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2	Out of control!? How loss of self-control influences prosocial behavior: The role of power
3	and moral values.
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#### Abstract

Lack of self-control has been suggested to facilitate norm-transgressing behaviors because of 26 the operation of automatic selfish impulses. Previous research, however, has shown that 27 people having a high moral identity may not show such selfish impulses when their self-28 control resources are depleted. In the present research, we extended this effect to prosocial 29 behavior. Moreover, we investigated the role of power in the interaction between moral 30 identity and self-control depletion. More specifically, we expected that power facilitates the 31 externalization of internal states, which implies that for people who feel powerful, rather than 32 powerless, depletion decreases prosocial behavior especially for those low in moral identity. 33 A laboratory experiment and a multisource field study supported our predictions. The present 34 finding that the interaction between self-control depletion and moral identity is contingent 35 upon people's level of power suggests that power may enable people to refrain from helping 36 37 behavior. Moreover, the findings suggest that if organizations want to improve prosocial behaviors, it may be effective to situationally induce moral values in their employees. 38

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# Out of control!? How loss of self-control influences prosocial behavior: The role of power and moral values.

Research suggests that in order to display prosocial and cooperative behaviors, people 41 require active self-control to override their automatic selfish impulses [1]. This suggestion 42 may have important implications in the context of work organizations because prosocial 43 employee behaviors like voluntary helping one's supervisor and coworkers, speaking up to 44 improve the way in which work is organized, and attempting to offer the best customer 45 service possible all play a significant role in effective organizational functioning [2,3]. 46 However, a variety of forces that are known to hamper and deplete self-control are 47 48 omnipresent in work situations, such as the necessity to make many choices and decisions [4], overly long working hours that lead to sleep deprivation [5,6], and stress [7]. In other words, a 49 number of factors that seem inherent to organizational life may constrain prosocial employee 50 51 behavior, and therefore organizational effectiveness.

Yet, not everybody requires active self-control to display prosocial behavior. More 52 specifically, people who have internalized moral values - as indexed by a high moral identity -53 may act in prosocial ways regardless of their level of self-control. This is an important 54 theoretical idea because it presents a different perspective on the workings of automatic 55 56 processes than most other studies, which usually assume that selfishness is automatically activated (e.g., [8-10]). However, internalized moral values have been argued to facilitate the 57 self-regulation of moral behavior [11,12], which should explain why they can override 58 automatic self-oriented processes. 59

60 Unfortunately, there is as yet little empirical evidence to substantiate these arguments 61 in the context of prosocial behavior. The present research therefore focuses on the interaction 62 between internalized moral values and self-control depletion in predicting voluntary prosocial 63 behaviors. Research on negative and antisocial behaviors has shown that the combination of depletion and low moral identity increases antisocial behavior [13,14]. However, in the present paper we argue that selfishness by showing antisocial behavior is inherently different from selfishness by refraining from prosocial behavior. We argue that people need power to feel that they can refrain from helping others. People who feel powerful are more inclined to disregard others [15,16] and therefore more likely to deviate from prevailing norms [17]. We thus expect that power is likely to be a facilitator of the selfish state resulting from the combination of depletion and low moral identity.

In the following sections, we will first develop our argument regarding the relevance 71 of self-control for the display of voluntary prosocial behaviors and the role of internalized 72 73 moral values in this process. We develop our reasoning using the influential strength model of self-control (see [18] for an overview). Internalized moral values are analyzed in terms of 74 theorizing on moral identity [19-21]. Then, we will develop our argument regarding the 75 76 critical moderating role of power in this process. This will result in a hypothesis regarding a three-way interaction effect of self-control, moral identity and employee power on voluntary 77 prosocial behavior. 78

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#### **Theoretical Background**

#### 80 Self-Control, Depletion, and Prosocial Behavior

81 Self-control refers to an individual's ability to inhibit, override, or refrain from acting upon his/her impulses and desires [22-24]. The human capacity for self-control is extremely 82 adaptive and enables people to follow society's norms and rules [24,25]. In line with this, 83 research has shown that self-control failures may lead to various behavioral problems that can 84 be harmful to people and to social collectives, such as depression, aggression, the inability to 85 manage finances, and theft. Conversely, successful self-control has been linked to numerous 86 positive outcomes such as success at work, increased concentration, and an improved ability 87 to cope with stress and problems (see [18] for an overview). 88

Research on self-control failures suggests that the capacity for self-control is a limited
resource, which, with repeated use, can become depleted [26]. When self-control resources
are depleted, performance on subsequent acts that require self-control may be impaired
[18,26]. Self-control failures are thus more likely to emerge when an individual performs
multiple acts that require self-control without rest or replenishment [26,27].

Importantly, the limited resource model of self-control may also have implications for 94 our understanding of prosocial behavior. Specifically, it has been argued that displaying 95 prosocial behavior and avoiding antisocial behavior requires self-control to override selfish 96 impulses [1]. Indirect support for this idea is found in laboratory research that focuses on 97 98 antisocial behavior showing that after an initial act that required self-control, people were more likely to cheat [9,13] and to act aggressively [28]. Research focusing on prosocial 99 behavior, however, is scarce, if non-existent. We know of only one paper that addressed this 100 101 issue but mostly in terms of prosocial intentions: DeWall and colleagues [1] showed that depletion reduced participants' intention to help, but helping behavior was not included in the 102 103 design. These findings suggest that people need self-control resources for prosocial behaviors to emerge. Interestingly, research suggests that having moral values (i.e., moral identity) 104 facilitates the self-control of prosocial behavior [29]. That is, people with a high moral 105 106 identity are more likely to have moral values readily accessible, even in situations that impair self-control. Below, we explicitly argue how moral identity may influence the self-regulation 107 of prosocial behavior. 108

109 Moral Identity

Moral identity reflects the degree to which people consider being a moral person an important part of their self-concept [19,20]. Moral identity has been conceptualized as a cognitive representation or schema of moral values, goals, traits, and behavioral scripts [20,29]. 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 [20,30]. When activated, moral
identity should have a strong influence on one's cognition and behavior, as individuals have a
strong tendency for self-consistency [19,31].

117 Consequently, moral identity is an important predictor of prosocial behavior [21] and 118 has been associated with increased levels of self-reported volunteering [19], ethical leader 119 behavior [32], an increased likelihood of making a donation [19,33], and charitable giving 120 [34]. Additionally, moral identity has been linked to decreased levels of selfish behavior, such 121 as less lying in business negotiations [20], lowered aggression on the football field [35], and 122 less antisocial behavior among adolescents [36].

