

# The Morning Morality Effect: The Influence of Time of Day on Unethical Behavior

Psychological Science  
 XX(X) 1–8  
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 DOI: 10.1177/0956797613498099  
[pss.sagepub.com](http://pss.sagepub.com)  


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## Abstract

Are people more moral in the morning than in the afternoon? We propose that the normal, unremarkable experiences associated with everyday living can deplete one's capacity to resist moral temptations. In a series of four experiments, both undergraduate students and a sample of U.S. adults engaged in less unethical behavior (e.g., less lying and cheating) on tasks performed in the morning than on the same tasks performed in the afternoon. This *morning morality effect* was mediated by decreases in moral awareness and self-control in the afternoon. Furthermore, the effect of time of day on unethical behavior was found to be stronger for people with a lower propensity to morally disengage. These findings highlight a simple yet pervasive factor (i.e., the time of day) that has important implications for moral behavior.

## Keywords

time of day, morality, cheating, ego depletion, self-control, moral disengagement

Received 1/26/13; Revision accepted 6/25/13

Why do “good” people do “bad” things? The answer to this often-asked question has important implications for good people everywhere who, despite selfish desires, strive to be and view themselves as moral, upstanding human beings (Mazar, Amir, & Ariely, 2008). One likely answer relates to people's ability—or inability—to regulate their own behavior and exert self-control (Baumeister, Bratslavsky, Muraven, & Tice, 1998). That is, although people are interested in doing the right thing, they sometimes fail to control their desires and impulses to cheat, steal, and lie for personal gain. Indeed, recent research has shown that time pressure (e.g., Shalvi, Eldar, & Bereby-Meyer, 2012), sleep deprivation (e.g., Wagner, Barnes, Lim, & Ferris, 2012), and participation in tasks that require the exercise of self-regulatory resources (e.g., Gino, Schweitzer, Mead, & Ariely, 2011) all decrease people's ability to exert self-control, which leads to increased unethical behavior in situations in which temptation exists. On the basis of these and other such findings, we posited that even something as simple as the time of day can affect unethical behavior—that the mere experience of everyday living can reduce one's self-control as the

day progresses. We predicted that the gradual fatigue associated with unremarkable daily activities (e.g., making decisions, regulating behavior, expending physical energy) can have a negative effect on one's moral behavior. In other words, people are more likely to act ethically and to overcome temptation in the morning than later in the day.

## Time of Day and Moral Behavior

According to the strength model of self-regulation (Baumeister et al., 1998; Muraven & Baumeister, 2000), the capacity for self-control is like a muscle and requires rest after use for its strength to be restored. All acts of self-control thus draw from the same finite resource, and the depletion of that resource hinders a person's ability to subsequently exert self-control. Dozens of empirical

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investigations have provided evidence for the depletion of self-regulatory resources (for a recent meta-analysis, see Hagger, Wood, Stiff, & Chatzisarantis, 2010), and studies have demonstrated the negative effects of such depletion on ethical behavior (e.g., Mead, Baumeister, Gino, Schweitzer, & Ariely, 2009). Gino et al. (2011), for example, showed that after engaging in a task requiring self-control, participants had lower moral awareness and cheated more on a subsequent task than did control participants. In short, to the extent that self-control is required to resist the temptation to act unethically, the depletion of resources that enable self-control will increase a person's likelihood of acting immorally, given the impulse.

Once self-regulatory resources have been depleted, they can be replenished through rest or relaxation (Tyler & Burns, 2008). Failing to rest adequately, however, can prolong the depleted state. Barnes, Schaubroeck, Huth, and Ghumman (2011), for example, found that participants who reported fewer hours of sleep during a given night demonstrated lower self-control on a cognitive task the following day. In a separate sample, they reported that less sleep was positively related to unethical behavior in the workplace (see also Christian & Ellis, 2011; Wagner et al., 2012). Evidence that sleep is required to replenish self-regulatory resources suggests that normal waking activities deplete self-control. However, we suggest not only that the resource-depleting effects of everyday living have adverse implications for people who are sleep deprived, but also that, even after a quality night's rest, self-regulatory resources are depleted by the afternoon of the following day. From the moment people wake up in the morning, daily life requires the exertion of self-control. In deciding what to eat for breakfast, where to go and why, or even what to say and to whom, people regulate and control their desires and impulses. Furthermore, recent evidence shows that simply making choices in general can reduce the resources used for self-control (Vohs et al., 2008). Therefore, we made the simple—yet important—prediction that if self-regulatory resources are gradually depleted throughout the day, people are more likely to behave unethically in the afternoon than in the morning—what we refer to as the *morning morality effect*. If true, such a morning morality effect would have important implications for people and organizations and for how they order their morally relevant daily tasks.

