Following the ego depletion literature, we argue that when leaders have to make multiple decisions and function in demanding situations, they are less likely to maintain the mental energy (i.e., cognitive resources) needed for other controlled, energy-requiring processes (Muraven and Baumeister 2000; Vohs et al. 2008). Furthermore, because ethical behaviors may depend on cognitive resources (Usoof-Thowfeek et al. 2011), ego depletion (i.e., as

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resulting from the hectic leader role) may increase the likelihood of leaders displaying unethical behavior.

We further postulate, however, that this proposed effect of ego depletion on unethical leader behavior may have boundary conditions. One important limit may be the extent to which people assign value and importance to morality. This variable is likely relevant because it may influence the amount of cognitive resources that leaders need to behave in an ethical manner. Specifically, moral identity refers to the extent to which people consider being a moral person as an important part of their self-definition (Aquino and Reed 2002; Blasi 1980). For those who define themselves in terms of morality, the display of ethical behavior will be more frequently implemented and, consequently, more internalized and automatic; as such, they will consume fewer cognitive resources and maintain their self-control (cf. Aquino et al. 2009; Aquino and Reed 2002; Reynolds and Ceranic 2007). One can therefore expect that leaders who are high in moral identity are less vulnerable than leaders low in moral identity to the effects of ego depletion on their display of ethical behaviors.

Ego Depletion and Self-Control

Self-control refers to an individual's capacity to inhibit, override, or refrain from acting upon his/her impulses and desires (Baumeister et al. 1994; Mischel 1974; Muraven and Baumeister 2000; Tangney et al. 2004). Successful self-control has been linked to numerous positive outcomes such as success at school and at work, increased concentration, an improved ability to cope with stress, and even lower divorce rates. Self-control failure, on the other hand, has been linked to negative actions such as theft, assault, and aggression, and various negative outcomes such as obesity, depression, and obsessive thoughts, (Hagger et al. 2010; Muraven et al. 1998; Tangney et al. 2004). It is thus clear that self-control plays a highly important role in a many aspects of our lives.

Baumeister and colleagues (e.g., Baumeister et al. 1998; Baumeister and Heatherton 1996; Baumeister et al. 2007; Muraven and Baumeister 2000; Muraven et al. 1998) proposed a limited-strength model of self-control to explain self-control failures. The idea behind this model is that self-control requires mental energy that is limited in its availability (Baumeister et al. 1998; Muraven et al. 1998). More specifically, all acts of self-control, such as repressing habitual responses, draw from the same limited resource, which can become depleted with repeated use (Muraven and Baumeister 2000). Baumeister and colleagues compared self-control to a muscle, which requires strength and energy to exert force over a period of time (Hagger et al. 2010). Just as muscles get tired from

exertion, self-control performance also deteriorates after repeated use (Baumeister et al. 2007).

The state of diminished resources following exertion of self-control is usually referred to as ego depletion (Baumeister et al. 1998). In support of the idea that different acts of self-control draw on a limited and shared resource, research shows that various acts of self-control (e.g., resisting tempting foods, suppressing emotions, performing counter-attitudinal behaviors) impair performance on a subsequent completely unrelated act that requires self-control (for an overview, see Hagger et al. 2010). Particularly important for the present purposes, research has shown that after an act of self-control, people are less willing to help others (DeWall et al. 2008), are more likely to cheat (Gino et al. 2011; Mead et al. 2009), and more likely to act aggressively (DeWall et al. 2007).

Research has identified several causes of resource depletion, including lack of sleep (Barnes et al. 2011), having to resist temptation (Baumeister et al. 1998; Vohs and Heatherton 2000), and stress (Muraven and Baumeister 2000). Interestingly, one prime determinant of ego depletion is having to make multiple choices and decisions (Vohs et al. 2008). As noted, most organizational leaders experience heavy workloads and have to make numerous choices and decisions each day. These specific characteristics of the leadership role seem to form a source of resource depletion, which might make leaders especially prone to self-control failure.

Awareness of the ethical dimension of many complex business decisions is an active and attention-consuming process that requires cognitive resources (Usouf-Thowfeek et al. 2011). Moreover, resisting the temptation to act in unethical ways is also likely to draw on these resources; this temptation may be especially pronounced for leaders because of their position of power (see, e.g., Fiske 1993; Georges and Harris 1998; Rusbult and Van Lange 2003). The assumption that ethical leadership draws from the same regulatory resources as the other aspects of the leadership role (e.g., decision making, number of choices, high workload) thus leads us to expect that depletion of self-regulatory resources can lead to higher levels of unethical leadership behavior.

However, there may be important boundary conditions for the link between ego depletion and unethical leader behavior. Specifically, the extent to which people assign value and importance to morality is likely to influence the amount of cognitive resources that leaders need to behave in an ethical manner. That is, leaders who define themselves in terms of morality will require fewer cognitive resources to inhibit impulses and will be able to buffer the effects of ego depletion on their ethical behaviors (cf. Aquino et al. 2009; Aquino and Reed 2002; Reynolds and Ceranic 2007). We explicitly test this argument by

focusing on the role of moral identity as a variable that limits the effects of ego depletion on unethical leader behaviors.

Moral Identity as a Buffer

Moral identity reflects the importance of morality to one's self-concept (Aquino and Reed 2002; Shao et al. 2008). Moral identity is usually conceptualized as a cognitive representation or schema of moral values, goals, traits, and behavioral scripts (Aquino et al. 2009; Lapsley and Narvaez 2004; Shao et al. 2008). For people high in moral identity, this moral self-schema is more readily accessible and available for use than for people low in moral identity. Moral values and ideals (such as being a good person, being helpful) are more central to someone's self-concept for people high in moral identity (Narvaez et al. 2006; Shao et al. 2008). When activated, moral identity should influence one's cognition and behavior as people have a strong tendency to maintain self-consistency (Aquino and Reed 2002; Blasi 1980, 1983).

In line with the idea that moral identity is an important source of motivation to behave in an ethical manner, previous studies have revealed a positive relationship between moral identity and moral behavior as reflected in self-reported volunteering (Aquino and Reed 2002), the actual likelihood of making a donation (Aquino and Reed 2002; Reed and Aquino 2003), and charitable giving (Reynolds and Ceranic 2007). Additionally, moral identity has been associated with decreased levels of immoral conduct, such as lying in business negotiations (Shao et al. 2008), lowered aggression on the football field (Sage et al. 2006), and less antisocial behavior among adolescents (Barriga et al. 2001). Interestingly, recent research has suggested that moral identity also functions as an antecedent of ethical leader behavior (Mayer et al. 2012).

We argue that moral identity is also a relevant boundary condition for the effects of ego depletion on unethical leader behavior. As noted, moral identity is an important motivator of ethical behavior (Aquino and Reed 2002; Blasi 1980; Hardy and Carlo 2005), and people with a high moral identity should thus be especially likely to expend extra effort to self-regulate their ethical behavior. Over time, people with a high moral identity will more frequently regulate their behavior (i.e., inhibit selfish impulses), resulting in more internalized and automatic enactment of ethical behavior (Seeley and Gardner 2003). Consequently, for people high in moral identity, this internalization of ethical behavior arguably implies that one's ethical behavior is less likely to draw on controlled cognitive processes that share resources with other controlled processes and thus may suffer less from regulatory depletion. In other words, because people high in moral

identity are much more likely than people low in moral identity to have internalized the display of ethical and prosocial behaviors, acting ethically may proceed in a more automatic manner that uses fewer controlled resources (see Bargh 1994; Schneider and Chein 2003; Shiffrin and Schneider 1977; Smith and Lerner 1986). Hence, in a state of resource depletion, a high moral identity will provide leaders with a buffer against the detrimental effects of ego depletion on their ethical behaviors.