Important for the present purposes, moral identity may also facilitate the self-123 regulation of prosocial behavior in situations that constrain the availability of self-regulatory 124 resources (e.g., self-control depletion). As argued above, people with a high moral identity 125 have more readily accessible moral values than people with a low moral identity [29]. 126 Consequently, people with a high moral identity should be especially likely to expend extra 127 effort to self-regulate their prosocial behaviors. Over time, people with a high moral identity 128 will thus more frequently implement prosocial behavior, resulting in more internalized and 129 automatic enactment of prosocial behavior [12]. People with a high moral identity are thus 130 131 likely to have their moral values more readily available, even in situations in which their selfcontrol resources are depleted. We know of only two studies that offer some indirect support 132 for this argument, but this support is offered in the realm of negative behavior. This research 133 shows that depletion makes people low in moral identity more likely to show antisocial 134 behavior, whereas this negative effect of depletion was absent among people high in moral 135 identity [13,14]. In other words, the combination of depletion and a low level of moral 136 identity represents a negative cocktail as evinced by the heightened levels of antisocial 137 behavior. 138

However, findings obtained with negative behaviors cannot be straightforwardly 139 extrapolated to (the non-display) of positive behavior. In philosophy, an important distinction 140 is made between positive (i.e., do good for another) and negative duties (i.e., refraining from 141 doing something morally bad; [37]). Importantly, Kant [38] argued that negative duties are 142 more stringent than positive duties. In other words, refraining from negative behavior is 143 considered more pressing than positive behavior, and therefore, negative behaviors are often 144 regulated by state legislation [39]. Likewise, in organizations, refraining from antisocial and 145 selfish behavior is regulated by formal sanction systems, whereas displaying prosocial 146 behavior is often informal and more easy to implement because of its' social desirability. 147 148 Admittedly, the display of prosocial behavior might sometimes be restrained by, for example, formal organizational rules and regulations [40] or by the demands that are inherent in 149 employees' primary tasks [41]. However, helping others is often considered to be rewarding 150 151 and these behaviors 'feel good' [42,43]. These behaviors are already stimulated at a young age [44]. Moreover, such behaviors are 'the right thing to do' and as such affirm one's 152 morality (see [45]). Thus, these behaviors are mostly regulated by informal norms rather than 153 by explicit sanctioning systems. 154

Variations in the display of antisocial and prosocial behavior can thus not be expected 155 156 to be symmetrical. As such, selfishness by showing antisocial behavior is inherently different from selfishness by refraining from prosocial behavior. One can thus not straightforwardly 157 extrapolate the effects of factors that influence the display of negative and antisocial 158 behaviors toward the non-display of positive and prosocial behaviors. Hence, it remains to be 159 seen whether the interaction effect between moral identity and depletion on antisocial 160 behavior generalizes to the display of prosocial behavior. As we argue below, it is likely that 161 power is a facilitator of the selfish state resulting from the combination of low moral identity 162

and depletion. In other words, it may be that people actually need power to feel that they canrefrain from prosocial behavior.

#### 165 **Power as an Inhibitor of Prosocial Behavior**

Power is typically defined as one's ability to administer and deny valuable resources 166 or punishment to other people (e.g., [15,46,47]). Power is a central aspect of organizational 167 contexts [48,49], and as such, can have a substantial impact on the emergence of selfish 168 behaviors. Specifically, power has often been viewed as a corruptive force, influencing people 169 to behave in self-interested ways [15,50-52]. A number of empirical studies have indeed 170 suggested that people who experience power tend to focus on selfish impulses and 171 172 subordinate the needs of others to their own desires (for overviews, see [15,16]). Moreover, the experience of power makes people less likely to empathize with someone else [53,54]. 173 People who experience power are also less influenced by others and less likely to conform to 174 175 prevailing norms [17]. In sum, it seems that people who feel powerful are inclined to disregard others in their behavior. 176 More recent research, however, suggests that the relation between power and self-177

interested behavior may be more complex [15]. Rather than directly influencing behavior,
power may instead amplify the behavioral expression of individual predispositions
[48,51,55,56]. Wisse & Rus [57], for example, found that people who experienced power
displayed more antisocial behavior when they focused on their personal self than when they
focused on their social self.

The finding that power magnifies inherent impulses is interesting in the context of moral identity and self-control depletion. Because the combination of a low moral identity and self-control depletion has been reported to increase antisocial behavior and, as such, can be considered to represent a cocktail of selfishness, power should be expected to be a magnifying factor. As we argued before, it is not possible to simply translate results found in

the realm of negative behavior to positive behavior, and it therefore remains to be shown 188 whether the combination of low moral identity and depletion leads to lower levels of prosocial 189 behavior, or if power is a necessary facilitator of this effect. We expect the latter to be true for 190 two reasons. First, prosocial behavior is usually displayed in high quality relationships such as 191 workplace relationships. Power, however, may actually undermine this prevalence of 192 prosocial behavior in high quality relationships. More specifically, power leads to an 193 194 objectification of others, which transforms workplace relationships in exchange relationships, as such undermining prosocial behavior [56]. Second, while the display of positive behavior is 195 enhanced by societal norms and education, high power undermines conformity [17], and 196 197 therefore less helping behavior can be expected. In other words, people high in power may feel that they are in a position where they can get away with less helping behavior. 198

For people high in moral identity, on the other hand, depletion does not influence their 199 200 level of selfishness as research suggests that high moral identifiers have their moral values more readily accessible even in situations of self-control depletion [13,14]. Because prosocial 201 behavior is easy to implement and generally sustained by societal and organizational norms, 202 we expect that people high in moral identity act in line with these societal norms irrespective 203 of their level of depletion. In the same vein, one could also reason that power, as a facilitator 204 205 of individual predispositions, may increase the prosocial behavior of people high in moral identity. Indeed, there is some research that indicates that people high in power who focus on 206 moral or prosocial values show less antisocial behavior than those low in power [48,57]. 207 Prosocial behavior is -unlike antisocial behavior- relatively easy to implement and sustained 208 by societal and organizational norms. We expect that because of this high social acceptance of 209 most prosocial behaviors, power will not lead to more prosocial behavior for high moral 210 identifiers. That is, we expect that prosocial behavior is already part of the daily routine for 211

people high in moral identity, and power is not likely to increase their helping behaviorbeyond this level.

#### 214 **Overview of Predictions and Studies**

There is reason to believe that self-control depletion undermines the emergence of 215 prosocial behaviors. However, internalized moral values in terms of a high moral identity 216 facilitate the self-regulation of prosocial behavior, even in situations that impair self-217 regulation. In other words, depletion is likely to make people low in moral identity less 218 prosocial, whereas depletion should have no effect on people high in moral identity. In the 219 present research we expect that - contrary to the negative effects of depletion and low moral 220 221 identity on antisocial behavior - power is a facilitator of the negative combination of depletion and low moral identity on prosocial behavior. It is likely that people may need power to feel 222 that they can get away with refraining from prosocial behavior. Hence, we expected that 223 224 power facilitates the interaction effect of depletion and moral identity on prosocial behavior. This leads to our Hypothesis, which implies a three-way interaction between depletion, moral 225 identity and power. In particular, when power levels are high, a combination of depletion and 226 low moral identity lead people to refrain from prosocial behavior, whereas no such an effect is 227 expected when power levels are low. The present study's Hypothesis therefore states that: 228

The negative effect of depletion on prosocial behavior among people low in moral
identity is restricted to people high, rather than low in power.

We tested this Hypothesis in two studies. Study 1 was a controlled laboratory experiment in which participants' power and level of depletion were manipulated. We measured the participant's level of moral identity independent from the experimental situation. The dependent variable in this study was the extent to which the participants helped another person who was in need.

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The controlled setting in Study 1 makes it possible to draw causal conclusions, but it 236 does not tell us much about the relevance of the processes that we set out to study in actual 237 organizational contexts. Therefore, Study 2 was conducted in an organizational setting, using 238 a multisource design. We asked employees of various organizations to indicate their level of 239 depletion, their moral identity, and their power in the organization using well-established 240 measures. To avoid potential common method and self-presentation biases [58] we asked a 241 colleague to indicate the focal employee's level of prosocial behavior. We operationalized 242 prosocial behavior as organizational citizenship behavior (OCB). OCB is an important and 243 commonly used index of prosocial employee behavior because it describes various types of 244 discretionary, extra-role behaviors that contribute to effective organizational functioning but 245 that are not explicitly required [59]. 246

#### Study 1

#### 248 Method

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Ethics statement. Ethics approval for Study 1 was formally waived by the ethical committee of the Faculty of Psychological and Educational Sciences (FPPW), Ghent University, as this research was performed in adherence with the ethical protocol of the university. All participants gave their formal, written consent, and were fully debriefed after the experiment. Participants participated voluntary and they could quit the experiment at any time without negative consequences. All data was analyzed and stored anonymously.