Such a broad prediction is consistent with some of the earliest theorizing on depletion and self-regulatory failure, yet it has not been examined specifically. In their initial formulation of the self-control-depletion hypothesis, Baumeister, Heatherton, and Tice (1994) cited evidence that impulsive crimes, violent attacks, relapses in addictive behavior, and alcoholic intoxication most often

occur in the evening rather than earlier in the day. Baumeister and Heatherton (1996) later noted that if “people are generally fatigued late in the evening, then self-regulation should break down more at such times than at others” (p. 3). However, it is also plausible that it is simply more convenient in the evening than at other times of day for people to overeat, become intoxicated, or attack others under the cover of darkness, and so forth (Bandura, 1996). Thus, the question remains: Are ordinary people better able to resist opportunities to lie, cheat, steal, and engage in other unethical behavior in the morning than in the afternoon? We predicted that the answer would be *yes*, and we tested this prediction in the present research.

### **The Moderating Effect of Moral Disengagement**

It is likely that time of day affects different people in different ways. Moral behavior is often viewed as a product of a person and his or her situation (e.g., Higgins, Power, & Kohlberg, 1984). People's ethical behavior is likely to be influenced by their propensity for *moral disengagement* (Bandura, 1990, 2002), which is “an individual difference in the way that people cognitively process decisions and behavior with ethical import that allows those inclined to morally disengage to behave unethically without feeling distress” (Moore, Detert, Treviño, Baker, & Mayer, 2012, p. 2). In other words, some people are more inclined to modify their beliefs about morally questionable behavior to reduce any psychological discomfort associated with acting immorally—to avoid guilt or self-censure (see Bandura, 1999). For instance, Moore et al. (2012) found that employees with a greater propensity to morally disengage participated in more unethical behavior at work, as rated by supervisors and coworkers. Likewise, Detert, Trevino, and Sweitzer (2008) found moral disengagement to be positively related to unethical decision making.

We propose that people's propensity to morally disengage will interact with the time of day (i.e., morning vs. afternoon) to affect ethically relevant outcomes. In particular, although we expected that people with a low propensity to morally disengage would behave more ethically than people with a high propensity to morally disengage, we predicted that the former would be more strongly influenced by the morning morality effect. We reasoned that the time of day is less likely to affect those with a high propensity to morally disengage; because their moral self-regulatory processes are already more likely to be deactivated, they are less likely to draw on self-regulatory resources when making ethical decisions and thus are less likely to be affected by the depletion of those resources. We therefore predicted that individual

propensity to morally disengage would moderate the relationship between time of day and unethical behavior, such that the relationship would be stronger for people with a relatively lower propensity for moral disengagement than for people with a relatively higher propensity for moral disengagement.

## The Present Research

To test our predictions, we conducted four experiments that provided participants with opportunities to be honest or to cheat or lie. In Experiment 1, we investigated whether people were more likely to lie and cheat in the afternoon than in the morning. In Experiment 2, we replicated these findings and also examined impaired moral awareness as a mediating mechanism. Prior research has demonstrated that self-control depletion can lead to reduced moral awareness, which results in increased unethical behavior (Gino et al., 2011). We tested whether time of day can trigger this chain of effects. In Experiment 3, in addition to addressing an important shortcoming of the first two experiments (i.e., participant self-selection into morning and afternoon sessions) by randomly assigning participants to these sessions, we more specifically examined self-control depletion as an underlying mechanism driving our predictions. Finally, in Experiment 4, we investigated the moderating effect of moral disengagement on the morning morality effect.