Study Overview

In the present research, we collected both experimental and (multisource) field data to cross-validate our findings. We did not opt for qualitative research as we were particularly interested in testing specific hypotheses, for which quantitative research is most suitable. Furthermore, we chose to use established and validated measures. Moral identity was measured using Aquino and Reed's (2002) instrument (for an overview, see Shao et al. 2008). In Study 1, we manipulated depletion using a frequently used and effective depletion task (for an overview, see Hagger et al. 2010); in Study 2, we assessed depletion with a measure that has been successfully used in prior research (Vohs et al. 2008). Unethical leader behavior was measured using Bennett and Robinson's (2000) often-used instrument that measures workplace deviance (for an overview, see Berry et al. 2007), which has shown good psychometric properties (Bennett and Robinson 2000) and which has been adapted and validated for peer report (Stewart et al. 2009).

In our research, we thus investigate unethical behavior by focusing on the prevalence of deviant leader behaviors in the workplace. In line with the literature, we define workplace deviance as voluntary behavior that violates significant organizational norms and, as such, threatens the well-being of the organization and/or its members (Bennett and Robinson 2000; Robinson and Bennett 1995). Deviant behavior represents volitional behavior that occurs because people either lack the motivation to conform to organizational norms and standards or because they become motivated to violate these norms and standards (Bennett and Robinson 2000). Workplace deviance encompasses a diversity of behaviors varying from interpersonal deviance (i.e., acts that inflict harm on individuals) to organizational deviance (i.e., acts that are directed at the organization) which can vary in intensity and potential consequences (Robinson and Bennett 1995) and, as such, form a meaningful operationalization of unethical behavior. Example behaviors include humiliating coworkers, procrastinating on work, and falsifying receipts to receive more money than was spent on business expenses.

As argued above, we expect that unethical leadership behaviors may occur when leaders face regulatory resource

constraints. We expect this because for many leaders, behaving ethically may not be an important part of their self-definition and is thus insufficiently internalized. To test this idea, we include the leader's moral identity as a moderator of the effect of self-regulatory depletion on the unethical behavior of leaders. Specifically, we expect self-regulatory depletion to result in unethical leadership behaviors particularly among leaders who are low, rather than high in moral identity.

We tested our hypothesis in two studies. Study 1 used a validated depletion task in a controlled laboratory setting which allows us to draw causal conclusions. Study 2 was a cross-sectional multisource study for which we relied on leaders' self-ratings of their depletion and moral identity, while ratings about the leaders' ethical behavior were provided by their colleagues as well as by the leaders themselves. The field study permits us to generalize our findings to an organizational field setting in which leaders function in meaningful day-to-day situations. At the same time, the specific multisource design of this study minimizes concerns about the effects of potential common method variance and self-presentation (Podsakoff et al. 2003).

Study 1

Method

Participants and Design

Seventy-eight undergraduate students (41 males and 37 females) with a mean age of 19.00 years ($SD = 1.95$) from a Dutch university participated in the study for partial course credit. Participants were randomly assigned to one of two experimental conditions: self-regulatory depletion or no depletion.

Experimental Procedure

This study was conducted in two stages. The first stage consisted of participants responding via the internet to a bogus "leadership ability" questionnaire and to the moral identity measure. The second stage included the actual experimental tasks. Upon arrival at the laboratory (one day after they had responded to the internet questionnaires), participants were seated in separate cubicles that were each equipped with a personal computer. All communication took place via this computer. Participants were informed that they would work together with two other participants on several tasks. They were led to believe that a computer network was established between them and the other group members via which they would collaborate.

All participants were then assigned to the leadership role. Instructions were taken from previous experiments that were designed to study unethical leadership behaviors (Maner and Mead 2010). Participants were informed that the group assignment required one person to be the leader and the others to be the subordinates. All participants learned that they were assigned the group leader role based on their answers on the "leadership ability" questionnaire that they completed in the first stage of the study (i.e., the day before the actual experiment). As the designated leader, they would thus be responsible for the functioning of their group. To check whether the participants understood this role assignment, we asked them which role they had to fulfill in the group assignment.

Participants then completed the regulatory depletion task (taken from Baumeister et al. 1998, Study 4). This task consists of two parts and has proven successful in the manipulation of ego depletion in a number of studies (Baumeister et al. 1998; DeWall et al. 2011; Fischer et al. 2007; Moller et al. 2006; Wheeler et al. 2007). The regulatory depletion task was presented as part of the group assignment. In the first part of the task, participants were instructed to indicate each instance of the letter *e* that they saw in a text (i.e., by clicking each *e* with the computer mouse). Participants received visual feedback whenever they clicked an *e* (i.e., a highlighted circle around the corresponding *e*) and were given five minutes to complete the task. This first phase was relatively easy and was used to establish a strong habitual response for scanning and indicating every *e*. In the second part of the task, participants either continued identifying the *es* using the same rule as before (i.e., the *no depletion* condition) or were given the instruction to respond to each *e*, except when the *e* was followed by a vowel or when a vowel appeared two letters before the *e* (i.e., the *high depletion* condition). For participants in the high depletion condition, overriding the response to scan for and indicate every *e* would require more regulatory resources than for participants in the low depletion condition who did not need to override a habitual response. After completing this task, we measured the dependent variables and manipulation checks.

Manipulation Checks

The effectiveness of the self-regulatory depletion manipulation was measured on a 7-point scale ranging from 1 (*totally disagree*) to 7 (*totally agree*) using two items: "The second task was habit-breaking" (taken from DeWall et al. 2008) and "The second task was simple" (reversed item; taken from Balliet and Joireman 2010).

Measures

In the first phase of the study (i.e., twenty-four hours before the experimental condition), we administered an online questionnaire that included demographic information questions, a measure of moral identity, and a bogus leadership scale that was administered to provide a justification for the role assignment.

We used Aquino and Reed's (2002) instrument to measure the participants' moral identity, which has been used in several studies and has shown good psychometric properties (for an overview, see Shao et al. 2008). In line with our ideas, we relied on the internalization dimension of this instrument (i.e., the extent to which people find morality an important aspect of who they are) and disregarded the symbolization subscale (which measures the extent to which people want to appear as a moral person). Consistent with Aquino and Reed's (2002) procedure, the following instructions were given: "Listed below are some characteristics that might describe a person: Caring, compassionate, fair, friendly, generous, helpful, hardworking, honest, and kind. The person with these characteristics could be you or it could be someone else. For a moment, visualize in your mind the kind of person who has these characteristics. Imagine how that person would think, feel, and act. When you have a clear image of what this person would be like, answer the following questions." Participants then answered the five internalization items on a 7-point scale ranging from 1 (*totally disagree*) to 7 (*totally agree*). Sample items from this scale are "It would make me feel good to be a person who has these characteristics" and "Having these characteristics is not really important to me" (reverse scored). The scale proved to be internally consistent (Cronbach's $\alpha = .71$; $M = 5.42$, $SD = 0.88$).

We assessed leadership deviance as a dependent variable for which we used the interpersonal deviance subscale of the organizational deviance measure which was developed and validated by Bennett and Robinson (2000). Participants answered these 7 items on a 7-point scale ranging from 1 (*not at all*) to 7 (*very much so*). We asked participants the extent to which they found the following behaviors in the current setting acceptable: "Say something hurtful to someone," "Make an ethnic, religious, or racial remark," "Curse at someone," "Play a mean prank on someone," "Act rudely toward someone," and "Publicly embarrass someone" (Cronbach's $\alpha = .82$; $M = 2.10$, $SD = 0.84$).