Participants and design. Eighty-four undergraduate students<sup>1</sup> from a medium-sized Belgian university participated in this study. The average age of participants was 18.95 years (SD = 2.11), and 89.3 percent were women. The participants were recruited through an online sign-up system and received partial course credit for their participation. Participants were randomly assigned to one condition of a 2 (depletion versus no depletion) x 2 (high versus

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low power) between subjects design. Participants' moral identity was assessed prior to the
experimental manipulations, creating an additional continuous between subjects variable.

Moral identity measure. Participants responded to an online questionnaire including 262 demographic information and a measure of moral identity 24 hours before the actual 263 experiment. We used Aquino and Reed's [19] instrument to measure participants' moral 264 identity. Following Aquino and Reed [19], and in line with our theoretical ideas, we relied on 265 the Internalization dimension of this instrument (i.e., the extent to which people find morality 266 an important aspect of who they are) and disregarded the Symbolization subscale (which 267 measures the extent to which people want to appear as a moral person). The Internalization 268 269 subscale has been proven to be the most stable and robust predictor of moral behavior [29,34]. In line with Aquino and Reed's [19] procedure, the following instructions were given: "Listed 270 below are some characteristics that might describe a person: Caring, Compassionate, Fair, 271 272 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 273 mind the kind of person who has these characteristics. Imagine how that person would think, 274 feel, and act. When you have a clear image of what this person would be like, answer the 275 following questions." Participants then responded to the five Internalization items on a 7-point 276 scale. Sample items from this scale are: "It would make me feel good to be a person who has 277 these characteristics" and "Having these characteristics is an important part of my sense of 278 self" (1 = totally disagree; 7 = totally agree; Cronbach's  $\alpha$  = .72; M = 6.18, SD = 0.60). 279

Experimental procedure. Upon arrival at the laboratory, participants were seated in separate cubicles, each equipped with a personal computer. All communication took place via this computer.

First, participants were introduced to the power manipulation, taken from Galinsky and colleagues [51] that served to prime high versus low power. Participants were asked to recall a particular situation in their lives. Participants in the high power condition wrote about
"a particular situation in which you had power over another individual or individuals".
Participants in the low power condition wrote about "a particular situation in which someone

else had power over you."

Following the power manipulation, participants responded to the manipulation checks using two items (adapted from [60]): "How powerful did you feel in the situation you recalled" and "How much power did someone else have over you in the situation you recalled" (reversed; 1 = not at all; 7 = very much so).

Participants then completed the depletion task (taken from Baumeister et al., 1998). 293 This task has proven to be successful as a manipulation of self-control depletion in a number 294 of studies (e.g., [26,61,62]). In the first part, participants were instructed to indicate each 295 instance of the letter *e* in a text (i.e., by clicking each *e* with the computer mouse). Participants 296 297 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 is 298 relatively easy and is used to establish a strong habitual response for scanning and indicating 299 every e. In the second part of the task, participants either continued indicating e's using the 300 same rule as before (no depletion condition), or they were given the instruction to indicate 301 each e, except for the ones followed by a vowel, or those with a vowel preceding the e by two 302 letters (high depletion condition). For participants in the high depletion condition, overriding 303 the response of scanning for and indicating every *e* is known to require more regulatory 304 resources than for participants in the low depletion condition (who did not need to override a 305 habitual response). 306

The effectiveness of the self-control depletion manipulation was assessed using two items: "The second task was hard" (taken from [63]), and "The second task was habitbreaking" (1 = not at all; 7 = very much so; taken from [1]).

Helping measure. After the experimental tasks, participants were told that there were 310 311 several PhD students in need of participants for their experiments that lasted usually somewhere between 5 and 60 minutes. Participants were asked whether they would be willing 312 to participate. We emphasized to the participants that it was not possible to reward them for 313 their participation in these additional studies, and that they would be contacted by an 314 experimenter to set a date and time that would suit them best. Then, participants indicated 315 how much time they would help (i.e., number of donated minutes) or by indicating that they 316 would not help (coded as 0 donated minutes; see e.g., [64,65] for similar ways to measure 317 prosocial behavior). Subsequently, participants were fully debriefed. 318

319 **Results** 

Manipulation checks. A 2 (depletion versus no depletion) x 2 (high power versus low 320 power) Analysis of Variance (ANOVA) showed that participants in the high power condition 321 322 considered themselves more powerful in the recalled situation than participants in the low power condition (M = 4.81, SD = 1.40 vs. M = 2.14, SD = 1.00, respectively), F(1, 80) =323 99.24, p < .001,  $\eta^2 = .55$ . These participants also disagreed more with the statement that 324 someone else had power over them than participants in the low power condition (M = 4.55, 325 SD = 1.23 vs. M = 5.29, SD = 1.15, respectively), F(1, 80) = 8.17, p = .01,  $\eta^2 = .09$ . No other 326 main or interaction effects were significant. 327

Additionally, two independent judges rated how powerful the participants were in the recalled situations on a 7-point scale (1 = not at all powerful; 7 = very powerful). The interrater reliability was high (Intraclass correlation coefficient [ICC] = .90) and ratings were averaged to assess the effectiveness of the power manipulation. A 2 (depletion versus no depletion) x 2 (high versus low power) ANOVA showed that participants in the high power condition were rated more powerful in the described situation than participants in the low 334 power condition (M = 4.85, SD = 0.58 vs. M = 3.20, SD = 0.90, respectively), F(1, 80) =

335 99.34, p < .001,  $\eta^2 = .55$ . No other main or interaction effects were significant.

A 2 (depletion versus no depletion) x 2 (high versus low power) ANOVA indicated that depleted participants rated the depletion task as harder than non-depleted participants (*M* = 4.88, *SD* = 1.33 vs. *M* = 3.60, *SD* = 1.50, respectively), *F*(1, 80) = 17.62, *p* < .001,  $\eta^2$  = .18. These participants also found the task more habit-breaking than non-depleted participants (*M* = 5.05, *SD* = 1.38 vs. *M* = 3.95, *SD* = 1.46, respectively), *F*(1, 80) = 12.40, *p* = .001,  $\eta^2$  = .13. No other main or interaction effects were significant.<sup>2</sup>

Helping behavior. Our measure of helping behavior (i.e., asking participants to 342 donate their time for participation in additional studies) was positively skewed (M = 21.31, 343 SD = 16.79). This resulted because a significant number of cases (N = 16) clustered at the 344 lower limit (i.e., helping out for 0 minutes, to indicate that they did not want to display 345 prosocial behavior). Skewed distributions can result in the violation of OLS assumptions. We 346 347 therefore conducted a Tobit regression (see [66]), which was specifically developed for variables with a lower (or upper) limit and a concentration of observations at this limiting 348 value. 349

To test our hypothesis, we thus conducted a Tobit regression analysis<sup>3</sup> in which helping behavior was predicted by the depletion manipulation, moral identity, the power manipulation, all the two-way interactions among these three variables, and finally, the threeway interaction. Following Aiken and West [67], the interaction terms were based on the mean-centered scores of moral identity and effect coded scores of depletion and power.