## Experiment 1

### Method

Sixty-two undergraduates (47 men, 15 women; mean age = 24 years,  $SD = 3.4$ ) participated in Experiment 1 in exchange for course credit and the opportunity to earn up to \$5. Each participant signed up for either a morning session (between 8 a.m. and noon) or an afternoon session (between noon and 6 p.m.). Each participant was seated at a computer separated from the others by a partition. They were instructed to complete a visual-perception task (adapted from Gino, Norton, & Ariely, 2010), which we used to measure unethical behavior. On the computer screen, in each of 100 trials, participants were shown, for 1 s, the image of a square bisected into two triangles by a diagonal line. Each square contained 20 dots scattered unevenly on either side of the line. On every trial, participants pressed a button to indicate whether there were more dots on the left or right side of the square. They received 5¢ for each response that identified more dots on the right side and 0.5¢ for each response that identified more on the left. Because they were paid according to the number of responses rather than to the correctness of the responses, participants had

an opportunity to lie on some of the trials to increase their payment.

Of the 100 trials, 34 contained squares in which there were clearly more dots on the left side; if participants indicated that there were more dots on the right side in these trials, we interpreted this as clear cheating. In 16 trials, there were clearly more dots on the right; if participants indicated that there were more dots on the right side in these trials, we interpreted this as telling the truth. Fifty trials were ambiguous (i.e., it was unclear which side had more dots, given the 1-s appearance of each square); participants who indicated that there were more dots on the right side in these trials might be demonstrating a self-interest bias. After completing a demographic survey, participants were paid based on their clicks. During debriefing, no participants expressed any suspicion about or correctly identified the experiment's hypotheses.

## Results and discussion

In Experiment 1, we investigated whether the time of the session (morning vs. afternoon) had any effect on the number of times participants engaged in clear cheating. Indeed, participants in the afternoon sessions indicated more frequently that dots appeared on the right side ( $M = 24.25$ ,  $SD = 8.51$ ) than did those in the morning sessions ( $M = 20.13$ ,  $SD = 7.10$ ),  $t(60) = -2.06$ ,  $p = .044$ . These results supported our prediction that participants would behave more dishonestly<sup>1</sup> in the afternoon sessions than in the morning sessions.

## Experiment 2

Gino et al. (2011) theorized and empirically demonstrated that people “whose self-regulatory resources are depleted are more likely to act unethically because these individuals do not have the executive resources to identify moral issues in the situation they are facing” and therefore are unable “to test their behavior against an external moral standard” (p. 193). In Experiment 2, we directly examined whether the gradual self-regulatory depletion that people face during a normal day can reduce their moral awareness in the face of an opportunity to cheat and, in turn, increase dishonesty.

### Method

Sixty-five undergraduates (43 men, 22 women; mean age = 23 years,  $SD = 3.7$ ) participated in Experiment 2 in exchange for course credit and the opportunity to earn up to \$5. Each participant signed up for either a morning session or an afternoon session, which were defined as in Experiment 1. Each participant was seated at a

computer and instructed to follow the instructions on the screen. Three participants (2 men, 1 woman; 2 in the morning and 1 in the afternoon) were excluded from the study because of technical errors resulting in incomplete responses.

Participants first completed the visual-perception task used in Experiment 1 to measure their level of dishonesty. After the 100 trials—in which they had the opportunity to cheat—an implicit measure of moral awareness (adapted from Gino et al., 2011) was taken by presenting participants with word fragments and asking them to complete the fragments with the first words that came to mind. Of the four word fragments, two (C \_ R A L and E \_ \_ \_ C \_ \_) could be completed with words related to morality (i.e., *moral* and *ethical*) or unrelated to morality (i.e., *coral* and *effects*). On each trial, each participant was thus given a moral awareness score of 0, 1, or 2 on the basis of the number of morality-related words they created. At the end, participants completed a demographic questionnaire and then were paid. During debriefing, no participant expressed any suspicion about or correctly identified the experiment's hypotheses.