Results

Comprehension and Manipulation Checks

All participants correctly indicated that they were assigned to the leader role. As expected, participants in the self-

regulatory depletion condition rated the second task as more habit-breaking than those in the no depletion condition ($M_s = 5.10$ vs. 4.42, $SD_s = 1.27$ vs. 1.34, respectively, $t(76) = -2.30$, $p < .05$). Furthermore, the second task was experienced as less simple in the self-regulatory depletion condition than in the no depletion condition ($M_s = 4.48$ vs. 3.47, $SD_s = 1.37$ vs. 1.42, respectively, $t(76) = -3.17$, $p < .01$). As an additional test of the effectiveness of our manipulation, we regressed the manipulation checks on the main and interactive effects of the regulatory depletion manipulation and participants' moral identity. These analyses show that both the manipulation checks were significantly related to the regulatory depletion manipulation, while the main effect of moral identity and the interaction term remained insignificant.

Deviant Leader Behavior

To test our hypothesis, we conducted a hierarchical regression analysis in which leader deviance was predicted by the main effects of the regulatory depletion manipulation and participants' moral identity at Step 1. We added a two-way interaction between regulatory depletion manipulation and moral identity at Step 2. Following Aiken and West (1991), the interaction term was based on the mean-centered scores of moral identity and the effect-coded scores of regulatory depletion. Table 1 shows the regression results.

Table 1 shows that the predicted two-way interaction was significant, $\beta = -.27$, $p < .05$. We conducted simple slope analyses to further examine this interaction (Aiken and West 1991). Figure 1 shows that, in line with our hypothesis, regulatory depletion significantly increased deviant leader behavior among participants who are low in moral identity (one SD below the mean), $\beta = .24$, $p < .05$. However, among participants who are high in moral identity, regulatory depletion decreased deviant leader behavior; however, this effect was not significant, $\beta = -.21$, $p = .11$.

Supplemental Analyses

To test the robustness of the OLS regression, we conducted a Tobit regression (see Tobin 1958), which was developed for variables with a lower (or upper) limit and a concentration of observations at this limiting value. Such distributions can result in the violation of OLS assumptions. Deviant leader behaviors are typically low-frequency phenomena that show such a cluster of observations at and just above the lower limit, thus making them strongly positively skewed. A Tobit regression revealed results similar to the OLS regressions for the hypothesized interaction on leader deviance, $b = -.27$, $p < .05$.

Table 1 Results of hierarchical regression analysis for leader deviance in Study 1

Variables	<i>B</i>	<i>SE B</i>	β	ΔR^2
Step 1				
Regulatory depletion (RD)	0.01	0.10	0.02	.03*
Moral identity (MI)	−0.16	0.11	−0.17	
Step 2				
Regulatory depletion (RD)	0.02	0.09	0.02	.08*
Moral identity (MI)	−0.11	0.11	−0.12	
RD × MI	−0.27	0.11	−0.28*	

Final model: $F(3, 74) = 2.94, p < .05$

B = unstandardized regression coefficient; β = standardized regression coefficient. For the regulatory depletion factor, −1 denotes no regulatory depletion manipulation, whereas 1 indicates regulatory depletion

* $p \leq .05$

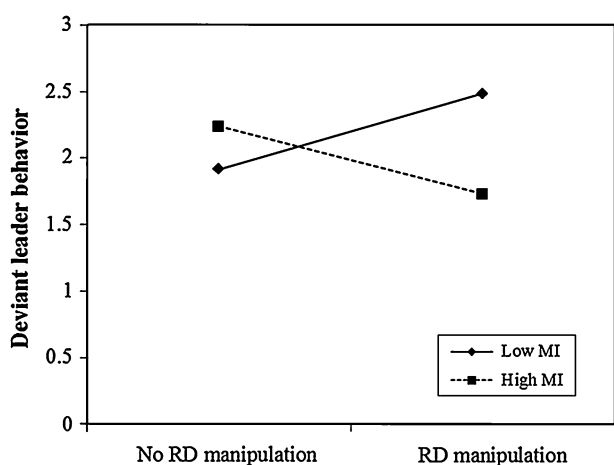


Fig. 1 Deviant leader behavior as a function of regulatory depletion manipulation and moral identity

Discussion

Study 1 provides supporting evidence for the hypothesized buffering role of moral identity in the effect of resource depletion on unethical leadership behavior. Regulatory depletion indeed increased unethical leadership behavior for leaders who are low in moral identity. In contrast, there was no such increase in unethical leadership behavior for leaders with a high level of moral identity. These findings thus highlight the pivotal role of moral identity in preventing unethical leadership behaviors.

Study 2

While Study 1 provided causal evidence for our proposed ideas, Study 2 was designed to generalize our findings to an organizational setting in which supervisors and employees function together in meaningful work situations. Instead of manipulating regulatory depletion, we measured supervisors' depletion in Study 2.

Method

Sample and Procedure

The study participants included 100 organizational supervisors (30 line, 61 middle, and 9 senior/top managers) and their matched colleagues from a variety of Dutch organizations. For their participation, they received credit points they could trade in for certain gifts (i.e., a ticket for the movies). Of the focal supervisors, 70 were male and 30 were female, and their mean age was 44.73 years ($SD = 9.91$). Supervisors worked an average of 11.79 years ($SD = 9.25$) in their current organization and 5.97 years ($SD = 5.69$) in their current function. Twenty percent of the focal supervisors were employed in the public sector and 80 percent in the private sector. The matched group of colleagues included 60 males and 40 females, with a mean age of 41.84 years ($SD = 10.52$).

Measures

In Study 2, we used the same five-item internalization subscale of moral identity (Aquino and Reed 2002) as in Study 1. To assess focal supervisors' levels of regulatory depletion, we asked the focal supervisors to indicate on a 5-point scale ranging from 1 (*totally disagree*) to 5 (*totally agree*) how much they agreed or disagreed with the following statements: "I often feel as if I have low energy," and "I often feel as if things are taking a lot of effort" (taken from Vohs et al. 2008, Study 5).

We measured unethical leadership behavior using Bennett and Robinson's (2000) 19-item measure of organizational deviance on a 5-point scale ranging from 1 (*not at all*) to 5 (*very much so*). This measure consists of an interpersonal and an organizational subscale, and it has shown good psychometric properties (Bennett and Robinson 2000). The leaders completed the items as self-reports, while the items were adapted for a peer report for their

colleagues who rated how often the focal leader performed actions such as “Discussed confidential company information with an unauthorized person,” “Falsified a receipt to get more money than spent on business expenses,” and “Publicly embarrassed someone at work” (modified and validated by Stewart et al. 2009).

Results

Descriptive Statistics and Intercorrelations

Table 2 presents the means, standard deviations, internal consistencies, and intercorrelations of the study’s variables.

Hypothesis Test

We conducted a hierarchical regression analysis with self-reported unethical leader behaviors serving as the dependent variable. The age, gender, and tenure of leaders were entered as control variables in the first block of the regression. Regulatory depletion and moral identity were entered in the second block of the regression. We added a two-way interaction between regulatory depletion and moral identity in the third block of the regression. Following Aiken and West (1991), the interaction term was based on mean-centered scores of the independent variables. Table 3 shows the regression results for self-reported unethical leader behavior. For one respondent, self-ratings of deviance were missing, and thus her information was disregarded in this analysis.

The predicted two-way interaction was significant, $\beta = -.25, p < .01$. We conducted simple slope analyses to further assess this interaction (Aiken and West 1991). Figure 2 shows that among leaders who are low in moral identity (one SD below the mean), regulatory depletion and unethical leader behaviors are positively related, $\beta = .55, p < .001$. However, among leaders who are high in moral identity, the relationship between regulatory depletion and

unethical leader behaviors was not significant, $\beta = .10, p = .40$.