Table 1 shows the results of the Tobit regression analysis. Of most importance, the predicted three-way interaction was significant,  $\beta = .34$ , p = .004. To analyze this interaction in more detail, we used simple slope analyses [67]. Figure 1a shows that, consistent with our predictions, among participants who were primed with high power, depletion significantly Yet, for participants who received the low power prime (see Figure 1b), depletion did not significantly influence helping behavior for those low in moral identity (one *SD* below the mean),  $\beta = .35$ , p = .09, or for those high in moral identity (one *SD* above the mean),  $\beta = .26$ , p = .24.

# 365 Summary and Conclusion

The results of Study 1 show that, in line with theoretical predictions [12] and our Hypothesis, among participants who felt high in power, depletion reduced prosocial behaviors for those low (as opposed to high) in moral identity, whereas this interaction effect between depletion and moral identity did not occur for those who felt low in power.

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#### Study 2

Study 1 provided causal evidence for our proposed ideas, but the setup limited us to the use of students as participants in a laboratory setting. Study 2 was designed to test our predictions in an organizational setting. Rather than priming power and manipulating depletion, we measured employees' sense of power in the organization and their level of depletion in addition to their moral identity. To avoid potential common method and selfpresentation biases we asked colleagues of the respondents to rate the respondent's prosocial behavior [58].

378 Method

Ethics statement. Ethics approval for Study 2 was formally waived by the ethical committee of the FPPW, Ghent University, as this research was performed in adherence with the ethical protocol of the university. We used a research agency to recruit our respondents, who gave their consent upon enrolling this research panel to use their data for research purposes. Moreover, a "double active opt-in" method was used, meaning that all respondents 384 gave their consent by actively and voluntarily agreeing to take part in our research. Before 385 starting the questionnaire, all respondents were provided with information on the purpose and 386 the content of the research. Respondents were informed that all data would be analyzed and 387 stored anonymously and that they could quit the questionnaire at any moment.

Sample and procedure. We recruited respondents via a Dutch research panel. We 388 asked potential respondents to respond to our survey and also to invite a coworker to respond 389 to some items. A total of 893 panel members agreed to fill out the questionnaire as focal 390 employee and 94 of these focal employees also found a colleague willing to fill out the 391 questionnaire. The focal employees (i.e., panel members) received credit points that would 392 allow them to receive certain gifts (e.g., tickets for the movies). Colleagues participated in a 393 lottery in which they could win an Ipad or one of five €20 gift certificates. Because we relied 394 on colleague ratings of the focal employee's behavior, the number of respondents included in 395 our analyses consisted of 94 employees and 94 matched colleagues.<sup>4</sup> 396

Of the focal employees, 55 were male and 39 were female. The mean age was 44.13 years (SD = 11.37). One percent had only lower education (primary school), 17% had high school only, 26% had followed up on this with vocational education, 36% had a bachelor's degree, and 20% had a master's degree. The focal employees worked on average for 12.83 years (SD = 10.80) in their current organization.

The matched group of colleagues included 47 males and 47 females. The mean age was 42.96 years (SD = 10.98). One percent had only lower education (primary school), 19% had high school only, 30% had followed up on this with vocational education, 43% had a bachelor's degree, and 7% had a master's degree. The colleagues worked on average for 10.72 years (SD = 9.27) in their current organization.

407	Measures. We measured moral identity using the same internalization subscale of the
408	moral identity measure [19] as in Study 1 (1 = not at all; 5 = very much so; Cronbach's $\alpha$ =
409	.77; $M = 4.02$ , $SD = 0.70$ ).
410	To assess focal employees' levels of depletion, we used the 2-item measure from
411	Muraven and colleagues [27]. Focal employees indicated how much they agreed or disagreed
412	with: "I often feel as if I have low energy," and "I often feel as if things are taking a lot of
413	effort" (1 = <i>strongly disagree</i> ; 5 = <i>strongly agree</i> ; Cronbach's $\alpha$ = .72; <i>M</i> = 2.29, <i>SD</i> = 0.93).
414	Power of the focal employee was measured using the 8-item instrument developed by

Anderson and Galinsky ([50]; see [68] for extensive validation evidence). Focal employees

responded to items such as "Even if I voice them, my views have little sway in the

417 organization" (reverse scored), and "If I want to, I get to make the decisions in the

organization" (1 = *strongly disagree*; 5 = *strongly agree*; Cronbach's  $\alpha$  = .77; *M* = 3.51, *SD* = 0.89).

We operationalized prosocial behavior of the focal employee using the 19-item OCB measure of Moorman and Blakely [69]. To assess OCB, *colleagues* of the focal employees were asked to rate the focal employees on actions such as "voluntarily helps new employees settle into the job," "often motivates others to express their ideas and opinions", "performs his/her job duties with extra-special care," and "actively promotes the organization's products and services to potential users" (1 = *strongly disagree;* 5 = *strongly agree;* Cronbach's  $\alpha$  = .91; M = 3.87, SD = 0.52).

427 **Results** 

428 Descriptive statistics and intercorrelations. Table 2 presents the means, standard
429 deviations, and correlations between the Study 2 variables.

Hypothesis test. To test our hypothesis, we conducted a hierarchical regression
analysis with colleague ratings of OCB serving as the dependent variable. Age, gender,

tenure, and education level of the focal employees, and, age, gender, and education level of
the colleagues were entered as control variables in the first step of the regression. Depletion,
moral identity, and power were entered in the second step of the regression. The two-way
interactions between depletion, moral identity, and power were entered in the third step of the
regression. The three-way interaction was entered in the fourth step. Interaction terms were
based on mean-centered scores of the independent variables [67].

Table 3 shows the results of the hierarchical regression analysis. Of most importance and in line with our Hypothesis, the predicted three-way interaction was significant,  $\beta = .24$ , p= .02. We used simple slope analyses [67] to analyze this interaction further. Figure 2a shows that, among high power employees, depletion significantly decreased OCB for those low in moral identity (one *SD* below the mean),  $\beta = -.95$ , p < .001. However, for those high in moral identity (one *SD* above the mean) depletion did not decrease OCB,  $\beta = .17$ , p = .35.

Figure 2b shows that, for low power employees, depletion had no effect on OCB for those low in moral identity (one *SD* below the mean),  $\beta = .02$ , p = .89. Unexpectedly, depletion increased OCB for those high in moral identity (one *SD* above the mean),  $\beta = .41$ , p= .050. However, given the fact that the interaction between moral identity and self-control depletion was not significant among employees low in power, and given that we did not obtain this result in Study 1, the results of this analysis should be interpreted with caution.

450 **Supplemental analyses.** We followed Spector and Brannick's [70] suggestion and 451 repeated our analyses without the control variables as predictors in the equations. This 452 analysis led to similar conclusions to those presented previously. Most importantly, the 453 predicted three-way interaction was significant,  $\beta = .24$ , p = .02.

454 Summary and Conclusion

The results of Study 2 supported our prediction. We found the hypothesized
interaction between moral identity and depletion for employees high in power, but not for

employees low in power. More specifically, depletion reduces prosocial behaviors among
employees low in moral identity if those employees feel high in power, but not if they feel
low in power. The prosocial behavior of employees high in moral identity, on the other hand,
was not influenced by depletion, whether they felt high in power or not. It thus seems that
employees with a high moral identity have their moral values more readily accessible, even
when their self-control resources are depleted and irrespective of their power level.

463

# **General Discussion**

A laboratory experiment and a multisource field study consistently showed an
interaction between depletion and moral identity for people high in power, but not for people
low in power. In the following sections we discuss the implications and limitations of these
findings.