## Results and discussion

Consistent with the results from Experiment 1, results from Experiment 2 showed that participants in the afternoon sessions engaged in clear cheating on the visual-perception task more frequently ( $M = 19.90$ ,  $SD = 5.61$ ) than did those in the morning sessions ( $M = 15.65$ ,  $SD = 4.71$ ),  $t(60) = -3.05$ ,  $p = .003$ .<sup>2</sup> We next examined the effect of time of day on the implicit-moral-awareness measure. Consistent with our prediction, participants in the afternoon sessions completed the fragments with fewer morality-related words ( $M = 0.23$ ,  $SD = 0.48$ ) than did those in the morning sessions ( $M = 0.65$ ,  $SD = 0.57$ ),  $t(60) = 3.09$ ,  $p = .003$ , which suggests that normal daily activities deplete people's capacity for moral awareness. Furthermore, we expected moral awareness to mediate the relationship between time of day and unethical behavior. To test this hypothesis, we used the bootstrapping method advocated by Preacher and Hayes (2004). Ordinary-least-squares regression analysis resulted in a significant direct effect of time of day (morning = 0, afternoon = 1) on clear cheating,  $b = 4.25$ ,  $SE = 1.39$ ,  $p = .003$ . This effect was reduced when we controlled for moral awareness (i.e., the mediator),  $b = 3.18$ ,  $SE = 1.46$ ,  $p = .03$ , which, as predicted, had a significant unique effect in the negative direction on clear cheating,  $b = -2.53$ ,  $SE = 1.29$ ,  $p = .05$ . Employing the bootstrapping method (with 5,000 samples) produced a 95% bias-corrected confidence interval of [0.20, 2.37] for the indirect effect of time of day on cheating through moral awareness. The confidence

interval excluded zero, which suggests a significant indirect effect. These findings are consistent with our prediction that people, on average, have lower moral awareness in the afternoon than in the morning and are thus more likely to engage in unethical behavior during the afternoon when given a tempting opportunity.

## Experiment 3

An important limitation of the two previous experiments was that participants self-selected a morning or afternoon session. It is possible that unethical people, in general, are more likely to sign up for afternoon sessions than ethical people are; if true, this would provide an alternative explanation for our previous findings. We addressed this limitation in Experiment 3 by randomly assigning participants to morning and afternoon conditions. Moreover, Experiment 3 provided more direct evidence for the depletion of self-regulatory resources as a result of normal daily activities and linked unethical behaviors to a previously used measure of self-control. We also extended our investigation to a broader population: an online sample of adults across the United States.

## Method

One hundred forty participants from the United States completed the first part of Experiment 3 through Amazon's Mechanical Turk Web-based platform (for a full description of Mechanical Turk sampling, see Buhrmester, Kwang, & Gosling, 2011) in exchange for \$1.50, with an opportunity to earn an additional 50¢ on a subsequent task. We posted the link to the task at mid-morning on a weekday; within 1 hr, 140 participants had responded. We invited the respondents to participate in a two-part experiment. In Part 1, completed at the time of a participant's initial response, we asked whether participants were willing and able to participate in the two-part experiment, which would require them to complete Part 2 on the following day. Ten participants were unable to participate the next day and thus were not assigned to an experimental condition and not included in the sample. The remaining 130 participants were randomly assigned to either the morning condition (8–11 a.m.) or the afternoon condition (3–6 p.m.) for completion of Part 2 of the experiment. The times were based on the participants' local time. We then asked participants to indicate their state of residence, to complete a short demographic questionnaire, and to provide a valid e-mail address to which we could send a URL that would allow them to participate in Part 2. The following day, an e-mail was sent to each participant approximately 3 hr before his or her selected time window. In total, 103 participants

(63 men, 40 women; mean age = 31 years,  $SD = 10.5$ ) completed Part 2 of the experiment, in which we investigated the link between time of day and unethical behavior through self-control depletion.

The depletion of self-control is often measured by exploring people's choices between visceral, impulsive *want* options (e.g., eating junk food) and future-oriented *should* options (e.g., eating a healthy snack; see, e.g., Milkman, 2012; Vohs et al., 2008). Selecting a *want* option is interpreted to reflect the depletion of self-regulatory resources. Accordingly, in Part 2, we asked participants, "Which of the following magazines would you most like to spend time reading, right now?" Their options were *The New York Review of Books* (the *should* choice) or *People* magazine (the *want* choice; adapted from Milkman, 2012).