The regression analysis was then repeated with the colleague ratings of unethical leader behaviors as the

Table 3 Results of hierarchical regression analysis for leader deviance (own ratings) in Study 2

Variables	<i>B</i>	<i>SE B</i>	β	ΔR^2
Step 3				.06**
Age	-0.01	0.01	-0.21	
Gender	0.10	0.10	0.10	
Organization tenure	0.01	0.01	0.15	
Function tenure	0.00	0.01	0.02	
Regulatory depletion (RD)	0.18	0.05	0.33***	
Moral identity (MI)	-0.15	0.06	-0.24**	
RD x MI	-0.15	0.06	-0.25**	

Final model: $F(7, 91) = 4.95, p < .001$

B = unstandardized regression coefficient; β = standardized regression coefficient

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$

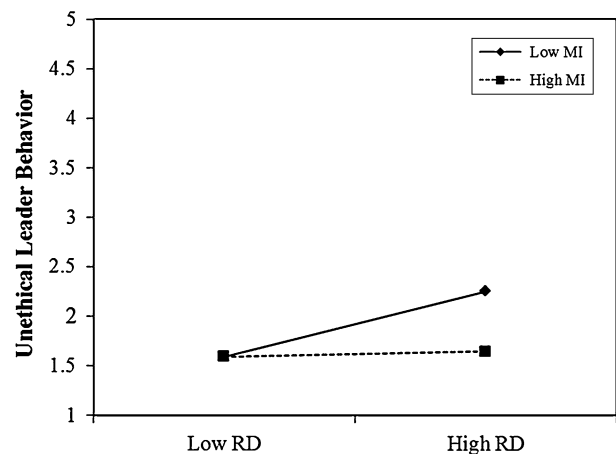


Fig. 2 Unethical leader behavior (self-ratings) as a function of regulatory depletion and moral identity

Table 2 Descriptive statistics and intercorrelations of Study 2 measures

Variable	<i>M</i>	<i>SD</i>	1	2	3	4
1. Regulatory depletion	2.54	0.95	(.89)			
2. Moral identity	5.34	0.81	.07	(.62)		
3. Leader deviance (OR)	1.47	0.52	.33**	-.22*	(.93)	
4. Leader deviance (CR)	1.60	0.81	.19	-.18	.61**	(.98)

N = 100. Internal reliabilities (coefficient alphas) are provided in parentheses on the diagonal

OR own ratings, CR colleague ratings

* $p \leq .05$; ** $p \leq .01$

dependent variable. As shown in Table 4, the predicted two-way interaction was significant, $\beta = -.33$, $p = .001$. We conducted simple slope analyses to further analyze this interaction (Aiken and West 1991). Figure 3 shows that among leaders who are low in moral identity (one *SD* below the mean), regulatory depletion and the leaders' unethical behavior are positively related, $\beta = .52$, $p < .001$. Among leaders high in moral identity, however, the relationship between regulatory depletion and unethical leader behavior was not significant, $\beta = -.09$, $p = .46$.

Supplemental Analyses

We conducted several additional analyses to further investigate the validity of our findings. First, as in Study 1, we conducted a Tobit regression (see Tobin 1958). The Tobit regression produced results similar to the OLS regressions for the hypothesized interaction on leader

Table 4 Results of hierarchical regression analysis for leader deviance (colleague indicated) in Study 2

Variables	<i>B</i>	<i>SE B</i>	β	ΔR^2
Step 3				.10***
Age	−0.03	0.01	−0.30***	
Gender	−0.07	0.16	−0.04***	
Organization tenure	0.01	0.01	0.13***	
Function tenure	−0.00	0.02	−0.02***	
Regulatory depletion (RD)	0.19	0.08	0.22***	
Moral identity (MI)	−0.13	0.09	−0.13***	
RD × MI	−0.32	0.09	−0.33***	

Final model: $F(7, 92) = 4.36$, $p < .001$. *B* = unstandardized regression coefficient; β = standardized regression coefficient

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$

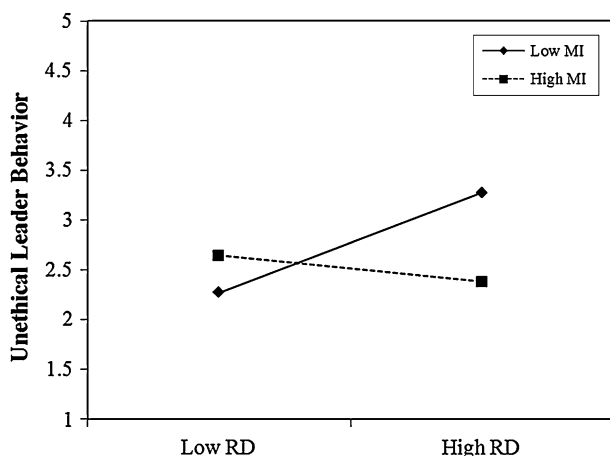


Fig. 3 Unethical leader behavior (colleague ratings) as a function of regulatory depletion and moral identity

deviance, $b = -.15$ and $-.31$, $ps < .05$, for self and observer ratings, respectively.

Second, there has been much discussion about the advantages and disadvantages of including control variables in organizational research. We thus decided to follow Spector and Brannick's (2011) suggestion by repeating our analyses without the control variables as predictors in the equations. These analyses led to similar conclusions to those presented previously. Most importantly, we found significant interactions with the self-ratings of leader deviance, $\beta = -.26$, $p < .01$, and with the colleague-indicated ratings of leader deviance, $\beta = -.34$, $p = .001$.

Discussion

Consistent with our main hypothesis and with the results obtained in Study 1, we obtained corroborative evidence for the moderating effect of moral identity in the relationship between regulatory depletion and unethical leader behavior. This time, however, results were obtained in an actual organizational setting. These findings provide further evidence for the prediction that leaders who are high in moral identity do not need regulatory resources to refrain from unethical leadership, while leaders with a low moral identity do require these resources.

General Discussion

The aim of the present research was to investigate the effects of regulatory depletion and moral identity on deviant leadership behavior. We obtained corroborative evidence for our hypothesis. More specifically, we identified ego depletion as a variable that may make leaders act in norm-transgressing ways. Moreover, to further enhance our understanding of this relationship, we also focused on moral identity as a possible boundary condition. Our results indicate that leaders with a low moral identity need self-regulatory resources to refrain from engaging in deviant leader behaviors, while for leaders who are high in moral identity, behaving ethically is less reliant on these resources and thus not influenced by regulatory resource depletion. This interactive effect was shown across the laboratory experiment (Study 1) and the multisource field study (Study 2).

Theoretic Implications

Our results are the first to show that ego depletion can induce leaders to display a wide range of norm-transgressing behaviors that are as varied as embezzling company property, deferring work in order to be paid overtime, and humiliating one's coworker in public. Such behaviors

contrast sharply with how organizations prefer to view the leadership role. Specifically, leaders often face hectic and fragmented workdays, but they are at the same time expected to cooperate, to serve the interests of the organization, and to direct followers toward organizational interests (e.g., Hollander 1980; Maner and Mead 2010; Tjosvold 1984; Van Vugt et al. 2008; Yukl and Van Fleet 1992). In fact, leadership is often defined as influencing followers to contribute to the collective and as coordinating collective interests (e.g., Hollander and Offermann 1990; Van Vugt et al. 2008).

Research has documented a number of cases in which leaders do not conform to the ideal leadership role of cooperatively working toward the organization's goals, but instead act in self-serving and norm-transgressing ways. This has been attributed to variables such as the instability of the leadership position (Maner and Mead 2010) and to leaders' feelings of incompetence (Fast and Chen 2009). Some scholars have even claimed that norm-transgressing behaviors are intrinsic to the leadership role (De Cremer 2003; Van Dijk and De Cremer 2006) because leaders feel entitled to obtain more outcomes than followers (De Cremer and Van Dijk 2005; Stouten, De Cremer and Van Dijk 2005). The present research identifies ego depletion as a variable that may make leaders act in norm-transgressing ways. Importantly, the nature of ego depletion sheds new light on (un)ethical leader behavior because leaders need to be able to control their automatic drives toward self-servingness.