### 468 **Theoretical Implications**

The obtained three way interaction between self-control depletion, moral identity and 469 power has theoretical implications for each of the constituting factors of this third order effect. 470 It enhances, first of all, our understanding of the role of self-regulation in the display of 471 prosocial behavior. In fact, most previous studies focused on effects of depletion on 472 subsequent task persistence or negative and antisocial behavior [13,28,71]. To date, indirect 473 474 evidence for the effect of depletion on prosocial behavior is offered only by DeWall and colleagues [1] who showed that depletion decreases prosocial *intentions*. Hence, our research 475 is (at least to our knowledge) the first to show that regulatory depletion has an effect on 476 prosocial *behavior*. These findings are important because our results indicate that especially 477 people who feel powerful and are low in moral identity are likely to show less prosocial 478 behavior as a result of regulatory depletion. At the same time, however, people high in power 479 are likely to serve as a source of ethical guidance by means of social learning [72,73]. That is, 480

if someone in power does not act in ethical ways, employees are likely to follow his or herlead [74].

Most importantly, the present findings offer corroborative evidence for the idea that 483 the effect of situations that constrain cognitive capacity (e.g., self-control depletion) on 484 prosocial behavior depends not only on one's level of moral identity, but also on one's sense 485 of power. That is, self-control depletion leads to a decrease in prosocial behavior among 486 people low in moral identity, but only when they feel powerful. Our reasoning for this is that 487 prosocial behavior is fairly easy to implement because of its social desirability and it thus 488 seems that people need power to feel that they can refrain from prosocial behavior. Research 489 490 in the realm of antisocial behavior, however, has shown that the effect of self-control depletion on antisocial behavior depends solely on one's level of moral identity [13,14]. That 491 is, depletion increases antisocial behavior among people low in moral identity, irrespective of 492 493 their power level. The self-regulation of prosocial behavior, on the other hand, is dependent upon people's level of power. In other words, depletion reduces prosocial behavior among 494 people low in moral identity, only if they experience power. Taking all these results together, 495 it is clear that the display of prosocial intentions relies on processes that are qualitatively 496 different from suppressing antisocial and selfish impulses (e.g., [75]). 497

498 The results of the present study also have implications for our understanding of what power tells us about the differences between not helping someone and hurting someone. In the 499 introduction we argued that refraining from antisocial behavior is considered as more pressing 500 than prosocial behavior [38]. That is, antisocial behavior is usually regulated by formal 501 sanctioning systems, which are known to make people focus on the exchange characteristics 502 of a situation [76,77]. Similarly, power is also likely to make people focus on the exchange 503 characteristics of a situation, because people who experience power tend to objectify others 504 [56]. It thus seems that similar processes that underlie the emergence of antisocial behavior, 505

also play a role in the behavior of people high in power. Prosocial behavior, on the other
hand, is regulated more informally because of its social desirability. Prosocial behavior is
generally sustained by social and organizational norms, and adherence to these norms is fairly
easy. The present study thus indicates that power is needed to obtain the same results for
prosocial behavior as for antisocial behavior (i.e., the negative effect of self-control depletion
for people low in moral identity; see [13,14]).

512 Our findings are also informative for the study of moral identity. Among people high 513 in moral identity, self-control depletion and power do not necessarily hamper the self-514 regulation of prosocial behavior. This finding suggests that, in line with Gino and colleagues 515 [13] and Joosten and colleagues [14], people high in moral identity have their moral values 516 accessible irrespective of their level of depletion.

Our research has also some implications that are relevant for the power literature. Past 517 research has, on the one hand, often shown that power can make people more selfish (for 518 overviews see [15,16]). However, on the other hand, some studies suggest that this 519 undermining effect on selfishness does not necessary result from having high power in itself 520 [15,51]. As a solution to these diverging findings, it has been proposed that power in itself 521 does not make people selfish but that it acts as a catalyst in facilitating the behavioral 522 523 expression of internal states [60,78]. This indicates that power is not inherently corruptive, but rather a facilitator of the behavioral expression of internal states (in our case: the toxic 524 cocktail of depletion and low moral identity). The present research adds to this literature, 525 showing that the facilitating effect of power on internal states (i.e., low moral identity) is 526 contingent upon third variables as well (i.e., self-control depletion). 527

### 528 **Practical Implications**

529 The present research also offers some practical implications for organizations. It seems 530 to be the case that particularly employees who feel powerful are vulnerable to the effects of

self-control depletion on prosocial behaviors. At the same time, it is especially important for 531 532 employees high in power to behave in prosocial ways as they form an important source of vicarious learning [73]. For these employees, the negative effects of self-control depletion on 533 prosocial behavior seem to apply particularly among those low in moral identity. Fortunately, 534 research indicates that it is possible to situationally increase the accessibility of moral identity 535 [29,79]. Combined with the present results, this entails a promising implication for 536 organizations. Situational interventions aimed at stimulating moral identity are thus likely to 537 make employees who feel high in power behave in prosocial ways. Such interventions can 538 consist of the stimulation of a clear ethical climate. Moreover, social learning is enforced by 539 540 ensuring that employees high in power act in moral ways, by which interventions aimed at increasing morality have positive implications for people low in power [74,80,81]. 541

Another practical implication of the present findings is that on the one hand, high 542 power makes employees particularly vulnerable to the effects of self-control depletion on 543 prosocial behaviors, while, on the other hand, power also comes with heavy workloads, and 544 numerous choices and decisions each day. Importantly, high stress levels [7], overly long 545 working hours that may lead to sleep deprivation [5,6], and the necessity to make many 546 choices and decisions [4], all constitute factors that are known to lead to self-control 547 548 depletion. Organizations should thus be aware that overloading their employees in this respect could also reduce the prevalence of prosocial behaviors, at least among employees with a low 549 moral identity and a high sense of power. Similarly, employees who feel high in power should 550 also be aware that their cognitive state could affect their own behavior. 551

552 One could assume from our results that employees who feel low in power are not 553 vulnerable to the effects of self-control depletion on selfish behaviors. It is, however, 554 important that organizations and employees realize that this only holds for the emergence of 555 prosocial behaviors. That is, our findings indicate that for employees low in power, depletion does not reduce prosocial behaviors for those low in moral identity. There are, however, studies in the realm of negative behavior that show that self-control depletion makes people low in moral identity more likely to show antisocial behavior [13,14]. Even though these studies did not compare high and low power, the results from these studies should nevertheless be taken into consideration.

#### 561 Strengths, Limitations and Suggestions for Future Research

A major strength of this article lies in the use of diverse methods to test our hypothesis. The laboratory experiment (Study 1) permits us to draw causal inferences with regard to the interactive effects of power, self-control depletion and moral identity on prosocial behavior. The subsequent multisource field study (Study 2) allowed us to investigate whether the hypothesized effects are also relevant in organizational settings. Furthermore, the multisource setting made it possible to control for common method and self-presentation biases [58].

A potential limitation is that the sample sizes in both Study 1 and Study 2 are relatively small and that this could potentially harm the validity of our results. We did, however, replicate the findings in an experimental setting (Study 1) and in a multisource field setting (Study 2), which reinforces the reliability and validity of our results. However, even though we believe that our results are valid and reliable, replications are necessary to further prove the validity of our findings.

