

In Line and Out of the Box: How Ethical Leaders Help Offset the Negative Effect of Morality on Creativity

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Utilizing role theory, we investigate the potential negative relationship between employees' moral ownership and their creativity, and the mitigating effect of ethical leadership in this relationship. We argue that employees higher on moral ownership are likely to take more moral role responsibility to ensure the ethical nature of their own actions and their environment, inadvertently resulting in them being less able to think outside of the box and to be creative at work. However, we propose that ethical leaders can relieve these employees from such moral agent role, allowing them to be creative while staying moral. We adopt a multimethod approach and test our predictions in 2 field studies (1 dyadic-based from the United States and 1 team-based from China) and 2 experimental studies (1 scenario-based and 1 team-based laboratory study). The results across these studies showed: (a) employee moral ownership is negatively related to employee creativity, and (b) ethical leadership moderates this relationship such that the negative association is mitigated when ethical leadership is high rather than low. Moreover, the team-based laboratory study demonstrated that moral responsibility relief mediated the buffering effect of ethical leadership. We discuss implications for role theory, ethicality, creativity, and leadership at work.

Keywords: morality, creativity, ethical leadership, role theory, multimethod approach

Employee creativity, defined as the development of novel and useful ideas (Amabile, 1983, 1996; George, 2007), is generally considered as the driving force behind an organization's longevity and success (Sternberg & Lubart, 1999; Zhou & George, 2001). Organizations care deeply about employee creativity because it enables organizations to develop novel services and products, to find creative solutions to problems in any job processes, and to maintain a competitive advantage in challenging environments (Florida & Goodnight, 2005; Zhou & Shalley, 2003). Scholars have thus explored the antecedents of employee creativity (for reviews, see Anderson,

Potočník, & Zhou, 2014; Shalley, Zhou, & Oldham, 2004; Zhou & Hoever, 2014; Zhou & Shalley, 2003), especially the prominent role of personal dispositions (George & Zhou, 2001; Zhou & Hoever, 2014). Interestingly and somewhat disconcerting, recent studies have provided initial evidence that dishonesty may lead to greater creativity because of a feeling of being unconstrained by rules (Baucus, Norton, Baucus, & Human, 2008; Gino & Wilermuth, 2014). Studies have also found that creative individuals may behave unethically under some conditions (e.g., Gino & Ariely, 2012; Keem, Shalley, Kim, & Jeong, 2018; Zheng, Qin, Liu, & Liao, 2019). This may be because of

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the fact that creative individuals tend to feel less constrained by established rules (Baucus et al., 2008; Guilford, 1968) and are more capable of coming up with justifications for their unethical behaviors (Keem et al., 2018; Zheng et al., 2019). These studies suggest that while not all creative endeavors have a common basis in immorality, there may be some connection between (im)morality and creativity that warrants further investigation.

Thus, organizations face a possible conundrum—on the one hand, organizations need employees to think *out of the box* and demonstrate high creativity; on the other hand, organizations need employees to stay *in line* and embody high morality. Especially given recent ethical crises and the increasing corporate malfeasance, maintaining morality is particularly important as it helps avoid regulatory peril and prevent from trillions of dollars losses (Schwepker, 2001; Treviño, den Nieuwenboer, & Kish-Gephart, 2014). In this regard, only valuing creativity but ignoring morality is a huge pitfall for organizations (Florida & Goodnight, 2005; Treviño, Weaver, & Reynolds, 2006). Beyond enhancing creativity, it is also important for organizations to ensure their employees act with high morality. Together, there are important research questions to address: are employees higher on morality potentially less creative? If the answer is yes, how do organizations offset such negative effect so that the trade-off between creativity and morality is minimized?

To address these questions, our research adopts and extends role theory (Biddle, 1979; Katz & Kahn, 1978) as the overarching theoretical lens to offer an account of why morality may constrain creativity and how to mitigate this effect. In brief, role theory suggests that individuals take on certain role responsibilities in a given system, which subsequently govern their choices of behaviors competing for their attention and energy, especially when the behaviors are inherently incompatible. Based on role theory, we focus on a specific aspect of morality that is relatively most germane to the role responsibility of monitoring and maintaining an ethical work environment—*moral ownership*, defined as “[individuals’] sense of psychological responsibility over the ethical nature of their own actions, those of others around them, their organization, or another collective” (Hannah, Avolio, & May, 2011, p. 293). This construct originated in theory on psychological ownership (Pierce, Kostova, & Dirks, 2003) that argues that individuals will internalize a specific target (e.g., a domain of expertise, idea, ethics, etc.) to be part of the “self” and consider that target as one’s role in life (Dittmar, 1992). Accordingly, employees higher on moral ownership have higher levels of moral motivation and moral action, and view the target of “morality” as part of their selves. They also see acting as moral agents to protect their teams and organizations from ethical rule violations, as an important role of their job, and they feel responsible to monitor morality in the environment (Hannah & Avolio, 2010; Hannah et al., 2011; Treviño et al., 2014). Drawing upon role theory, we propose that employee moral ownership is negatively related to employee creativity. Role theory posits that individuals would find it difficult to perform extra roles particularly with expectations that are incompatible with the conformed role imposed by their personal characteristics (Biddle, 1979, 1986; Katz & Kahn, 1978). The moral agent role imposed by moral ownership seems incongruent with the creativity role given that morality emphasizes compliance and maintaining rules while creativity stresses “breaking the rule.” As a result, the moral agent role would compete with the creativity

role in terms of attention and energy; thus, leading to a negative link between the two.

We further propose that a way to mitigate such negative relationship may lie in the *ethical leadership* of the work unit’s supervisor. Ethical leadership is defined as “the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision making” (Brown, Treviño, & Harrison, 2005, p. 120). Role theory argues that in addition to conformity to one’s role, having one to share the role responsibility is a possible strategy to resolve conflicting role expectations (Biddle, 1979, 1986; Katz & Kahn, 1978). In the workplace, the leader is a critical actor who can (and in many cases should) assume responsibility (Biddle, 1979). This is true particularly with regards to (un)ethical issues, as the leadership literature suggests ethical leadership to be a central source of ethical guidance and regulation (Brown & Treviño, 2006; Treviño, Brown, & Hartman, 2003).

Furthermore, in line with the key tenets of role theory, we develop a new concept called *moral responsibility relief*, defined as a sense of relief feelings because of reduced moral role responsibility, to explicitly capture the underlying process and explain why ethical leadership mitigates the negative impact of moral ownership on creativity. Ethical leadership sets and enforces clear ethical rules and takes the moral responsibility to manage (un)ethical behaviors in the workplace. Such leaders serve to take over the moral agent role responsibility and relieve employees higher on moral ownership from the burden of monitoring and maintaining moral standards and regulating the ethicality of their environment. Thus, employees higher on moral ownership who have ethical leaders will experience moral responsibility relief and will not suffer from a decline in creativity associated with high morality.