These findings are particularly important because leaders, by means of their behavior, serve as social models for their employees, which influence follower cooperation, and displays of ethical behavior. This process is usually understood in terms of social learning theory (Bandura 1977, 1986), which holds that people learn behavior by observing and imitating others. According to Bandura (1986), people with high status who have the ability to control rewards may function as effective role models. Therefore, leaders are the most likely source of vicarious learning in an organizational setting. This makes leaders' conformity to ethical rules a particularly important aspect of the leadership role. In support of this idea, norm-transgressing leaders are known to decrease positive affect, trust, cooperation, and performance among their followers (De Cremer 2006a, 2006b; Van Knippenberg and Van Knippenberg 2005). In sum, the hectic and fragmented workdays that leaders typically face may increase the likelihood that they cross essential boundaries of their leadership role by displaying unethical behaviors, which consequently makes them less effective in motivating employees to act productively and cooperatively.

A second theoretic implication is derived from the fact that Study 2 revealed that self-reports and colleague ratings

of leader deviance show a highly similar pattern. Specifically, ego-depleted leaders reported more deviant behaviors and they were rated as more deviant by their coworkers (at least leaders who are low in moral identity). It thus seems that leaders are well aware of the specific and sometimes norm-transgressing actions they perform, even when they are depleted of cognitive resources. This, however, does not necessarily imply that leaders are also aware of the ethical dimension of their actions. Leaders may, for instance, frame a specific action not in ethical terms, but rather in purely economic terms (e.g., striving for a financial reward even if it comes at the expense of others; Tenbrunsel and Messick 1999). In fact, it has been argued that the salience of the economic aspects of a situation may make the ethical dimension of the decision "fade" into the background; thus, leaders do not recognize their actions as unethical (Tenbrunsel and Messick 2004). This idea suggests that ego depletion can lead to deviant leader actions ranging from discrimination to forgery because it hinders the identification of the ethical dimension of a decision, which is a necessary first step in conducting ethical behavior (Rest 1986).

Our research also contributes to the literature on moral identity. To date, most research has focused on the antecedents and consequences of moral identity (for an overview, see Shao et al. 2008). Research that investigates precisely *when* moral identity may influence behavior remains relatively sparse. Thus far, scholars have looked at the interaction between moral identity and formalism (Reynolds and Ceranic 2007), at the interaction between moral identity and ethical organization culture (Skarlicki et al. 2008), and at the interaction between internal and symbolic moral identity (Caldwell and Moberg 2007). We add to this existing literature and illuminate how moral identity operates. In this context, it is interesting to note that while ego depletion hinders behavior that requires cognitive processing, it does not influence automatic processes (DeWall et al. 2008; Schmeichel et al. 2003). Our results thus suggest that moral identity influences moral behavior in a fairly automatic way, and it is not thwarted by other processes that require controlled processing.

Practical Implications

A first important practical implication of the present findings is that they suggest that characteristics of leaders' day-to-day activities can undermine their ability to behave ethically and may actually make leaders more likely to act in norm-transgressing ways. This is an important finding for managers to acknowledge because much of a leader's influence is derived from being a role model, rather than from explicit attempts to influence followers (Brown et al. 2005; Walumbwa et al. 2011). Organizations should thus

be aware that overloading their managers with decisions to take may come with the cost of an increased likelihood of leaders transgressing ethical norms. Nevertheless, managers should be similarly aware that whenever they are facing tasks that can have important (i.e., ethical) implications, their cognitive state can affect their behavior; thus, it is necessary to carefully schedule these tasks. Tasks that may have ethical implications should preferably be made after a period of rest because rest can replenish managers' cognitive resources (Baumeister et al. 2000).

Our findings also convey a more optimistic message by indicating that not all leaders are prone to displaying norm-transgressing behaviors due to the effects of ego depletion. Specifically, leaders who are high in moral identity proved to be immune to the effects of ego depletion in promoting norm-transgressing behaviors. This finding is relevant from a practical perspective because although moral identity represents a rather stable individual characteristic, it might also be impacted by the situation. Research (Aquino et al. 2009; Reed et al. 2007) shows that it is possible to situationally increase the accessibility of moral identity. Combined with the present results, these prior findings have two promising implications for organizations. First, making moral identity accessible through situational interventions such as stimulating a clear ethical climate and ensuring that the organization's top management behaves in ethical ways (Martin and Cullen 2006; Mayer et al. 2009; Mayer et al. 2010) makes it more likely that leaders behave ethically. More importantly, this effect should also buffer the effects of ego depletion on leaders' norm-transgressing behaviors. Second, and equally important, situational interventions that make moral identity salient are likely to result in leaders being "trained" to act ethically. Such training may make ethical behaviors more automatic, thus rendering leaders immune to the effects of ego depletion on norm-transgressing behaviors.

Strengths and Limitations

A major strength of this article lies in the use of diverse methods to test our hypothesis. While the laboratory experiment conducted in Study 1 permits us to make causal inferences, Study 2 was a field study that allowed us to investigate whether the hypothesized effects emerged in an organizational setting.

We recognize, of course, that we did not include a situational manipulation of morality in the experiment. However, our reliance on a dispositional operationalization of moral identity is clearly in line with our ideas that moral identity as a dispositional variable is likely to lead to internalized moral behavior (i.e., these leaders are better trained to act ethically). Obviously, this is not the case with situational manipulations of morality in relatively short-

lived experimental contexts. Yet, various studies show that a moral prime can stimulate morality and thus can induce individuals to behave more morally (Aquino et al. 2009; Mazar et al. 2008; Reed et al. 2007). At the same time, it should be recognized that other research shows that situational manipulations of morality can lead to compensatory, rather than consistent, moral behavior. In other words, priming morality can also reduce the display of moral behaviors (Jordan et al. 2011; Sachdeva et al. 2009; Smeesters et al. 2003; Zhong et al. 2009). Rather than trying to resolve this inconsistency in the literature, we relied on a dispositional measure of moral identity, which has proven to be a consistent predictor of moral behavior (for an overview, see Shao et al. 2008). Moreover, a dispositional measure of moral identity is more likely to tap into internalized moral values and, more importantly, should be a stronger predictor of the prevalence of (internalized) moral actions.

Research on deviance has typically relied on self-reported behavioral measures (Berry et al., 2007). In line with this, we also relied on self-reported deviance in Study 1. However, we found the same consistent pattern in the multisource field sample using observer measures of leaders' actual behaviors, which cross-validates the use of self-report in the experimental study. Additionally, the observer ratings of deviance in Study 2 yielded a pattern of results which was analogous to the self-reported ratings, which corroborates results of a recent meta-analysis on organizational deviance (Berry et al., 2007) showing high convergence between observer- and self-reported organizational deviance.

An additional limitation of this research that should be mentioned is the skewed gender distribution in Study 2. A majority of our respondents were male, reflecting the preponderance of males in an executive function. This skewed gender distribution may pose potential problems to the validity of our results. We addressed this issue by including gender as a control variable in Study 2 and found no effect of gender. Furthermore, excluding gender as a control variable did not alter our results in any way. It is in this respect relevant to note that a meta-analysis on workplace deviance showed that gender had only a very weak correlation with deviant behavior (Berry et al. 2007).

Directions for Future Research

One highly relevant avenue for future research might be to investigate our research questions in another cultural setting. For instance, the present research was conducted in the Netherlands, which is considered an individualistic culture (Schimmack et al. 2005). It might be interesting to conduct a similar study in a collectivistic culture. Many aspects of moral behavior are interpersonal in nature

(Aquino et al. 2009; Kant 1785/2005; Singer 1981), and differences in cultural orientation might therefore influence deviant leader behavior. In Japan, for example, expressing anger publicly is considered unseemly, while this is considered necessary (to avoid “boiling over” or “blowing up” at a later point) in the United States (Markus and Kitayama 1991). Even more directly relevant to the present research question, collectivist cultures place greater importance on acting in line with norms and expectations (Husted and Allen 2008). Therefore, like our respondents high in moral identity, collectivist cultures should be more experienced in inhibiting their selfish impulses than individualists (Seeley and Gardner 2003). As a result, leaders in collectivistic cultures might be less influenced by ego depletion and may refrain from deviant behavior when they are depleted.