Next, we presented participants with a decision-making task in which they had an opportunity to lie to earn more money (for detailed examples of this methodology, see Cohen, Gunia, Kim-Jun, & Murnighan, 2009; Gneezy, 2005). Participants were told that they would receive a monetary payment on the basis of a message that the participant would soon send to a randomly assigned virtual partner, who would choose the payment amount. Participants were then given the option of sending either a truthful message or a blatantly deceptive message. If a participant sent the truthful message, he or she would earn 25¢; by contrast, if a participant lied and sent the deceptive message, he or she would earn twice that amount (50¢). Thus, there was a clear financial incentive to lie.

After deciding which message to send, participants answered a survey. They were asked to list the current local time as a manipulation check (the online survey software we used allowed us to record when each participant started and finished the survey). One participant (in the morning condition) completed the survey outside the assigned window of time and thus was excluded from analysis. This left us with 102 participants (51 in each condition). We also measured participants' current positive and negative affective states using the Positive and Negative Affect Schedule (Watson, Tellegen, & Clark, 1988); responses were made on a scale ranging from 1 (*not at all*) to 5 (*very much*). Finally, we asked participants to complete Shirom and Melamed's (2006) five-item cognitive-fatigue scale ( $\alpha = .96$ ), which reflects perceptions of the momentary availability of self-regulatory resources. Participants rated each item (e.g., "my thinking process is slow") on a scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). At the end of the survey, all participants were debriefed and paid 50¢ (the maximum amount possible in the task). No participant expressed any suspicion about the experiment or correctly identified the experiment's hypotheses.

## Results and discussion

As predicted, participants in the afternoon lied more (65%) than did those in the morning (43%),  $b = 0.88$ , odds ratio = 2.41, Wald  $z = 4.70$ ,  $p = .030$ . Moreover, people in the afternoon were more likely (59%) than those in the morning (41%) to select the *want* magazine option than the *should* option,  $p = .075$ , which reflects self-control depletion. Next, we used Mplus software version 6.12 (Muthén & Muthén, 2010) to conduct a mediation analysis with a dichotomous mediator to test whether magazine choice—as a measure of self-control depletion—mediated the effect of time of day on the likelihood of lying. This bootstrap analysis generated a 95% bias-corrected confidence interval of [0.017, 0.419] for the indirect effect, which excludes zero. We thus found support for our prediction that the effect of time of day on lying is mediated by self-control depletion, as reflected in choice of magazine.

The self-report measure of cognitive fatigue provided further evidence of the depletion of self-regulatory resources throughout the course of a normal day; participants reported higher cognitive fatigue in the afternoon ( $M = 3.20$ ,  $SD = 1.72$ ) than in the morning ( $M = 2.47$ ,  $SD = 1.28$ ),  $t(46) = -2.43$ ,  $p = .017$ . However, we found no significant between-conditions difference in positive affect (afternoon session:  $M = 2.52$  vs. morning session:  $M = 2.58$ ,  $p = .74$ ) or negative affect (afternoon session:  $M = 1.26$  vs. morning session:  $M = 1.16$ ,  $p = .11$ ), which suggests that the effect of time of day on unethical behavior is not driven by a change in affective states.

## Experiment 4

In Experiment 4, we used a different ethically relevant task to replicate the main effect of time of day on unethical behavior. Moreover, we also tested our prediction that moral disengagement moderates the morning morality effect (i.e., the effect is stronger for those with a lower propensity to morally disengage).