In Study 2, we relied on colleague ratings of OCB. Our reliance on a single source to measure OCB may pose a threat to the validity of our findings, because of the discretionary nature of OCB [82]. That is, OCB consists of many different behaviors, and it is not unlikely that the colleagues witnessed only part of these behaviors. It may thus be that our reliance on a single source measure does not fully capture the unique variance present in citizenship behaviors. Future research could address this possible shortcoming by measuring OCB via various sources (e.g., comparing self and other ratings, or by combining various otherratings).

Another strength of the present article is that self-control depletion was manipulated in 583 Study 1, whereas it was measured in Study 2. Although it can be argued that the manipulation 584 of self-control depletion represents a more dynamic representation of self-control depletion 585 than the more trait oriented measure, similar results were obtained. This apparent consistency 586 strengthens our beliefs that it is possible to capture self-control depletion with a trait oriented 587 measure in the field. These results also corroborate previous research that combined self-588 control depletion manipulations and measures, which shows clear consistency between these 589 590 two operationalizations of self-control depletion [4,14]

Readers could wonder whether there are situations in which power may increase the prosocial behavior of people high in moral identity. In our research we focused on informal, effortless helping behavior. As noted in the introduction, prosocial behavior might sometimes be restrained by organizational rules and regulations or by demands inherent in employees' primary tasks [40,41]. In these cases, prosocial behavior is thus likely to be more effortful and less socially desirable, and may have as a result that high moral identifiers need power to act in line with their moral values.

### 598 Concluding Remarks

Research focusing on the social effects of depletion presents us with a rather cynical view of human nature. Lack of self-control results in selfishness [8-10], and is also likely to undermine the emergence of prosocial behaviors. Yet, other studies show that depletion makes only people low in moral identity more selfish, while no such an effect of depletion was obtained among high moral identifiers. We argued that one cannot simply extrapolate the effects of factors that influence the display of antisocial behavior to the non-display of prosocial behavior, and that one may need power to refrain from prosocial behavior. In line

- 606 with this, we showed that the moderating role of moral identity on the effects of depletion is
- 607 present among people high in power, and not among people low in power.

608	References
609	1. DeWall CN, Baumeister RF, Gailliot MT, Maner JK (2008) Depletion makes the heart
610	grow less helpful: Helping as a function of self-regulatory energy and genetic
611	relatedness. Personality and Social Psychology Bulletin 34: 1653-1662.
612	2. Podsakoff NP, Whiting SW, Podsakoff PM, Blume BD (2009) Individual-and
613	organizational-level consequences of organizational citizenship behaviors: A meta-
614	analysis. Journal of Applied Psychology 94: 122-141.
615	3. Podsakoff PM, MacKenzie SB, Paine JB, Bachrach DG (2000) Organizational citizenship
616	behaviors: A critical review of the theoretical and empirical literature and suggestions
617	for future research. Journal of Management 26: 513-563.
618	4. Vohs KD, Baumeister RF, Schmeichel BJ, Twenge JM, Nelson NM, et al. (2008) Making
619	choices impairs subsequent self-control: A limited-resource account of decision
620	making, self-regulation, and active initiative. Journal of Personality and Social
621	Psychology 94: 883-898.
622	5. Barnes CM, Schaubroeck J, Huth M, Ghumman S (2011) Lack of sleep and unethical
623	conduct. Organizational Behavior and Human Decision Processes 115: 169-180.
624	6. Christian MS, Ellis AP (2011) Examining the effects of sleep deprivation on workplace
625	deviance: A self-regulatory perspective. Academy of Management Journal 54: 913-
626	934.
627	7. Muraven M, Baumeister RF (2000) Self-regulation and depletion of limited resources:
628	Does self-control resemble a muscle? Psychological Bulletin 126: 247-259.
629	8. Baumeister RF, Exline J (1999) Virtue, personality, and social relations: Self-control as the
630	moral muscle. Journal of Personality 67: 1165-1194.

- 9. Mead NL, Baumeister RF, Gino F, Schweitzer ME, Ariely D (2009) Too tired to tell the
  truth: Self-control resource depletion and dishonesty. Journal of Experimental Social
  Psychology 45: 594-597.
- 634 10. Shalvi S, Eldar O, Bereby-Meyer Y (2012) Honesty requires time (and lack of
  635 justifications). Psychological Science 23: 1264-1270.
- 11. Muraven M, Slessareva E (2003) Mechanisms of self-control failure: Motivation and
  limited resources. Personality and Social Psychology Bulletin 29: 894-906.
- 638 12. Seeley EA, Gardner WL (2003) The "selfless" and self-regulation: The role of chronic
  639 other-orientation in averting self-regulatory depletion. Self and Identity 2: 103-117.
- Gino F, Schweitzer ME, Mead NL, Ariely D (2011) Unable to resist temptation: How
   self-control depletion promotes unethical behavior. Organizational Behavior and
- Human Decision Processes 115: 191-203.
- 14. Joosten A, Van Dijke M, Van Hiel A, De Cremer D (2014) Being "in control" may make
  you lose control: The role of self-regulation in unethical leadership behavior. Journal
  of Business Ethics 121: 1-14.
- 15. Keltner D, Gruenfeld DH, Anderson C (2003) Power, approach, and inhibition.
- 647 Psychological Review 110: 265-284.
- 648 16. Magee JC, Smith PK (2013) The social distance theory of power. Personality and Social
  649 Psychology Review 17: 158-186.
- 17. Briñol P, Petty RE, Valle C, Rucker DD, Becerra A (2007) The effects of message
- recipients' power before and after persuasion: A self-validation analysis. Journal of
  Personality and Social Psychology 93: 1040-1053.
- 18. Hagger MS, Wood C, Stiff C, Chatzisarantis NL (2010) Ego depletion and the strength
  model of self-control: A meta-analysis. Psychological Bulletin 136: 495-525.

- 19. Aquino K, Reed II A (2002) The self-importance of moral identity. Journal of Personality
  and Social Psychology 83: 1423-1440.
- 20. Shao R, Aquino K, Freeman D (2008) Beyond moral reasoning: A review of moral
  identity research and its implications for business ethics. Business Ethics Quarterly 18:
  513-540.
- 21. Hardy SA, Carlo G (2005) Identity as a source of moral motivation. Human Development
  48: 232-256.
- 662 22. Baumeister RF, Heatherton TF, Dianne M (1994) Losing control: How and why people
  663 fail at self-regulation. San Diego: Academic Press.
- 23. Tangney JP, Baumeister RF, Boone AL (2004) High self-control predicts good
   adjustment, less pathology, better grades, and interpersonal success. Journal of
- 666 Personality 72: 271-324.
- Mischel W (1974) Processes in delay of gratification. In: Berkowitz L, editor. Advances
   in experimental social psychology. New York: Academic Press. pp. 249-292.
- 25. Baumeister RF, Vohs KD, Tice DM (2007) The strength model of self-control. Current
  Directions in Psychological Science 16: 351-355.
- 26. Baumeister RF, Bratslavsky E, Muraven M, Tice DM (1998) Ego depletion: Is the active
  self a limited resource? Journal of Personality and Social Psychology 74: 1252-1265.
- 673 27. Muraven M, Tice DM, Baumeister RF (1998) Self-control as a limited resource:
- 674 Regulatory depletion patterns. Journal of Personality and Social Psychology 74: 774675 789.
- 28. DeWall CN, Baumeister RF, Stillman TF, Gailliot MT (2007) Violence restrained: Effects
  of self-regulation and its depletion on aggression. Journal of Experimental Social
  Psychology 43: 62-76.