This research aims to make several theoretical contributions. First, our research extends prior work on morality and creativity by probing the effect of moral ownership on creativity. Extant research has largely examined morality and creativity separately. Although a few studies have started to unveil the common base of unethical behavior and creativity (e.g., Gino & Ariely, 2012; Gino & Wiltermuth, 2014; Keem et al., 2018; Zheng et al., 2019), we know little about whether high level of morality *as a disposition* leads to lower creativity. We not only directly test the effect of moral ownership on creativity, but also identify a mitigator (i.e., ethical leadership). In other words, we not only identify a potential problem, but also provide a solution to the problem and an explanation for why the solution works.

Second, this investigation serves to extend and substantiate role theory by formally examining how perceived roles of moral responsibility can shift from employees to leaders. Katz and Kahn’s (1978) theorization describes organizations as systems of interdependent behaviors, whereby the behavior of one individual has an impact on the effectiveness of such individual, their group and the organization (Griffin, Neal, & Parker, 2007). We build upon and extend this argument by suggesting that roles taken by employees (and their leader) can shift, and that such shift (i.e., a leader taking the role of monitoring morality thereby relieving employees higher on moral ownership from such role requirement) can create benefits for the whole organization.

Third, our research contributes to the literature on ethical leadership by exploring another potential benefit for such leadership,

namely, helping employees who take on responsibility for ethical issues to be creative. Studies have found a direct effect of ethical leadership in improving employee positive attitudes such as affective commitment and job satisfaction (Brown et al., 2005; Neubert, Carlson, Kacmar, Roberts, & Chonko, 2009), increasing employee positive behaviors such as citizenship behavior and job performance (Avey, Wernsing, & Palanski, 2012; Chen & Hou, 2016), and reducing deviant and unethical behaviors (Mayer, Aquino, Greenbaum, & Kuenzi, 2012; Mayer, Kuenzi, Greenbaum, Bardes, & Salvador, 2009). Our research indicates that ethical leadership may act as an important boundary condition to counteract the potential downside of moral ownership on creativity and may serve as a possible solution to resolve the possible morality—creativity conundrum.

Theory and Hypotheses Development

Moral Ownership Through a Role Theory Lens

Moral ownership refers to employees' sense of responsibility over the ethical nature of their own behaviors and of the external environment (Hannah & Avolio, 2010; Hannah et al., 2011). This construct is derived from theory of moral agency that assumes that individuals have the capacity to exercise control over the ethical nature of the context (Bandura, 1991, 1999), and relates to the notion of psychological ownership. In the literature of psychological ownership, the targets can be both tangible (e.g., product) and intangible (e.g., ethics; Pierce et al., 2003; Rousseau, 1998). The targets of ownership are associated with one's self-identity and are viewed as an extension of the self (Dittmar, 1992). In this vein, individuals higher on ownership will internalize the specific target to be part of their "selves" and regard it as an important role in their lives.

Accordingly, employees higher on moral ownership will incorporate morality into the sense of self and act as moral agents in organizations (Hannah & Avolio, 2010; Hannah et al., 2011). Such employees would feel a sense of high responsibility to regulate the ethicality of their own behaviors and the environment. Although empirical research on moral ownership is scant, scholars have argued that moral ownership is effective in facilitating employees' ethical behaviors and reducing employees' unethical behaviors. For example, Hannah et al. (2011) proposed that higher levels of moral ownership would be associated with higher levels of moral motivation and moral action. Treviño et al. (2014) also stated that "The ascription of responsibility to the self has long been considered important to ethical decision making" (p. 646) and concluded with the relationship between moral ownership and (un)ethical behavior.

Building upon and adding to this literature, we use role theory (Biddle, 1979; Katz & Kahn, 1978) to elucidate the moral ownership—creativity link. According to role theory, a role is defined as "those behaviors characteristic of one or more persons in a context" (Biddle, 1979, p. 58) or "the behavior expected from an individual occupying a specific position (Biddle, 1979) such that the cognition and expected behavior associated with the position are fundamentally important to success in the role (Katz and Kahn, 1978)" (Aritzeta, Swales, & Senior, 2007, p. 97). Roles are building blocks to explain and understand how employees behave, interact, and coordinate their behaviors in the organization system

(Katz & Kahn, 1978; Welbourne, Johnson, & Erez, 1998). The core of role theory is that individuals subjectively internalize and take on certain role responsibilities in a given system, which will subsequently govern their behaviors as they choose from a variety of possible acts competing for their attention and energy (Biddle, 1979; Katz & Kahn, 1978). Employees pay less or even no attention to work behaviors that are not part of their role conceptualization. In particular, if individuals are occupied with two incompatible role expectations, they are likely to conform to only one role to resolve such incompatibility (Biddle, 1979, 1986; Katz & Kahn, 1978).

Based on the conceptualization of moral ownership, we argue that employees higher on moral ownership incorporate the responsibility (a) to act morally themselves, and (b) to enforce morality in their group, as part of their role responsibilities at work. Employees higher on moral ownership bring many positive consequences for the organization (Hannah & Avolio, 2010; Hannah et al., 2011; Treviño et al., 2014), but as we argue next, these employees may also show reduced levels of creativity at work.

Moral Ownership and Creativity

We argue that an employee higher on moral ownership is more likely to assume a moral agent role, which may then lead them to show lower creativity. Role theory suggests that individuals tend to only conform to one role and feel difficult to perform another role, especially when role expectations are incongruent (Biddle, 1979, 1986; Katz & Kahn, 1978). We argue that the moral agent role would compete with the creativity role in terms of the time and energy in the workplace, as both the moral and the creative roles are discretionary. We also argue that the two roles may be perceived as potentially incongruent, making it harder for employees to enact both.

First, as role theory suggests, bounded by limited time and energy, employees are only able to take on and attend to limited roles at a given point of time. Being higher on moral ownership means employees view it as their core role to ensure the moral aspects of the environment, which brings about the responsibility of not only maintaining one's own morality but also monitoring whether others are ethical. This makes it less likely for employees with higher moral ownership to spend much time or energy on other discretionary roles including creativity (Balkin, Roussel, & Werner, 2015; Ng & Yam, 2019). Because employees will use their discretion to decide which roles they are more likely to take on (Hannah et al., 2011; Treviño et al., 2006), employees with higher moral ownership are more likely to engage in acts that promote moral ownership (that is more essential and core to their sense of self) instead of acts that promote creativity. They will still probably perform well on in-role performance, which is essential to their survival in their organization, but are unlikely to take on another role (showing creativity) that is less central to their sense of self.¹

¹ There might be organizations where the core task is about creativity (e.g., IDEO), in which case creativity is not considered as an extra-role behavior. However, in many if not most organizations (and in line with our empirical contexts in the field), creativity is considered as an important discretionary behavior that is not formally required in job descriptions (Balkin et al., 2015).

Second, the role expectations imposed by moral ownership and creativity might appear to be different or incongruent with each other. Specifically, employees with higher moral ownership are vigilant about rule violations because they incorporate morality into the sense of self and, therefore, they act as “the moral agent” in the organization (Hannah & Avolio, 2010; Hannah et al., 2011). Such employees are occupied with moral role responsibilities that guide them to ensure their own and others’ behaviors obey certain rules in the environment. In contrast, creativity as a role behavior emphasizes more “rule breaking” by thinking out of the box to generate novel ideas (Amabile, 1983, 1996). This incongruence makes it even more difficult for employees higher on moral ownership to take on the extra role of showing creativity. Therefore, we propose:

Hypothesis 1: Employee moral ownership is negatively related to employee creativity.