A second avenue for future research lies in the specific type of norm-transgressing behavior that is focused on as the outcome variable. In our research, we focused on unethical leader behaviors that harm the organization and/or its members. It could be interesting, however, to focus on different types of unethical leader behavior. For instance, prosocial rule breaking (Morrison 2006; Umphress et al. 2010) represents norm-transgressing behavior that is intended to benefit the organization and/or its members. An example of this is violating organizational policies or procedures to solve a problem (Galperin 2012). Arguably, this creates tension between doing the morally right thing from a rule-based (i.e., deontological) perspective and from an outcome-based (i.e., utilitarian) perspective.

Concluding Remarks

The hectic, fragmented nature of a typical day for organizational leaders makes them especially prone to resource depletion. Regrettably, depletion makes it more likely that organizational leaders display norm-transgressing behaviors that conflict with their desired leadership role, which should focus on benefitting the organization and stimulating employees to strive toward these goals as well. We showed that leaders who are high in moral identity are less vulnerable to resource depletion effects in their display of unethical behaviors, indicating that they need less controlled resources to act ethically. Leaders who are low in moral identity, however, need these cognitive resources to display ethical leader behaviors. This indicates that the nature of the leadership role can lead to unethical leader behaviors, as such highlighting the importance of internalizing the motivation to act in ethical ways in organizational settings.

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References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Aquino, K., Freeman, D., Reed, A. II., Lim, V. K. G., & Felps, W. (2009). Testing a social-cognitive model of moral behavior: The interactive influence of situations and moral identity centrality. *Journal of Personality and Social Psychology*, 97(1), 123–141. doi:10.1037/a0015406.
- Aquino, K., & Reed, A. II. (2002). The self-importance of moral identity. *Journal of Personality and Social Psychology*, 83(6), 1423–1440. doi:10.1037/0022-3514.83.6.1423.
- Balliet, D., & Joireman, J. (2010). Ego depletion reduces proselves' concern with the well-being of others. *Group Processes & Intergroup Relations*, 13(2), 227–239. doi:10.1177/1368430209353634.
- Bandura, A. (1977). *Social-learning theory*. Upper Saddle River: Prentice Hall.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Upper Saddle River, NJ: Prentice Hall.
- Bargh, J. A. (1994). The four horsemen of automaticity: Awareness, intention, efficiency, and control in social cognition. In R. S. Wyer Jr & T. K. Srull (Eds.), *Handbook of social cognition* (2nd ed., Vol. 1, pp. 1–40). Hillsdale, NJ: Erlbaum.
- Barnes, C. M., Schaubroeck, J., Huth, M., & Ghumman, S. (2011). Lack of sleep and unethical conduct. *Organizational Behavior and Human Decision Processes*, 115(2), 169–180. doi:10.1016/j.obhdp.2011.01.009.
- Barriga, A. Q., Morrison, E. M., Liao, A. K., & Gibbs, J. C. (2001). Moral cognition: Explaining the gender difference in antisocial behavior. *Merrill-Palmer Quarterly*, 47(4), 532–562. doi:10.1353/mpq.2001.0020.
- Baumeister, R. F., Bratslavsky, E., Muraven, M., & Tice, D. M. (1998). Ego depletion: Is the active self a limited resource? *Journal of Personality and Social Psychology*, 74(5), 1252–1265. doi:10.1037/0022-3514.74.5.1252.
- Baumeister, R. F., & Heatherton, T. F. (1996). Self-regulation failure: An overview. *Psychological Inquiry*, 7(1), 1–15. doi:10.1207/s15327965pli0701_1.
- Baumeister, R. F., Heatherton, T. F., & Tice, D. M. (1994). *Losing control: How and why people fail at self-regulation*. San Diego, CA: Academic Press.
- Baumeister, R. F., Muraven, M., & Tice, D. M. (2000). Ego depletion: A resource model of volition, self-regulation, and controlled processing. *Social Cognition*, 18(2), 130–150. doi:10.1521/soco.2000.18.2.130.
- Baumeister, R. F., Vohs, K. D., & Tice, D. M. (2007). The strength model of self-control. *Current Directions in Psychological Science*, 16(6), 351–355. doi:10.1111/j.1467-8721.2007.00534.x.
- Bennett, R. J., & Robinson, S. L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology*, 85(3), 349–360. doi:10.1037/0021-9010.85.3.349.
- 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(2), 410–424. doi:10.1037/0021-9010.92.2.410.
- Blasi, A. (1980). Bridging moral cognition and moral action: A critical review of the literature. *Psychological Bulletin*, 88(1), 1–45. doi:10.1037/0033-2909.88.1.1.
- Blasi, A. (1983). Moral cognition and moral action: A theoretical perspective. *Developmental Review*, 3(2), 178–210. doi:10.1016/0273-2297(83)90029-1.
- Brown, M. E., Treviño, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behavior and Human Decision Processes*, 97(2), 117–134. doi:10.1016/j.obhdp.2005.03.002.