679	29. Aquino K, Freeman D, Reed II A, Lim VK, Felps W (2009) Testing a social-cognitive
680	model of moral behavior: The interactive influence of situations and moral identity
681	centrality. Journal of Personality and Social Psychology 97: 123-141.
682	30. Narvaez D, Lapsley DK, Hagele S, Lasky B (2006) Moral chronicity and social
683	information processing: Tests of a social cognitive approach to the moral personality.
684	Journal of Research in Personality 40: 966-985.
685	31. Blasi A (1980) Bridging moral cognition and moral action: A critical review of the
686	literature. Psychological Bulletin 88: 1-45.
687	32. Mayer DM, Aquino K, Greenbaum RL, Kuenzi M (2012) Who displays ethical
688	leadership, and why does it matter? An examination of antecedents and consequences
689	of ethical leadership. Academy of Management Journal 55: 151-171.
690	33. Reed II A, Aquino KF (2003) Moral identity and the expanding circle of moral regard
691	toward out-groups. Journal of Personality and Social Psychology 84: 1270-1286.
692	34. Reynolds SJ, Ceranic TL (2007) The effects of moral judgment and moral identity on
693	moral behavior: An empirical examination of the moral individual. Journal of Applied
694	Psychology 92: 1610-1624.
695	35. Sage L, Kavussanu M, Duda J (2006) Goal orientations and moral identity as predictors of
696	prosocial and antisocial functioning in male association football players. Journal of
697	Sports Sciences 24: 455-466.
698	36. Barriga AQ, Morrison EM, Liau AK, Gibbs JC (2001) Moral cognition: Explaining the
699	gender difference in antisocial behavior. Merrill-Palmer Quarterly 47: 532-562.
700	37. Rawls J (1971) A theory of justice. Cambridge, MA: Harvard University Press.
701	38. Kant I (2005) Groundwork for the metaphysics of morals. Ontario, Canada: Broadview
702	Press. (Original work published 1785).
703	39. Nozick R (1974) Anarchy, state, and utopia. Oxford, UK: Blackwell.

- 40. Morrison EW (2006) Doing the job well: An investigation of pro-social rule breaking.
  Journal of Management 32: 5-28.
- 41. Bell SJ, Menguc B (2002) The employee-organization relationship, organizational
- citizenship behaviors, and superior service quality. Journal of Retailing 78: 131-146.
- 42. Rilling JK, Gutman DA, Zeh TR, Pagnoni G, Berns GS, et al. (2002) A neural basis for
  social cooperation. Neuron 35: 395-405.
- 43. Smith KD, Keating JP, Stotland E (1989) Altruism reconsidered: The effect of denying
  feedback on a victim's status to empathic witnesses. Journal of Personality and Social
  Psychology 57: 641-650.
- 44. Grusec JE (1991) Socializing concern for others in the home. Developmental Psychology
  27: 338-342.
- 45. Batson CD, Kobrynowicz D, Dinnerstein JL, Kampf HC, Wilson AD (1997) In a very
   different voice: Unmasking moral hypocrisy. Journal of Personality and Social
- 717 Psychology 72: 1335-1348.
- 46. Fiske ST (1993) Controlling other people: The impact of power on stereotyping.
- 719 American Psychologist 48: 621-628.
- 47. French Jr JR, Raven B (1959) The bases of social power. In: Cartwright D, editor. Studies
  in social power. Ann Arbor, Michigan: Institute for Social Research. pp. 150-167.
- 48. DeCelles KA, DeRue DS, Margolis JD, Ceranic TL (2012) Does power corrupt or enable?
- When and why power facilitates self-interested behavior. Journal of AppliedPsychology 97: 681-689.
- 49. Magee JC, Galinsky AD (2008) Social hierarchy: The self-reinforcing nature of power
  and status. The Academy of Management Annals 2: 351-398.
- 50. Anderson C, Galinsky AD (2006) Power, optimism, and risk-taking. European Journal of
   Social Psychology 36: 511-536.

729	51. Galinsky AD, Gruenfeld DH, Magee JC (2003) From power to action. Journal of
730	Personality and Social Psychology 85: 453-466.

- 52. Kipnis D (1972) Does power corrupt? Journal of Personality and Social Psychology 24:
  33-41.
- 53. Galinsky AD, Magee JC, Inesi ME, Gruenfeld DH (2006) Power and perspectives not
  taken. Psychological Science 17: 1068-1074.
- 54. Van Kleef GA, Oveis C, Van der Löwe I, LuoKogan A, Goetz J, et al. (2008) Power,
  distress, and compassion. Turning a blind eye to the suffering of others. Psychological
  Science 19: 1315-1322.
- 55. Hoogervorst N, De Cremer D, Van Dijke M, Mayer DM (2012) When do leaders
- 739sacrifice? The effects of sense of power and belongingness on leader self-sacrifice.
- The Leadership Quarterly 23: 883-896.
- 56. Chen S, Lee-Chai AY, Bargh JA (2001) Relationship orientation as a moderator of the
- r42 effects of social power. Journal of Personality and Social Psychology 80: 173-187.
- 57. Wisse B, Rus D (2012) Leader self-concept and self-interested behavior: The moderating

role of power. Journal of Personnel Psychology 11: 40-48.

- 58. Podsakoff PM, MacKenzie SB, Lee J-Y, Podsakoff NP (2003) Common method biases in
- behavioral research: A critical review of the literature and recommended remedies.
- Journal of Applied Psychology 88: 879-903.
- 59. Organ DW (1988) Organizational citizenship behavior: The good soldier syndrome.
- 749 Lexington, MA: Lexington.
- 60. Guinote A, Weick M, Cai A (2012) Does power magnify the expression of dispositions?
- 751 Psychological Science 23: 475-482.

- 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: 1306-1321.
- 62. Wheeler SC, Briñol P, Hermann AD (2007) Resistance to persuasion as self-regulation:
   Ego-depletion and its effects on attitude change processes. Journal of Experimental
- 757 Social Psychology 43: 150-156.
- 63. Balliet D, Joireman J (2010) Ego depletion reduces proselfs' concern with the well-being
   of others. Group Processes & Intergroup Relations 13: 227-239.
- <sup>760</sup> 64. Van Dijke M, De Cremer D, Brebels L, Van Quaquebeke N (2013) Willing and able:
- Action-state orientation and the relation between procedural justice and employeecooperation. Journal of Management: In press.
- 763 65. Zhong C-B, Liljenquist K (2006) Washing away your sins: Threatened morality and
   764 physical cleansing. Science 313: 1451-1452.
- 765 66. Tobin J (1958) Estimation of relationships for limited dependent variables. Econometrica
  766 26: 24-36.
- 767 67. Aiken LS, West SG (1991) Multiple regression: Testing and interpreting interactions.
  768 Newbury Park, CA: Sage. XI, 212 S. p.
- 68. Anderson C, John OP, Keltner D (2012) The personal sense of power. Journal of
  Personality 80: 313-344.
- 69. Moorman RH, Blakely GL (1995) Individualism-collectivism as an individual difference
   predictor of organizational citizenship behavior. Journal of Organizational Behavior
   16: 127-142.
- 774 70. Spector PE, Brannick MT (2011) Methodological urban legends: The misuse of statistical
   775 control variables. Organizational Research Methods 14: 287-305.