The Moderating Role of Ethical Leadership

Does it then mean that employees higher on moral ownership are always less creative? Not necessarily. Based on role theory, a solution may lie in behaviors enacted by the leaders of these employees. Specifically, role theory posits that one possible strategy to resolve competing role expectations is to have someone else share the responsibility (Biddle, 1979, 1986; Katz & Kahn, 1978). In the work context, role theory posits that leaders (compared with other group members) are “more able to take the roles of others” (Biddle, 1979, p. 189), and leaders can share the responsibility to regulate the work environment. Along the same line of reasoning, in the leadership literature, a leader is considered a central source of ethical guidance (Brown & Treviño, 2006; Brown et al., 2005; Treviño et al., 2003). Based on the premise of role theory and the features of ethical leadership, we argue that ethical leadership can mitigate the negative effect of employee moral ownership on employee creativity. Our core argument is that ethical leaders effectively help employees relieve some of the burden of the moral agent role responsibility, thereby mitigating the negative effect of moral ownership on creativity.

Consistent with our arguments above, we argue that ethical leaders serve to maintain the ethical nature of the environment by rewarding ethical conducts and punishing ethical violations at work (Brown & Treviño, 2006; Brown et al., 2005; Treviño et al., 2003); thus, relieving employees with higher moral ownership of the responsibility to monitor (un)ethical behaviors and enabling them to have more time and energy for creativity. Literature on ethical leadership suggests that “ethical leaders *do not tolerate ethical lapses*. They make sure that unethical conduct is followed by *discipline*.” (Treviño et al., 2003, p. 18). The reinforcement of rewards and punishments promotes employees to learn appropriate norms of acceptable behaviors at work, through either personal experiences or vicarious learning (Bandura, 1977, 1986). Indeed, ethical leadership has been shown to be effective in managing and reducing unethical behaviors at work (Mayer et al., 2009; Ng & Feldman, 2015). Therefore, ethical leadership is taking care of promoting and sustaining the ethical context in the workplace, a role viewed important by employees of high moral ownership. As a result, employees higher on moral ownership are somewhat relieved from this moral agent role and, thus, have more time and

energy in their possession for other desirable discretionary roles such as being creative.

We also argue that ethical leadership makes it clearer what ethical rule violation entails; thus, resolving some of the perceived incongruence between the moral role and the creative role. Thus, it sets clear ethical boundaries and helps employees with high moral ownership understand that as long as people do not cross the line they are free to engage in creativity—inducing flexible and divergent thinking without compromising ethicality. Thus, we propose:

Hypothesis 2: Ethical leadership moderates the negative relationship between employee moral ownership and employee creativity, such that the negative relationship is mitigated when ethical leadership is high rather than low.

The Mediating Role of Moral Responsibility Relief

We assert that the mechanism underlying the mitigating effect of ethical leadership on the negative relationship between employee moral ownership and employee creativity can be explicitly captured by *moral responsibility relief*, referring to a sense of relief feelings because of reduced burden of moral role responsibility. A relief feeling occurs when a goal is successfully achieved and a burden or a threat is avoided or removed (Carver, 2009). A feeling of relief also signals that resources are restored and replenished after a specific goal is achieved (Fredrickson, Mancuso, Branigan, & Tugade, 2000), and it further indicates that individuals can consider other available goals to pursue (Fredrickson, 1998; Isen, 1987). Integrated with role theory, when one’s role responsibility is fulfilled and the burden is reduced, individuals tend to experience the feeling of role responsibility relief. Subsequently, such relief can replenish individuals’ resources and facilitate them to consider other role responsibilities such as creativity.

When ethical leaders actively take the moral role responsibilities by setting clear ethical boundaries for both moral employees and other team members and by managing the (un)ethical behaviors in the workplace, employees higher on moral ownership will feel relieved from the moral agent role. This is because of the goal of regulating the ethicality of their environment is achieved and the burden of moral role responsibility is reduced by having an ethical leader. Having experienced this relief, employees higher on moral ownership will have more time and energy to engage in another role such as being creative (Baas, De Dreu, & Nijstad, 2011; Gino & Willemuth, 2014). Taken together, employee moral responsibility relief can explain why ethical leadership can buffer the negative impact of employee moral ownership and employee creativity.

Hypothesis 3: Employee moral responsibility relief mediates the interactive effect of employee moral ownership and ethical leadership on employee creativity.

Overview of Studies

We designed two field studies and two experimental studies to jointly offer a rigorous test of our hypotheses.² In Study 1, we

² Data, syntax, and materials used in all studies are available at https://osf.io/v3qf2/?view_only=8a073a1c88304ca3a110f88356c035ea. We disclosed the outputs rather than the data used in Study 2 because of the confidentiality agreement with the company.

collected cross-sectional dyadic data from paired managers and employees in the United States; in Study 2, we used a two-wave survey design of team-based data from China; in Studies 3 and 4, we used a scenario-based experiment and a high-engagement lab experiment, respectively, to increase the internal validity of our conclusions. In the high-engagement lab experiment, we looked at both low ethical as well as unethical leadership and compared them to high ethical leadership to get better clarity of the mitigating effect of ethical leadership. We also gauged the mediating role of moral responsibility relief and ruled out the potential influences of alternative predictors and mediators.

Study 1

Method

Participants and procedure. We recruited working adults as participants through ROI-Rocket (previously ClearVoice), a U.S.-based commercial panel service provider that has been used in prior research (e.g., Carton, Murphy, & Clark, 2014; Derfler-Rozin, Baker, & Gino, 2018).³ We paid ROI-Rocket a total of 4,500 U.S. dollars for the service. We were able to obtain supervisor-subordinate dyadic data from a diverse population of U.S. employees in various industries. We deemed such sample as appropriate since the definition of creativity includes any creative solutions to business strategies or problems in any job types (Zhou & George, 2001; Zhou & Shalley, 2003). To minimize potential selection bias in the recruitment process, we first randomly selected participants as subordinates, and then asked these participants to nominate their supervisors. ROI-Rocket then proceeded to forward the supervisor survey link to the respective supervisor's e-mail address as a way to complete a matched dyad pair.

We designed two separate online surveys for the subordinate and the supervisor. In the subordinate survey, we asked subordinates to assess their own moral ownership, evaluate their direct supervisors' ethical leadership, and report their own demographic information including gender, age, education, and tenure with their supervisors. In the supervisor survey, we asked the corresponding direct supervisor to rate the specific subordinate's creativity. In line with existing methodological practices, we also included attention check questions in the survey and rejected responses that failed the attention checks (Chen, Chen, & Sheldon, 2016).