## Method

Seventy adults from the United States completed the first part of the experiment through Amazon's Mechanical Turk in exchange for \$1, with an opportunity to earn an additional \$1 on the basis of their performance on a short task. The link to the study was posted midmorning on a weekday; within 30 min, 70 participants had responded. The procedures were identical to those in Experiment 3, with two exceptions. First, in Part 1 of the experiment, the moral-disengagement scale (Moore et al., 2012) was used to assess a participant's propensity to morally disengage. Participants were instructed to respond to eight

items (e.g., “Considering the ways people grossly misrepresent themselves, it’s hardly a sin to inflate your own credentials a bit”;  $\alpha = .92$ ) on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Second, to minimize the unintended consequences of measuring moral disengagement on participant responses in Part 2, we introduced a longer temporal lag between the experiment’s two parts. After each participant was randomly assigned to either the morning or afternoon condition in Part 1, they were given several options from which to select a day during the upcoming week on which they could complete Part 2. Each participant received an e-mail approximately 3 hr before his or her selected time. In total, 50 participants (23 male, 27 female; mean age = 38 years,  $SD = 13.4$ ) completed Part 2. The moral-disengagement scores from Part 1 did not predict participation in Part 2.

In Part 2, we asked participants to complete an online matrix task (Wiltermuth, 2011) in which they earned 5¢ for each correctly solved matrix. Participants were presented with 20 matrices, each of which appeared on screen for 15 s. Each matrix contained 12 three-digit numbers (e.g., 4.27). Participants were asked to indicate whether they found a matching pair (i.e., two numbers that would add up to 10) in each matrix, which effectively provided them with the opportunity to cheat because they were not asked to specify the matching pair. Ten of the matrices were solvable (i.e., contained two numbers that summed to 10), and the remaining 10 were unsolvable (i.e., did not contain two numbers that summed to 10). That is, unbeknownst to participants, this task allowed us to gauge whether someone cheated.

Participants also completed a manipulation check in which we asked them to type in the current local time (as in Experiment 3, the actual time was recorded by the survey); at the end of the experiment, they were asked to report whether they were suspicious of any part of the experiment and to guess the purpose of the experiment. One participant (in the afternoon condition) suspected that not all of the puzzles were solvable and thus was excluded from the analysis. One additional participant (in the morning condition) correctly identified what was being studied—the link between time of day, cognitive functioning, and honesty—and was also excluded from analysis. All of the participants completed the task within their selected time windows. This left us with 48 participants (27 in the morning condition, 21 in the afternoon condition). All participants were paid on the basis of the number of matrices they reported as correctly solved.

## Results and discussion

Participants in the afternoon condition reported solving a higher number of unsolvable matrices ( $M = 4.48$ ,  $SD = 2.72$ ) than did those in the morning condition ( $M = 2.63$ ,

**Table 1.** Results of Moderated Regression Analyses Predicting Self-Reported Number of Unsolvable Matrices (Experiment 4)

Predictor	Step 1		Step 2	
	$\beta$	$t(47)$	$\beta$	$t(47)$
Condition	0.33	2.33*	0.94	2.95**
Moral disengagement	0.04	-1.35	0.49	1.53 <sup>†</sup>
Condition $\times$ Moral Disengagement	—	—	-0.90	-2.14*

Note: In Step 1, we created a model with condition (morning = 0, afternoon = 1) and moral disengagement as predictors. In Step 2, the interaction between these two variables was added to the model. For Step 1, the total  $R^2$  was .12 ( $p < .10$ ), and for Step 2, the total  $R^2$  was .19 ( $p < .05$ ).

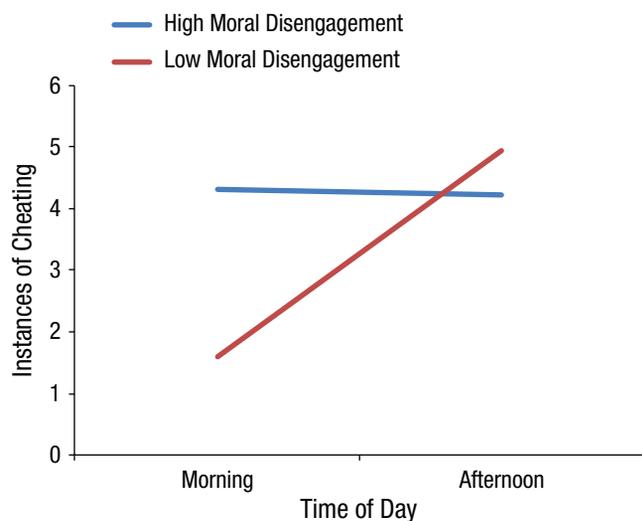
<sup>†</sup> $p < .10$ . \* $p < .05$ . \*\* $p < .01$ .