- 776 71. Stucke TS, Baumeister RF (2006) Ego depletion and aggressive behavior: Is the inhibition
  777 of aggression a limited resource? European Journal of Social Psychology 36: 1-13.
- 778 72. Bandura A (1977) Social learning theory. Upper Saddle River, NJ: Prentice Hall.
- 779 73. Bandura A (1986) Social foundations of thought and action: A cognitive social theory.
  780 Upper Saddle River, NJ: Prentice Hall.
- 781 74. Mayer DM, Kuenzi M, Greenbaum R, Bardes M, Salvador RB (2009) How low does
- ethical leadership flow? Test of a trickle-down model. Organizational Behavior andHuman Decision Processes 108: 1-13.
- 784 75. Lee K, Allen NJ (2002) Organizational citizenship behavior and workplace deviance: The
  785 role of affect and cognitions. Journal of Applied Psychology 87: 131-142.
- 786 76. Mulder LB, Van Dijk E, De Cremer D, Wilke HAM (2006) Undermining trust and
- cooperation: The paradox of sanctioning systems in social dilemmas. Journal of
  Experimental social psychology 42: 147-162.
- 789 77. Tenbrunsel AE, Messick DM (1999) Sanctioning systems, decision frames, and
  790 cooperation. Administrative Science Quarterly 44: 684-707.
- 791 78. Galinsky AD, Magee JC, Gruenfeld DH, Whitson JA, Liljenquist KA (2008) Power
- reduces the press of the situation: Implications for creativity, conformity, and
- dissonance. Journal of Personality and Social Psychology 95: 1450-1466.
- 794 79. Reed II A, Aquino K, Levy E (2007) Moral identity and judgments of charitable
  795 behaviors. Journal of Marketing 71: 178-193.
- 80. Martin KD, Cullen JB (2006) Continuities and extensions of ethical climate theory: A
   meta-analytic review. Journal of Business Ethics 69: 175-194.
- 81. Mayer DM, Kuenzi M, Greenbaum RL (2010) Examining the link between ethical
- <sup>799</sup> leadership and employee misconduct: The mediating role of ethical climate. Journal of
- Business Ethics 95: 7-16.

801	82. Allen TD, Barnard S, Rush MC, Russell JE (2000) Ratings of organizational citizenship
802	behavior: Does the source make a difference? Human Resource Management Review
803	10: 97-114.
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#### Footnotes

<sup>1</sup> Three respondents were not included in the analyses because they did not follow the instructions of the power manipulation. Inclusion of these three respondents in our analyses did not change any of the results. Most importantly, the predicted three-way interaction remained significant,  $\beta = .29$ , p = .01.

<sup>2</sup> We also conducted regression analyses in which the manipulation checks were predicted 814 815 by the depletion manipulation, power manipulation, participants' moral identity, and the corresponding interaction terms. These analyses produced similar results to those presented in 816 the main text. Specifically, power increased how powerful participants felt,  $\beta = .75$ , p < .001, 817 and decreased reported feelings of powerlessness,  $\beta = -.30$ , p = .01. Furthermore, participants 818 in the high power condition were rated significantly more powerful than participants in the 819 low power condition,  $\beta = .83$ , p < .001. Finally, depletion increased ratings of how hard,  $\beta =$ 820 .43, p < .001, and habit-breaking the task was,  $\beta = .35$ , p = .001. In none of the analyses, other 821 main or interaction effects were significant. 822

<sup>3</sup>We also conducted OLS regression analyses. These analyses produced similar results as the Tobit regression analyses. Most importantly, the predicted three-way interaction was significant,  $\beta = .28$ , p = .02.

<sup>4</sup> Focal employees who could be included in the analyses (i.e., because they had a coworker who was also willing to participate) did not differ from focal employees who could not be included in the analyses with regard to their mean level on the demographic variables and focal predictors. There was one exception: focal employees who could be included worked longer in their current organization than focal employees who were not included. This is most likely because longer tenure increases the likelihood of developing social connections with colleagues. This should make it easier to find a coworker willing to participate.

- 833 In addition, we also tested whether the correlations between the study variables were
- significantly different between included and not included employees. The correlations
- between the study's variables (Bonferroni corrected) did not differ between the two groups of
- 836 focal employees. These analyses give us little reason to think that selection biases impacted
- 837 our results and conclusions.

*Figure 1a.* Helping as a function of depletion and moral identity for participants high inpower.

840

*Figure 1b.* Helping as a function of depletion and moral identity for participants low in power.

843 *Figure 2a.* OCB (coworker rating) as a function of depletion and moral identity for high

844 power employees.

845

*Figure 2b.* OCB (coworker rating) as a function of depletion and moral identity for low power

847 employees.

## 848 Table 1

Variables	В	SE B	β
Self-control depletion (SD)	-1.26	2.11	06
Moral identity (MI)	5.24	3.90	.15
Power (P)	-0.34	2.11	02
SD x MI	1.24	3.90	.04
SD x P	-2.14	2.11	11
MI x P	3.66	3.90	.11
SD x MI x P	11.55	3.92	.34**

849 Results of Hierarchical Regression Analysis for Helping in Study 1

Note. Final model: -2 log likelihood = -311.39,  $\chi^2(7) = 11.29$ , p = .13. B = unstandardized

regression coefficient;  $\beta$  = standardized regression coefficient. For the self-control depletion manipulation, -1 denotes no self-control depletion; 1 denotes self-control depletion. For the power manipulation, -1 denotes low power; 1 denotes high power.

854 \* p < .05. \*\* p < .01.

<b>1</b>		v										
Variable	М	SD	1	2	3	4	5	6	7	8	9	10
1. Self-control depletion	2.29	0.93	(.72)									
2. Moral identity	4.02	0.70	19	(.77)								
3. Power	3.51	0.77	23*	.30**	(.89)							
4. OCB (colleague rating)	3.87	0.52	19	.36**	.27**	(.91)						
5. Age (focal)	44.13	11.37	22*	15	03	04						
6. Gender (focal)	1.41	0.50	05	.13	.15	.20	.04					
7. Tenure (focal)	12.83	10.80	11	14	09	.01	.66**	03				
8. Education level (focal)	3.57	1.03	05	.25*	.18	.09	12	09	13			
9. Age (colleague)	42.96	10.98	12	17	.00	18	.32**	.06	.11	19		
10. Gender (colleague)	1.50	0.50	20	.29**	.14	.27**	12	.67**	13	.10	19	
11. Education level (colleague)	3.36	0.91	08	.27**	.31**	.07	04	15	.03	.64**	22*	.05

856 Descriptive Statistics and Intercorrelations of Study 2 Measures

Note. N = 94. Internal reliabilities (coefficient alphas) are provided in parentheses on the diagonal. For gender, 1 denotes males, 2 denotes

858 females.

859 \*  $p \le .05$ . \*\*  $p \le .01$ .

# Table 3

Results of Hierarchical Regression Analysis for OCB in Study 2

Variables	Step 1	Step 2	Step 3	Step 4
Age of focal employee	03	05	09	08
Gender of focal employee	.10	.09	.07	.07
Tenure of focal employee	.08	.12	.16	.15
Education level of focal employee	.06	.06	.07	.06
Age of colleague	14	16	12	10
Gender of colleague	.17	.07	.08	.11
Education level of colleague	.00	13	06	07
Self-control depletion (SD)		10	04	09
Moral identity (MI)		.26	.22*	.23*
Power		.19	.16	.15
SD x MI			.33**	.41***
SD x Power			29**	31**
MI x Power			03	.05
SD x MI x Power				.25*
$R^2$	.10	.23	.34	.38
$R^2$ adj	.03	.13	.23	.27
$R^2$ change	.10	.13**	.11**	.04*
F	1.35	2.42*	3.14**	3.45***

Note. Table presents Beta coefficients. For gender, -1 denotes males, 1 denotes females.

\* p < .05. \*\* p < .01. \*\*\* p < .001.