Our final sample was 152 matched supervisor-subordinate dyads. Fifty-three percent were male, 68% got undergraduate or higher degrees, the average age was 43.50 years old ($SD = 12.38$), and the average tenure with leader was 6.30 years ($SD = 5.74$).

Measures. Unless otherwise noted, all measures used 7-point Likert rating scales (1 = *strongly disagree*, 7 = *strongly agree*).

Employee moral ownership. We measured moral ownership with a three-item scale developed by Hannah and Avolio (2010) only in the subordinate survey.⁴ A sample item is "I will assume responsibility to take action when I see an unethical act" (Cronbach's $\alpha = .82$).

Ethical leadership. We adopted the 10-item scale developed by Brown et al. (2005) to rate direct supervisors' ethical leadership. Sample items included "The supervisor defines success not just by results but also the way that they are obtained," "The supervisor disciplines employees who violate ethical standards,"

and "The supervisor sets an example of how to do things the right way in terms of ethics" ($\alpha = .95$).

Employee creativity. We used the 13-item scale developed by Zhou and George (2001) to evaluate employees' creativity. Sample items included "This employee suggests new ways to achieve goals or objectives" and "This employee comes up with new and practical ideas to improve performance" (1 = *not at all characteristic*, 7 = *very characteristic*; $\alpha = .96$).

Control variables. We controlled for subordinates' gender, age, education, and tenure with their supervisor, because these variables might affect employee creativity (George & Zhou, 2001; Shalley et al., 2004). The results remained unchanged without inclusion of the controls.

Results

Table 1 displays descriptive statistics for Study 1 variables, including means, standard deviations, correlations, and reliabilities.

Hypotheses testing. In Study 1, we used ordinary least squares (OLS) regressions to test Hypotheses 1 and 2.

Test of main effect. Hypothesis 1 posits that employee moral ownership is negatively related to employee creativity. Table 2 indicated that employee moral ownership was negatively related to employee creativity ($B = -.15$, $p = .037$; Model 2). Thus, Hypothesis 1 was supported.

Tests of moderation effect. Hypothesis 2 predicts that ethical leadership moderates the moral ownership—creativity relationship, such that the negative relationship between employee moral ownership and employee creativity is mitigated when ethical leadership is high rather than low. Table 2 shows that the interaction term of employee moral ownership and ethical leadership was significant ($B = .14$, $p = .002$; Model 3). Simple slope tests (depicted in Figure 1) showed that when ethical leadership was low (1 SD below the mean), employee moral ownership was significantly and negatively related to employee creativity ($B = -.46$, $p < .001$). In contrast, when ethical leadership was high (1 SD above the mean), the relationship between employee moral ownership and employee creativity became nonsignificant ($B = -.15$, $p = .112$). Therefore, Hypothesis 2 was supported.

Discussion

Study 1 provided initial evidence to support Hypotheses 1 and 2. However, it was limited by having merely dyadic rather than team-based data. It was also conducted using employees from different industries and contexts, which may increase generalizability but may introduce noise. Therefore, in Study 2, we collected multiwave team-based data in China in a specific organizational context. We also assessed in-role performance (rated by

³ This field study, titled "Moral Conscientiousness and Creativity" [740192-1], was approved by the University of Maryland Institutional Review Board.

⁴ We have got the permission to use this scale from Mind Garden (<http://www.mindgarden.com>). We also conducted a separate survey study to validate this scale. The detailed results are available at https://osf.io/v3qf2/?view_only=8a073a1c88304ca3a110f88356c035ea. This validation study, titled "Creativity ethical leadership" [1403163-2], was approved by the University of Maryland Institutional Review Board.

Table 1

Means, Standard Deviations, Correlations, and Reliabilities Among Studied Variables, Study 1

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1. Employee gender	1.47	0.50	—						
2. Employee age	43.50	12.38	.15	—					
3. Employee education	2.84	1.15	-.16	-.25**	—				
4. Employee tenure with supervisor	6.30	5.74	.02	.42***	-.10	—			
5. Employee moral ownership	5.18	1.21	-.05	.05	.31***	-.04	(.82)		
6. Ethical leadership	5.38	1.09	.02	-.04	.09	-.03	.45***	(.95)	
7. Employee creativity	5.54	1.01	-.09	-.04	.05	-.07	-.14 [†]	.26**	(.96)

Note. *N* = 152. Data on variables 1–6 were reported by subordinates; variable 7 was rated by supervisors. Gender: male = 1, female = 2. Education: high school graduate = 1, diploma/associate degree = 2, bachelor = 3, master = 4, doctoral = 5. Cronbach's α values for the variables are shown in bold and italics along the diagonal in the brackets.

[†] $p < .10$. ** $p < .01$. *** $p < .001$.

supervisors) in Study 2 to examine whether the detected effect is a general performance effect or, as our theory implies, is unique to a more discretionary behavior such as creativity.

Study 2

Method

Participants and procedure. We collected data from 63 branches (equivalent to “team”) of a commercial bank in northern China. We deemed this setting appropriate because by definition creativity contains creative solutions to business problems in any job processes (Shalley et al., 2004; Zhou & Shalley, 2003), and in practice bankers often need to solve customers' problems or deal with issues about work procedures (Liu, Chen, & Yao, 2011), and doing it in a creative manner can create huge benefits for maintaining bank-customers relationship and enhancing the viability of the banks. Moreover, we intentionally chose a context where creativity is more of a discretionary as opposed to in-role performance, in line with our theorization. We invited 63 branch leaders (i.e., supervisors) and 574 frontline employees (i.e., subordinates)

to participate in our research. To improve data quality, we administered hard-copy surveys to interested participants on-site in a prearranged conference room located at the bank's headquarters. We assured participants that their responses would be kept confidential and only be used for research purposes.

To reduce common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), we gathered data at two time points, one month apart. At Time 1, we invited 574 subordinates to rate their own moral ownership and their direct supervisors' ethical leadership. Of all participants, 505 subordinates completed the questionnaire, representing a response rate of 88%. One month later, at Time 2, we invited 63 supervisors to evaluate their subordinates' creativity and in-role performance. A total of 464 evaluations were obtained from 53 supervisors, a response rate of 92% at the subordinate level and 84% at the supervisor level. All participants' demographic information was provided by the human resources department of the bank.

After matching the two-wave data using a unique identification code, we had responses from 464 subordinates and 53 supervisors. On average, a team had 8.75 employees. Employees' average age

Table 2

Results of Main and Moderation Effects, Study 1

Variables	Employee creativity		
	M1	M2	M3
Intercept	5.72*** (0.48)	6.27*** (0.54)	5.17*** (0.44)
Controls			
Employee gender	−0.17 (0.17)	−0.18 (0.17)	−0.11 (0.15)
Employee age	0.00 (0.01)	0.00 (0.01)	0.01 (0.01)
Employee education	0.03 (0.08)	0.09 (0.08)	0.12 (0.07)
Employee tenure with supervisor	−0.01 (0.02)	−0.01 (0.02)	−0.02 (0.01)
Independent variable			
Employee moral ownership		−0.15* (0.07)	−0.30*** (0.07)
Moderator			
Ethical leadership			0.45*** (0.08)
Interaction			
Employee moral ownership × Ethical leadership			0.14** (0.05)
<i>R</i> ²	0.01	0.04	0.24
ΔR^2	—	0.03	0.20

Note. *N* = 152. Unstandardized regression coefficients are reported. Standard errors are reported in parentheses.