- Caldwell, D. F., & Moberg, D. (2007). An exploratory investigation of the effect of ethical culture in activating moral imagination. *Journal of Business Ethics*, 73(2), 193–204. doi:10.1007/s10551-006-9190-6.
- De Cremer, D. (2003). How self-conception may lead to inequality: Effect of hierarchical roles on the equality rule in organizational resource-sharing tasks. *Group & Organization Management*, 28(2), 282–302. doi:10.1177/1059601103251215.
- De Cremer, D. (2006a). Affective and motivational consequences of leader self-sacrifice: The moderating effect of autocratic leadership. *Leadership Quarterly*, 17(1), 79–93. doi:10.1016/j.leafqua.2005.10.005.
- De Cremer, D. (2006b). When authorities influence followers' affect: The interactive effect of procedural justice and transformational leadership. *European Journal of Work and Organizational Psychology*, 15(3), 322–351. doi:10.1080/13594320600627662.
- De Cremer, D., & Van Dijk, E. (2005). When and why leaders put themselves first: Leader behaviour in resource allocations as a function of feeling entitled. *European Journal of Social Psychology*, 35(4), 553–563. doi:10.1002/ejsp.260.
- DeWall, C. N., Baumeister, R. F., Gailliot, M. T., & Maner, J. K. (2008). Depletion makes the heart grow less helpful: Helping as a function of self-regulatory energy and genetic relatedness. *Personality and Social Psychology Bulletin*, 34(12), 1653–1662. doi:10.1177/0146167208323981.
- DeWall, C. N., Baumeister, R. F., Mead, N. L., & Vohs, K. D. (2011). How leaders self-regulate their task performance: Evidence that power promotes diligence, depletion, and disdain. *Journal of Personality and Social Psychology*, 100(1), 47–65. doi:10.1037/a0020932.
- DeWall, C. N., Baumeister, R. F., Stillman, T. F., & Gailliot, M. T. (2007). Violence restrained: Effects of self-regulation and its depletion on aggression. *Journal of Experimental Social Psychology*, 43(1), 62–76. doi:10.1016/j.jesp.2005.12.005.
- Fast, N. J., & Chen, S. (2009). When the boss feels inadequate: Power, incompetence, and aggression. *Psychological Science*, 20(11), 1406–1413. doi:10.1111/j.1467-9280.2009.02452.x.
- Fischer, P., Greitemeyer, T., & Frey, D. (2007). Ego depletion and positive illusions: Does the construction of positivity require regulatory resources? *Personality and Social Psychology Bulletin*, 33(9), 1306–1321. doi:10.1177/0146167207303025.
- Fiske, S. T. (1993). Controlling other people: The impact of power on stereotyping. *American Psychologist*, 48(6), 621–628. doi:10.1037/0003-066x.48.6.621.
- Galperin, B. L. (2012). Exploring the nomological network of workplace deviance: Developing and validating a measure of constructive deviance. *Journal of Applied Social Psychology*, 42(12), 2988–3025. doi:10.1111/j.1559-1816.2012.00971.x.
- Ganster, D. C. (2005). Executive job demands: Suggestions from a stress and decision-making perspective. *Academy of Management Review*, 30(3), 492–502. Retrieved from <http://www.jstor.org/stable/20159140>.
- Georgesens, J. C., & Harris, M. J. (1998). Why's my boss always holding me down? A meta-analysis of power effects on performance evaluations. *Personality and Social Psychology Review*, 2(3), 184–195. doi:10.1207/s15327957pspr0203_3.
- Gino, F., Schweitzer, M. E., Mead, N. L., & Ariely, D. (2011). Unable to resist temptation: How self-control depletion promotes unethical behavior. *Organizational Behavior and Human Decision Processes*, 115(2), 191–203. doi:10.1016/j.obhdp.2011.03.001.
- Hagger, M. S., Wood, C., Stiff, C., & Chatzisarantis, N. L. D. (2010). Ego depletion and the strength model of self-control: A meta-analysis. *Psychological Bulletin*, 136(4), 495–525. doi:10.1037/a0019486.
- Hambrick, D. C., Finkelstein, S., & Mooney, A. C. (2005). Executive job demands: New insights for explaining strategic decisions and leader behaviors. *Academy of Management Review*, 30(3), 472–491. Retrieved from <http://www.jstor.org/stable/20159139>.
- Hardy, S. A., & Carlo, G. (2005). Identity as a source of moral motivation. *Human Development*, 48(4), 232–256. doi:10.1159/000086859.
- Hollander, E. P. (1980). *Leadership and social exchange processes*. Gergen, M. S.: In K. J.
- Hollander, E. P., & Offermann, L. R. (1990). Power and leadership in organizations: Relationships in transition. *American Psychologist*, 45(2), 179–189. doi:10.1037/0003-066x.45.2.179.
- Husted, B. W., & Allen, D. B. (2008). Toward a model of cross-cultural business ethics: The impact of individualism and collectivism on the ethical decision-making process. *Journal of Business Ethics*, 82(2), 293–305. doi:10.1007/s10551-008-9888-8.
- Jordan, J., Mullen, E., & Murnighan, J. K. (2011). Striving for the moral self: The effects of recalling past moral actions on future moral behavior. *Personality and Social Psychology Bulletin*, 37(5), 701–713. doi:10.1177/0146167211400208.
- Kant, I. (2005). *Groundwork for the metaphysics of morals*. Ontario, Canada: Broadview Press (Original work published 1785).
- Lapsley, D. K., & Narvaez, D. (2004). A social-cognitive approach to moral personality. In D. K. Lapsley & D. Narvaez (Eds.), *Moral development, self, and identity* (pp. 189–213). Mahwah, NJ: Lawrence Erlbaum.
- Maner, J. K., & Mead, N. L. (2010). The essential tension between leadership and power: When leaders sacrifice group goals for the sake of self-interest. *Journal of Personality and Social Psychology*, 99(3), 482–497. doi:10.1037/A0018559.
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98(2), 224–253. doi:10.1037/0033-295x.98.2.224.
- Martin, K. D., & Cullen, J. B. (2006). Continuities and extensions of ethical climate theory: A meta-analytic review. *Journal of Business Ethics*, 69(2), 175–194. doi:10.1007/s10551-006-9084-7.
- Mayer, D. M., Aquino, K., Greenbaum, R. L., & Kuenzi, M. (2012). Who displays ethical leadership, and why does it matter? An examination of antecedents and consequences of ethical leadership. *Academy of Management Journal*, 55(1), 151–171. doi:10.5465/amj.2008.0276.
- Mayer, D. M., Kuenzi, M., & Greenbaum, R. L. (2010). Examining the link between ethical leadership and employee misconduct: The mediating role of ethical climate. *Journal of Business Ethics*, 95, 7–16. doi:10.1007/s10551-011-0794-0.
- Mayer, D. M., Kuenzi, M., Greenbaum, R., Bardes, M., & Salvador, R. (2009). How low does ethical leadership flow? Test of a trickle-down model. *Organizational Behavior and Human Decision Processes*, 108(1), 1–13. doi:10.1016/j.obhdp.2008.04.002.
- Mazar, N., Amir, O., & Ariely, D. (2008). The dishonesty of honest people: A theory of self-concept maintenance. *Journal of Marketing Research*, 45(6), 633–644. doi:10.1509/jmkr.45.6.633.
- Mead, N. L., Baumeister, R. F., Gino, F., Schweitzer, M. E., & Ariely, D. (2009). Too tired to tell the truth: Self-control resource depletion and dishonesty. *Journal of Experimental Social Psychology*, 45(3), 594–597. doi:10.1016/j.jesp.2009.02.004.
- Mintzberg, H. (1973). *The nature of managerial work*. New York: Harper & Row.
- Mischel, W. (1974). Processes in delay of gratification. In L. Berkowitz (Ed.), *Advances in social psychology* (Vol. 7, pp. 249–292). New York: Academic Press.
- Moller, A. C., Deci, E. L., & Ryan, R. M. (2006). Choice and ego-depletion: The moderating role of autonomy. *Personality and*