$SD = 2.71$ ),  $t(46) = -2.45$ ,  $p = .018$ . These results show that participants in both conditions cheated to some degree, but afternoon participants cheated more, thus supporting our prediction.<sup>3</sup>

To test for the moderation effect of moral disengagement, we conducted a hierarchical regression analysis (see Table 1). In Step 1, a model was tested in which condition (morning = 0, afternoon = 1) and moral disengagement were predictor variables and the reported number of unsolvable matrices was the dependent variable. In Step 2, an interaction term between condition and moral disengagement was added to the model. As expected, the interaction between condition and moral disengagement was a significant predictor of reported number of matrices ( $\beta = -0.90$ ,  $p = .05$ ). Figure 1 provides a graphic representation of a simple-slopes analysis showing the effect of condition on cheating at high and low levels of moral disengagement (i.e., 1 standard deviation above and below the mean, respectively). As can be seen, time of day seems to more strongly affect those with a low propensity to morally disengage than those with a high propensity.

## General Discussion

Relying on research and theory related to resource depletion and self-regulatory processes, we found evidence across four experiments that, provided with the opportunity, people are more likely to engage in unethical acts in the afternoon than in the morning. We further demonstrated that people who have a lower propensity to morally disengage—and who are thus generally expected to behave more ethically—were more strongly influenced by this morning morality effect. This finding supports our somewhat counterintuitive prediction that people more likely to morally disengage will be less affected by the depletion of self-regulatory resources because they are more prone to deactivate their moral self-regulatory



**Fig. 1.** Results from Experiment 4: mean instances of cheating as a function of the time of day and level of moral disengagement. High and low moral disengagement correspond to 1 standard deviation above and below the mean, respectively.

processes in the first place than those who are less likely to morally disengage. Furthermore, we measured implicit moral awareness and showed that, indeed, a lower degree of moral awareness mediated the effect of time of day on greater cheating. In addition, higher unethical behavior in the afternoon was directly linked to lower levels of self-control.

This research provides further support for the growing body of work on bounded ethicality (Banaji, Bazerman, & Chugh, 2003), which suggests that unethical behavior is due in part to the psychological processes and cognitive biases that lead people to engage in certain behaviors without consciously recognizing the ethical implications. We predicted, and found, that people are vulnerable to the gradual depletion of self-regulatory resources as a result of unremarkable daily activities. This depletion can, in turn, lead them to act in ethically questionable ways. Unfortunately, it might be that the most honest people, such as those less likely to morally disengage, are most susceptible to the negative consequences associated with the morning morality effect. In other words, our findings suggest that mere time of day can lead to a systematic failure of good people to act morally.

Our message is simple yet important. The morning morality effect has notable implications for individuals and organizations, and it suggests that morally relevant tasks should be deliberately ordered throughout the day. Perhaps organizations, for instance, need to be more vigilant about combatting the unethical behavior of customers (or employees) in the afternoon than in the morning. As future research continues to examine the nuances of the morning morality effect—and other subtle factors that

influence everyday morality—psychological scientists will be better equipped to develop practical strategies for helping “good” people avoid doing “bad” things.

### Author Contributions

M. Kouchaki and I. H. Smith developed the study concept, designed the study, collected and analyzed the data, and drafted the manuscript. Both authors approved the final version of the manuscript for submission.

### Declaration of Conflicting Interests

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

### Notes

1. We conducted additional analyses in which the number of times that participants identified squares in ambiguous trials as having more dots on the right than on the left and all trials together were dependent variables. Results showed that participants similarly chose *on the right side* significantly more often in the afternoon than in the morning. However, we found no significant difference for trials that clearly showed more dots on the right.
2. Again, we conducted additional analyses in which the number of times that participants identified squares in ambiguous trials as having more dots on the right than on the left and all trials together were dependent variables. Results showed that participants similarly chose *on the right side* significantly more often in the afternoon than in the morning. However, we found no significant difference for trials that clearly showed more dots on the right.
3. Participants in the afternoon also reported solving significantly more matrices overall than did those in the morning.

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