* $p < .05$. ** $p < .01$. *** $p < .001$.

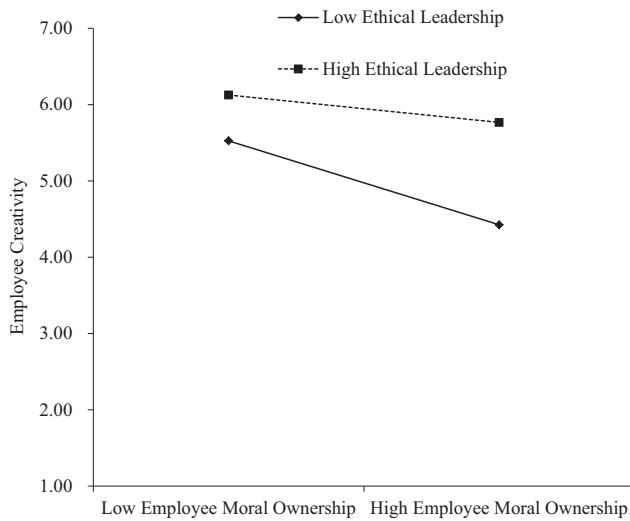


Figure 1. The interactive effect of employee moral ownership and ethical leadership on employee creativity, Study 1.

was 28.93 years old ($SD = 3.91$), the average tenure was 6.58 years ($SD = 4.46$), 74% were female, and 89% held undergraduate or higher degrees.

Measures. We used the same scales to measure employee moral ownership ($\alpha = .72$; scale ranging from 1 = *strongly disagree* to 7 = *strongly agree*), ethical leadership ($\alpha = .96$; scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*), employee creativity ($\alpha = .98$; scale ranging from 1 = *not at all characteristic* to 5 = *very characteristic*). We followed Brislin's (1986) translation and back-translation procedures to translate all English items into Chinese.

In-role performance. To test a potential rating effect (see supplementary analyses) and examine whether the effect detected is unique to creativity ratings, we also invited supervisors to evaluate subordinates' in-role performance. We adopted a five-item scale, which was originally developed by Podsakoff and MacKenzie (1989) and was then used by Janssen (2001). Sample items included "This employee always completes the duties specified in his/her job description," and "This employee fulfills all responsibilities required by his/her job" ($\alpha = .93$; scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*).

Control variables. Similar to Study 1, we controlled for subordinates' gender, age, education, and tenure with supervisor. The results hold without the inclusion of these controls.

Analytic strategies. In this study, our employees were nested in different teams. Before hypotheses testing, we first checked whether it was appropriate to use hierarchical linear modeling (HLM; Bryk & Raudenbush, 1992) to test our Hypotheses 1 and 2. Results from a null model with creativity as the dependent variable and no predictors showed significant between-team variance in creativity ($\chi^2_{(52)} = 1081.99, p < .001$; ICC1 = .68, representing 68% of variance resides between teams). Therefore, HLM was appropriate to use in this study.

We further examined whether it was feasible to aggregate subordinates' responses of ethical leadership to the team level, indicating the extent to which employees of the same team had a shared perception of their direct supervisor's leadership style

(Schaubroeck et al., 2012). We examined James, Demaree, and Wolf's (1984) $r_{wg(j)}$ and the indices of intraclass correlation coefficients (ICC; Bliese, 2000) to justify data aggregation. The mean and median values of $r_{wg(j)}$ for ethical leadership were .9566 and .9630, respectively, and the values for ICC1 and ICC2 were .09 and .47, respectively. These values are comparable with those reported in prior studies of ethical leadership (e.g., Schaubroeck et al., 2012), indicating that aggregating employees' evaluations of ethical leadership to the team level was appropriate (Bliese, 2000).

When testing Hypothesis 1, the main effect of employee moral ownership on employee creativity, we followed procedures recommended by Hofmann and Gavin (1998) and applied grand mean centering technique. When testing Hypothesis 2, the cross-level interactive effects of employee moral ownership (Level 1) and ethical leadership (Level 2) on employee creativity, we followed procedures suggested by Hofmann and Gavin (1998) and used group-mean centering to separate the cross-level effect from between-team interaction. We also reintroduced the group mean of employee moral ownership into the Level-2 intercept model and controlled for the effect of ethical leadership and the interaction term between group mean of employee moral ownership and ethical leadership at Level 2 (Hofmann & Gavin, 1998; Liao & Chuang, 2007).

Results

Table 3 presents descriptive statistics for the variables in Study 2. **Hypotheses testing.**

Test of main effect. As shown in Table 4, employee moral ownership was negatively related to employee creativity ($B = -.05, p = .015$; Model 2). Thus, Hypothesis 1 was supported.

Tests of moderation effect. Table 4 showed that the cross-level interactive effect of employee moral ownership (Level 1) and ethical leadership (Level 2) on employee creativity was significant ($B = .17, p = .026$; Model 3), while the between-team interaction between group mean of employee moral ownership and ethical leadership at Level 2 was not significant ($B = .56, p = .370$). Simple slope tests and the interaction plot (see Figure 2) showed that when ethical leadership was low (1 SD below the mean), moral ownership was negatively related to creativity ($B = -.17, p = .010$); but when ethical leadership was high (1 SD above the mean), the slope was nonsignificant ($B = .07, p = .292$). Replicating Study 1's results, Hypothesis 2 was supported.

Supplementary Analyses and Discussion

We ran supplementary analyses using in-role performance as the dependent variable for two reasons. First, we wanted to rule out alternative explanations that the significant moderating effect of ethical leadership might result from a halo effect or a matching principle (in this case representing supplementary fit). That is, ethical leaders might rate employees with higher moral ownership more positively across the board, or employees with higher moral ownership may be more likely to be satisfied with an ethical leader as they have similar ethical standards and thereby will reciprocate with higher performance (based on a social exchange principle). Second, we wanted to show that the effects are unique to discretionary behaviors (in line with role theory) such as creativity and not representing a general in-role performance effect. The null model result showed significant between-team variance in in-role performance ($\chi^2_{(52)} = 853.62, p <$

Table 3

Means, Standard Deviations, Correlations, and Reliabilities Among Studied Variables, Study 2

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Employee gender	1.74	0.44	—	-.30*	-.20	-.22	-.45***	-.39**	-.09	-.08
2. Employee age	28.93	3.91	.05	—	-.01	.92***	.03	.18	.03	.17
3. Employee education	2.91	0.34	-.02	-.09*	—	-.07	.13	.14	.46***	.43**
4. Employee tenure with supervisor	6.58	4.46	.05	.88***	-.15**	—	-.07	.11	.00	.13
5. Employee moral ownership, Time 1	5.03	0.99	-.10*	.09*	.04	.03	(.72)	.37**	.19	.03
6. Ethical leadership, Time 1	3.82	0.69	-.05	-.08†	.04	-.07	.21***	(.96)	.20	.01
7. Employee creativity, Time 2	3.70	0.79	-.16***	-.16***	.16***	-.11*	-.09†	.07	(.98)	.68***
8. Employee in-role performance, Time 2	4.04	0.51	.02	-.01	.03	-.02	-.04	.05	.37***	(.93)

Note. The correlations above the diagonal represent team-level correlations (computed using employees' aggregated scores; $N = 53$). The correlations below the diagonal represent pooled-within employee-level correlations ($N = 464$). Data on variables 1–4 were objective data provided by the HR department; data on variables 5–6 were rated by subordinates; variables 7–8 were reported by supervisors. Gender: male = 1, female = 2. Education: Secondary school degree = 1, junior college degree = 2, undergraduate degree = 3, graduate degree = 4. Cronbach's α values for the variables are shown in bold and italics along the diagonal in the brackets.