- Social Psychology Bulletin*, 32(8), 1024–1036. doi:10.1177/0146167206288008.
- Morrison, E. W. (2006). Doing the job well: An investigation of prosocial rule breaking. *Journal of Management*, 32(1), 5–28. doi:10.1177/0149206305277790.
- Muraven, M., & Baumeister, R. F. (2000). Self-regulation and depletion of limited resources: Does self-control resemble a muscle? *Psychological Bulletin*, 126(2), 247–259. doi:10.1037/0033-2909.126.2.247.
- Muraven, M., Tice, D. M., & Baumeister, R. F. (1998). Self-control as limited resource: Regulatory depletion patterns. *Journal of Personality and Social Psychology*, 74(3), 774–789. doi:10.1037/0022-3514.74.3.774.
- Narvaez, D., Lapsley, D. K., Hagele, S., & Lasky, B. (2006). Moral chronicity and social information processing: Tests of a social cognitive approach to the moral personality. *Journal of Research in Personality*, 40(6), 966–985. doi:10.1016/j.jrp.2005.10.003.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. doi:10.1037/0021-9101.88.5.879.
- Reed, A. II., & Aquino, K. F. (2003). Moral identity and the expanding circle of moral regard toward out-groups. *Journal of Personality and Social Psychology*, 84(6), 1270–1286. doi:10.1037/0022-3514.84.6.1270.
- Reed, A. II., Aquino, K., & Levy, E. (2007). Moral identity and judgments of charitable behaviors. *Journal of Marketing*, 71(1), 178–193. doi:10.1509/jmkg.71.1.178.
- Rest, J. (1986). *Moral development: Advances in research and theory*. New York: Praeger.
- Reynolds, S. J., & Ceranic, T. L. (2007). The effects of moral judgment and moral identity on moral behavior: An empirical examination of the moral individual. *Journal of Applied Psychology*, 92(6), 1610–1624. doi:10.1037/0021-9010.92.6.1610.
- Robinson, S. L., & Bennett, R. J. (1995). A typology of deviant workplace behaviors: A multidimensional scaling study. *Academy of Management Journal*, 38(2), 555–572. doi:10.2307/256693.
- Rusbult, C. E., & Van Lange, P. A. M. (2003). Interdependence, interaction, and relationships. *Annual Review of Psychology*, 54, 351–375. doi:10.1146/annurev.psych.54.101601.145059.
- Sachdeva, S., Iliev, R., & Medin, D. L. (2009). Sinning saints and saintly sinners: The paradox of moral self-regulation. *Psychological Science*, 20(4), 523–528. doi:10.1111/j.1467-9280.2009.02326.x.
- Sage, L., Kavussanu, M., & Duda, J. (2006). Goal orientations and moral identity as predictors of prosocial and antisocial functioning in male association football players. *Journal of Sports Sciences*, 24(5), 455–466. doi:10.1080/02640410500244531.
- Schimmack, U., Oishi, S., & Diener, E. (2005). Individualism: A valid and important dimension of cultural differences between nations. *Personality and Social Psychology Review*, 9(1), 17–31. doi:10.1207/s15327957pspr0901_2.
- Schmeichel, B. J., Vohs, K. D., & Baumeister, R. F. (2003). Intellectual performance and ego depletion: Role of the self in logical reasoning and other information processing. *Journal of Personality and Social Psychology*, 85(1), 33–46. doi:10.1037/0022-3514.85.1.33.
- Schneider, W., & Chein, J. M. (2003). Controlled & automatic processing: Behavior, theory, and biological mechanisms. *Cognitive Science*, 27(3), 525–559. doi:10.1016/S0364-0213(03)00011-9.
- Seeley, E. A., & Gardner, W. L. (2003). The “selfless” and self-regulation: The role of chronic other-orientation in averting self-regulatory depletion. *Self and Identity*, 2(2), 103–117. doi:10.1080/15298860309034.
- Shao, R. D., Aquino, K., & Freeman, D. (2008). Beyond moral reasoning: A review of moral identity research and its implications for business ethics. *Business Ethics Quarterly*, 18(4), 513–540.
- Shiffrin, R. M., & Schneider, W. (1977). Controlled and automatic human information-processing: II. Perceptual learning, automatic attending, and a general theory. *Psychological Review*, 84(2), 127–190. doi:10.1037/0033-295x.84.2.127.
- Singer, P. (1981). *The expanding circle: Ethics and sociobiology*. New York: Farrar Straus & Giroux.
- Skarlicki, D. P., van Jaarsveld, D. D., & Walker, D. D. (2008). Getting even for customer mistreatment: The role of moral identity in the relationship between customer interpersonal injustice and employee sabotage. *Journal of Applied Psychology*, 93(6), 1335–1347. doi:10.1037/a0012704.
- Smeesters, D., Warlop, L., Van Avermaet, E., Corneille, O., & Yzerbyt, V. (2003). Do not prime hawks with doves: The interplay of construct activation and consistency of social value orientation on cooperative behavior. *Journal of Personality and Social Psychology*, 84(5), 972–987. doi:10.1037/0022-3514.84.5.972.
- Smith, E. R., & Lerner, M. (1986). Development of automatism of social judgments. *Journal of Personality and Social Psychology*, 50(2), 246–259. doi:10.1037/0022-3514.50.2.246.
- Spector, P. E., & Brannick, M. T. (2011). Methodological urban legends: The misuse of statistical control variables. *Organizational Research Methods*, 14(2), 287–305. doi:10.1177/1094428110369842.
- Stewart, S. M., Bing, M. N., Davison, H. K., Woehr, D. J., & McIntyre, M. D. (2009). In the eyes of the beholder: A non-self-report measure of workplace deviance. *Journal of Applied Psychology*, 94(1), 207–215. doi:10.1037/A0012605.
- Stouten, J., De Cremer, D., & Van Dijk, E. (2005). I’m doing the best I can (for myself): Leadership and variance of harvesting in resource dilemmas. *Group Dynamics: Theory, Research, and Practice*, 9(3), 205–211. doi:10.1037/1089-2699.9.3.205.
- Tangney, J. P., Baumeister, R. F., & Boone, A. L. (2004). High self-control predicts good adjustment, less pathology, better grades, and interpersonal success. *Journal of Personality*, 72(2), 271–324. doi:10.1111/j.0022-3506.2004.00263.x.
- Tenbrunsel, A. E., & Messick, D. M. (1999). Sanctioning systems, decision frames, and cooperation. *Administrative Science Quarterly*, 44(4), 684–707. doi:10.2307/2667052.
- Tenbrunsel, A. E., & Messick, D. M. (2004). Ethical fading: The role of self-deception in unethical behavior. *Social Justice Research*, 17(2), 223–236. doi:10.1023/B:SORE.0000027411.35832.53.
- Tjosvold, D. (1984). Cooperation theory and organizations. *Human Relations*, 37(9), 743. doi:10.1177/001872678403700903.
- Tobin, J. (1958). Estimation of relationships for limited dependent variables. *Econometrica*, 26(1), 24–36. doi:10.2307/1907382.
- Umphress, E. E., Bingham, J. B., & Mitchell, M. S. (2010). Unethical behavior in the name of the company: The moderating effect of organizational identification and positive reciprocity beliefs on unethical pro-organizational behavior. *Journal of Applied Psychology*, 95(4), 769–780. doi:10.1037/a0019214.
- Usoof-Thowfeek, R., Janoff-Bulman, R., & Tavernini, J. (2011). Moral judgments and the role of social harm: Differences in automatic versus controlled processing. *Journal of Experimental Social Psychology*, 47(1), 1–6. doi:10.1016/j.jesp.2010.07.016.
- Van Dijk, E., & De Cremer, D. (2006). Self-benefiting in the allocation of scarce resources: Leader-follower effects and the moderating effect of social value orientations. *Personality and Social Psychology Bulletin*, 32(10), 1352–1361. doi:10.1177/0146167206290338.
- Van Knippenberg, B., & Van Knippenberg, D. (2005). Leader self-sacrifice and leadership effectiveness: The moderating role of

- leader prototypicality. *Journal of Applied Psychology*, 90(1), 25–37. doi:[10.1037/0021-9010.90.1.25](https://doi.org/10.1037/0021-9010.90.1.25).
- Van Vugt, M., Hogan, R., & Kaiser, R. B. (2008). Leadership, followership, and evolution: Some lessons from the past. *American Psychologist*, 63(3), 182–196. doi:[10.1037/0003-066x.63.3.182](https://doi.org/10.1037/0003-066x.63.3.182).
- Vohs, K. D., Baumeister, R. F., Schmeichel, B. J., Twenge, J. M., Nelson, N. M., & Tice, D. M. (2008). Making choices impairs subsequent self-control: A limited-resource account of decision making, self-regulation, and active initiative. *Journal of Personality and Social Psychology*, 94(5), 883–898. doi:[10.1037/0022-3514.94.5.883](https://doi.org/10.1037/0022-3514.94.5.883).
- Vohs, K. D., & Heatherton, T. F. (2000). Self-regulatory failure: A resource-depletion approach. *Psychological Science*, 11(3), 249–254. doi:[10.1111/1467-9280.00250](https://doi.org/10.1111/1467-9280.00250).
- Walumbwa, F. O., Mayer, D. M., Wang, P., Wang, H., Workman, K., & Christensen, A. L. (2011). Linking ethical leadership to employee performance: The roles of leader-member exchange, self-efficacy, and organizational identification. *Organizational Behavior and Human Decision Processes*, 115(2), 204–213. doi:[10.1016/j.obhdp.2010.11.002](https://doi.org/10.1016/j.obhdp.2010.11.002).
- Wheeler, S. C., Briñol, P., & Hermann, A. D. (2007). Resistance to persuasion as self-regulation: Ego-depletion and its effects on attitude change processes. *Journal of Experimental Social Psychology*, 43(1), 150–156. doi:[10.1016/j.jesp.2006.01.001](https://doi.org/10.1016/j.jesp.2006.01.001).
- Yukl, G. A., & Van Fleet, D. D. (1992). Theory and research on leadership in organizations. In M. D. Dunette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (pp. 659–677). Palo Alto, CA: Consulting Psychology Press.
- Zhong, C., Liljenquist, K., & Cain, D. M. (2009). Moral self-regulation. Licensing and compensation. In D. De Cremer (Ed.), *Psychological perspectives on ethical behavior and decision making* (pp. 75–89). Charlotte, NC: Information Age Publishing.