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

.001; ICC1 = .61, showing 61% of variance was between teams). Therefore, we again used HLM for this analysis. We followed the same procedures to test the main effect of employee moral ownership on employee in-role performance and the moderating effect of ethical leadership. The results revealed that neither the main effect ($B = -.02, p = .352$) nor the moderating effect ($B = -.09, p = .121$) were significant. Therefore, these results helped rule out the alternative explanations mentioned above and showed that the effects obtained were unique to creativity.

Study 1 and Study 2 offered consistent support to Hypotheses 1 and 2. However, these two studies are limited in their ability to infer causality given the use of field surveys and they did not test the mediating mechanism underlying the buffering effect of ethical leadership on the relationship between employee moral ownership and employee creativity, namely employee moral responsibility relief. Thus, we designed two experimental studies, a scenario-based experiment (Study 3) and a high-engagement lab experiment (Study 4), to improve the internal validity of our research, and to test the mediating role of moral responsibility relief.

Study 3

Method

Participants and procedure. We recruited students at a large university on the East Coast of the United States to participate in our study.⁵ Students received course credit in exchange for their participation. One week before our lab study, participants were invited to complete an online presurvey asking them to rate their moral ownership and provide demographic information including gender, age, and years of work experience.⁶ We did that to be consistent with our theorizing about moral ownership as a relatively stable individual difference and to distant this measurement from any manipulation in the lab. In the actual lab study, we used a two-factor between-subjects design to manipulate ethical leadership (high vs. low). Participants were told that they had worked as part of a five-member team in the Marketing and Communications department of the university for 3 years, and that their job duty was to enhance the university's reputation. The scenario described their direct supervisor, René, who gave them an important task to generate as many slogans as possible to advertise the

university. Participants were then randomly exposed to the high or low ethical leadership conditions, and were given 10 minutes to generate slogans. Finally, participants were asked to evaluate ethical leadership as a manipulation check.

In total, we received 131 responses for the presurvey and 130 responses for the lab study survey.⁷ After matching the data using unique identification code for each participant, we had 120 valid responses ($N = 60$ in the low ethical leadership condition, $N = 60$ in the high ethical leadership condition). Their average age was 22.05 years ($SD = 2.12$), average work experience was 3.83 years ($SD = 2.13$), and 59% were male.

Manipulations. We adapted the materials used in Stouten, van Dijke, Mayer, De Cremer, and Euwema (2013), which were based on the conceptualization of ethical leadership (Brown et al., 2005). In the high ethical leadership condition, participants read:

René very strongly believes in doing the “right” thing in terms of ethics without making compromises to rules. René is seen as a person who always takes ethical decisions. René always does what he says regarding ethics and consistently acts according to own ethical values if it comes to taking decisions. This is the reason that René does not tolerate any violations of ethical standards or established rules. Otherwise, he will discipline the employees. He defines success not just by results but also the way they are obtained. Therefore, when talking to you and the rest of the team members about the slogans to generate, René also made sure to make it clear to you all that your slogan should adhere to clear ethical rules and conventions: 1) Your slogan should be different enough from other slogans being used in other major universities, so you should not copy any existing slogan, it should be original; 2) Your slogan should not be using a language that can

⁵ This study, titled “Morality and creativity lab experiment” [1044547-1], was approved by the University of Maryland Institutional Review Board.

⁶ To disguise our real research purpose, we also asked the participants to rate their extraversion and conscientiousness using scales from Saucier (1994).

⁷ Among 131 participants who submitted presurvey, 27 completed it on-site before completing the lab study. The results remained the same controlling for whether participants completed the presurvey online or on-site. Among the 130 participants who submitted the lab study survey, eight did not generate any slogans. Therefore, we treated them as missing values and excluded their responses from our analyses.

Table 4
Hierarchical Linear Modeling Results of Main and Moderation Effects, Study 2

Variables	Employee creativity		
	M1	M2	M3
Intercept	3.99*** (0.33)	3.90*** (0.35)	3.83*** (0.35)
Level 1			
Employee gender	−0.16** (0.05)	−0.16** (0.05)	−0.16** (0.05)
Employee age	−0.03* (0.01)	−0.02 (0.01)	−0.02 (0.01)
Employee education	0.22** (0.06)	0.23** (0.06)	0.23*** (0.06)
Employee tenure with supervisor	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)
Employee moral ownership		−0.05* (0.02)	−0.05** (0.02)
Level 2			
Ethical leadership			0.18 (0.34)
Employee moral ownership (group mean)			0.11 (0.22)
Employee moral ownership (group mean) × Ethical leadership			0.56 (0.62)
Cross-level interaction			
Employee moral ownership × Ethical leadership			0.17* (0.08)

Note. $N = 464$ at the employee level, $N = 53$ at the team level. Unstandardized regression coefficients are reported. The standard errors in the estimations are reported in parentheses.

* $p < .05$. ** $p < .01$. *** $p < .001$.

offend any minority or racial group in the society; 3) Your slogan should not be discriminating between men and women; 4) Your slogan should not be longer than 10 words.

In the low ethical leadership condition, participants read:

René does not believe in doing the “right” thing in terms of ethics. This is why René often makes compromises regarding ethics and rules. Many will describe René as a person who never makes ethical decisions. René never does what he says regarding ethics and hardly ever consistently acts according to own ethical values or established rules if it comes to taking decisions. This is the reason that René tolerates violations of ethical standards or established rules. He defines success just by results but never cares about the way they are obtained. Therefore, when talking to you and the rest of the team members about the slogans to generate, René did not make it clear

what ethical standards the slogans should adhere to. The only thing he said is that your slogan should not be longer than 10 words.

Therefore, when assigning the slogan task, René in the high ethical leadership condition also made it clear to the participants that their slogan should adhere to clear ethical rules and then described several rules, while in the low ethical leadership condition René did not make it clear what ethical standards the slogans should adhere to. In both conditions, we made René asking for no more than a 10 words slogan, to make sure the effect we describe does not stem from the leader creating rules generally, but specifically from creating rules that relate to ethics. Doing so also allowed us to reduce variance in the length of slogans across both conditions.

Measures. We used the same scale to measure moral ownership ($\alpha = .74$).

Creativity. We employed two independent research assistants who were blind to our research and participants’ characteristics to evaluate creativity of the slogan generated by participants. We first made a detailed coding scheme containing a brief introduction of the scenario and elaborated creativity standards. Based on the definition of creativity (Amabile, 1983, 1996; George, 2007) and following the operationalization in prior lab studies concerning creativity (e.g., Baer, Leenders, Oldham, & Vadera, 2010; Chua, 2013), slogans were defined as creative if they were both novel and useful, where “useful” means potentially appealing to others to advertise the university. In addition, considering that creativity is more about a few great ideas rather than a large number of only mediocre ideas (Baer et al., 2010), we asked the raters to ignore the total number of slogans when evaluating creativity. Then, we provided two raters with a list of 75 slogans from 16 participants and asked them to evaluate: (a) How creative they thought a specific slogan was? (b) Generally, how creative they thought a specific participant’s ideas were? (1 = *not at all creative*, 5 = *extremely creative*). Because the interrater reliability for this initial coding was high, indicating that the coding scheme provided was adequate, in the second step, we provided the two raters with a

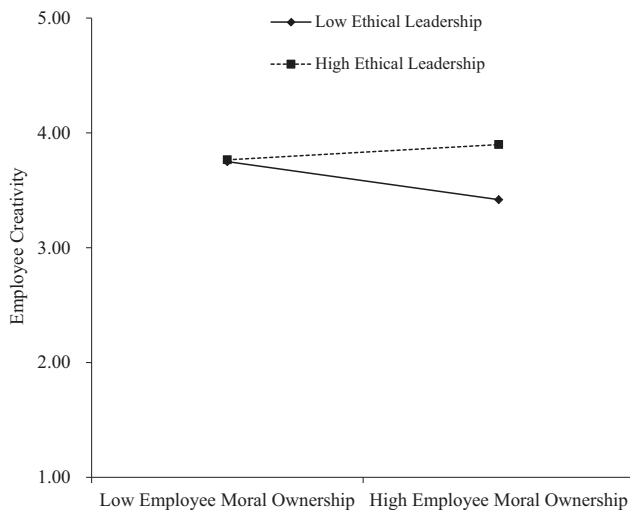


Figure 2. The interactive effect of employee moral ownership and ethical leadership on employee creativity, Study 2.

total of 727 slogans (ranging from 1 to 30 for each participant) generated by the matched 120 participants, and asked them to evaluate the creativity for both each specific slogan and for the participants' ideas overall based on the coding scheme described above. The two raters' rating reliability and agreement were within conventional guidelines (LeBreton & Senter, 2008) for ratings of a specific slogan ($ICC1 = .39$, $ICC2 = .56$, median of single item $r_{wg} = .84$) and all generated slogans ($ICC1 = .31$, $ICC2 = .47$, median of single item $r_{wg} = .75$). Thus, we averaged the raters' ratings.

Based on the ratings, we derived three measures of creativity: (a) the rating of the participant's most creative slogan (highest rating); (b) the average rating of a given participant's slogans; and (c) the general rating of a given participant's creativity. Because we were interested in the effect on generating a few great ideas rather than the total number of ideas, we present the results in the tables using the highest rating as our dependent variable (Baer et al., 2010), but describe the consistent results obtained using the other two measures of creativity in footnotes.

Manipulation check. We chose three most relevant items from Brown et al. (2005) to check ethical leadership manipulation. Items included "René defines success not just by results but also the way that they are obtained," "René disciplines employees who violate ethical standards," and "René sets an example of how to do things the right way in terms of ethics" ($\alpha = .94$; using scaling ranging from 1 = *strongly disagree* to 7 = *strongly agree*).

Control variable. To rule out the potential influence of slogan number generated by each participant, we controlled for this number. The results remained the same without this control.

Results

Table 5 shows descriptive statistics for variables in Study 3.

Manipulation checks. Participants in the high ethical leadership condition gave higher rating on ethical leadership ($M = 5.71$, $SD = 1.05$) than those in the low ethical leadership condition ($M = 2.85$, $SD = 1.94$), $t(118) = 10.04$, $p < .001$. Thus, our manipulation was effective.

Hypotheses testing.

Test of main effect. Although, similar to previous studies, the relationship between moral ownership and rated creativity trended to be negative, the effect failed to reach significance level and was only marginally significant ($B = -.16$, $p = .097$). Thus, Hypothesis 1 was not supported.⁸

Tests of moderation effect. Table 6 shows that the interaction term of employee moral ownership and ethical leadership condition (low = 0, high = 1) on employee creativity rating was significant ($B = .57$, $p = .002$; Model 2).⁹ Tests of simple slope and the interaction plot (see Figure 3) revealed that within the condition of low ethical leadership, moral ownership was negatively related to creativity ratings ($B = -.38$, $p = .002$); while within the high ethical leadership condition, the slope was non-significant ($B = .20$, $p = .158$). Thus, Hypothesis 2 was supported and ethical leadership buffered the negative relationship between moral ownership and creativity.

Discussion

Study 3 extended Studies 1 and 2 by using a scenario-based experiment that asked participants to imagine working with a

supervisor who is either high or low on ethical leadership and then engage in a creativity task handed to them allegedly by the supervisor. However, Study 3 is partly hypothetical and lacks the high realism that reflects *experiencing* a leader who is either high or low in ethical leadership. Thus, Study 4 was designed as a lab study that allowed us to manipulate ethical leadership in a more engaging way and to subsequently assess creativity more objectively. In addition, Study 4 aimed to explicitly examine the mediating role of moral responsibility relief (Hypothesis 3). Moreover, in Study 4 we manipulated ethical leadership using three levels—namely high, low, and unethical leadership conditions.¹⁰ Adding the unethical leadership condition allowed us to be more precise in exploring the mitigating effect of high ethical leadership on the relationship between moral ownership and creativity. Finding that the effect is specific to high ethical leadership (and that high ethical leadership is different compared with both low and unethical leadership) would suggest that the effect is driven by the high ethical leadership condition. Alternatively, if we find that it is the unethical leadership condition that is different from both the low and high ethical leadership condition, this would suggest that the effect is driven by unethical leaders (suggesting it is enough that leaders are NOT unethical as opposed to being high on ethicality). Finally, in Study 4 we further conducted supplementary analyses to rule out the influences of alternative predictors and mediating mechanisms.

Study 4

Method

Participants and procedure. We recruited students at a large university on the East Coast of the United States to participate in our lab experiment for course credit (a nonoverlapping sample from Study 3).¹¹ Upon their arrival, the experimenter randomly assigned the participants to three manipulated conditions (i.e., high, low, and unethical leadership conditions). When seated, they were first invited to complete a presurvey evaluating moral ownership, alternative predictors including reflective moral attentiveness, moral identity, and cognitive flexibility, as well as demographics information including gender, age, and number of years of work experience, and then were told that they were going to be connected to other three team members (presented as avatars) to play together the "Synergize" game (see Erez, Schilpzand, Leavitt,

⁸ We obtained similar results for the relationship between employee moral ownership and employee creativity using the average rating ($B = -.127$, $p = .111$) and the general rating ($B = -.131$, $p = .111$) as respective dependent variables.

⁹ We got similar results for the moderating effect of ethical leadership using the average rating ($B = .33$, $p = .037$) and the general rating ($B = .36$, $p = .031$) as respective dependent variables.

¹⁰ We are grateful for one anonymous reviewer for suggesting to include three levels of ethical leadership. We also conducted a study with two manipulated conditions (i.e., low and high ethical leadership conditions). The results largely supported Hypotheses 1 and 2. Data, syntax, and results are available at https://osf.io/v3qf2/?view_only=8a073a1c88304ca3a110f88356c035ea.

¹¹ This study, titled "Creativity ethical leadership" [1403163-1], was approved by the University of Maryland Institutional Review Board.

Table 5

Means, Standard Deviations, Correlations, and Reliabilities Among Studied Variables, Study 3

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. Employee gender	1.41	0.49	—									
2. Employee age	22.05	2.12	.14	—								
3. Employee year of work experience	3.83	2.13	-.04	.19*	—							
4. Employee moral ownership	5.10	0.96	.21*	.11	.06	(.74)						
5. Ethical leadership conditions	0.50	0.50	-.05	-.01	-.06	-.11	—					
6. Ethical leadership (manipulation check)	4.28	2.11	-.10	-.10	-.03	.00	.68***	(.94)				
7. Employee creativity (highest rating)	3.01	0.99	-.16†	-.07	-.01	-.15†	.18*	.02	—			
8. Employee creativity (average rating)	2.31	0.86	-.10	-.04	-.05	-.14	.22*	.11	.87***	—		
9. Employee creativity (general rating)	2.45	0.87	-.08	-.06	-.06	-.14	.14	-.01	.87***	.93***	—	
10. Slogan number	6.06	4.40	-.08	.08	.10	-.03	-.01	-.10	.08	-.24**	-.19*	—

Note. *N* = 120. Gender: male = 1, female = 2. Ethical leadership conditions: low = 0, high = 1. Cronbach's α values for the variables are shown in bold and italics along the diagonal in the brackets.

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Woolum, & Judge, 2015; Schilpzand, Leavitt, & Lim, 2016).¹² In the game, their team leader's behaviors were manipulated to exemplify high versus low versus unethical leadership (see below for a detailed description). After finishing the Synergize task, participants were asked to evaluate their feelings while doing the task namely moral responsibility relief and alternative mediators including leader-member exchange relationship (LMX) and personal liking, then to complete a remote associates test (RAT; Mednick, 1962) as the second group task, and finally rate ethical leadership as a manipulation check. We chose to use the RAT as a measure of creativity for two reasons. First, the RAT is a widely used instrument to measure creativity in prior studies (e.g., Chua, 2013; Griskevicius, Cialdini, & Kenrick, 2006; Roskes, De Dreu, & Nijstad, 2012). In particular, Gino and Wiltermuth (2014) used this measure in their study to examine the relationship between dishonesty and creativity, a different but related research topic to ours. Second, the RAT is a measure with an objective solution (compared with a more subjective coding); thus, triangulating our results using this objective measure (on top of the subjective evaluation of creativity used in Study 3).

Table 6

Results of Main and Moderation Effects, Study 3

Variables	Employee creativity (highest rating)	
	M1	M2
Intercept	3.71*** (0.51)	2.76*** (0.17)
Control variable		
Slogan number	0.02 (0.02)	0.02 (0.02)
Independent variable		
Employee moral ownership	-0.16† (0.09)	-0.38** (0.12)
Manipulated condition		
Ethical leadership condition		0.34* (0.17)
Interaction		
Employee moral ownership $\times$ Ethical leadership condition		0.57** (0.18)
R^2	0.03	0.13
ΔR^2	—	0.10

Note. *N* = 120. Low ethical leadership condition was set as the reference group. Unstandardized regression coefficients are reported. Standard errors are reported in parentheses.

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

We received a total of 371 completed responses. Four participants noted in the naivety check question that they thought other players were simulated and, thus, their responses were excluded from analyses. The final sample was consisted of 367 valid responses (*N* = 126 in the unethical leadership condition, *N* = 121 in the low ethical leadership condition, and *N* = 120 in the high ethical leadership condition). Their average age was 20.39 years (*SD* = 1.39), average work experience was 2.88 years (*SD* = 1.76), and 48% were male.

Synergize task. In the first part of the study participants played a multiplayer electronic game titled Synergize, an experimental paradigm involving responsive electronic confederates and intended to overcome the limitations of human confederates (see Leavitt, Qiu, & Shapiro, 2019). We closely followed suggestions from Leavitt et al. (2019) to increase the psychological realism and internal validity of the experiments. The Synergize game comprised of two sections. In the first section, participants were told that they would be playing an online game with three other participants seated in a different location of the university. In reality, studies were being run in both the main and remote location of the university, so this cover story seemed reliable. They were told as a cover story that the purpose of the study was to see how payment method influences people's performance in a dynamic virtual environment. Participants then waited for about 10 s while the system appeared to assign the participants to a payment method. This procedural delay was designed to increase the believability of the cover story. All participants were told afterward that they were assigned to a contingent payment method in which their payments depended on the overall team performance. Next, participants selected an avatar, entered a username, and were informed that the system would randomly select one player to be the leader with the duty to fully engage other players in the game. They were told that the collective goal of the game was to generate as many creative usages for a paperclip as possible within a 5-min time limit.

In the second section, each participant teamed up with another three players for the game. The game started after the

¹² Similar to Study 3, the questions of moral ownership were embedded with extraversion and conscientiousness personality items.

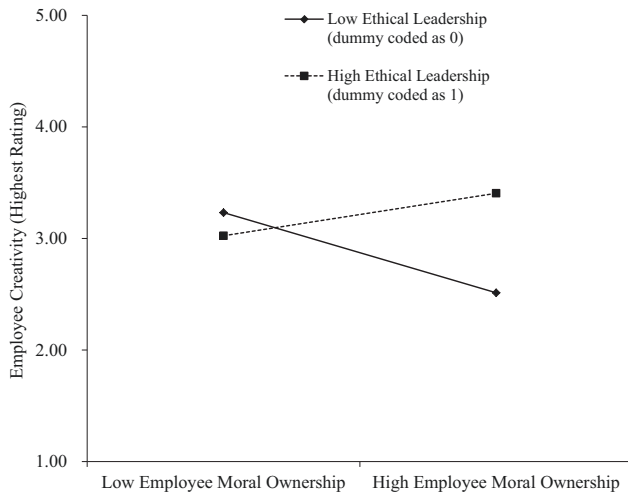


Figure 3. The interactive effect of employee moral ownership and ethical leadership on employee creativity, Study 3.

leader was selected, and the leader was the one who held the ball and took the first turn. During each turn, a specific player who held the ball was to enter a creative usage for a paperclip in the textbox below his or her avatar (the answer would be consequently displayed on the screen), then the player was to pass the ball to one of the teammates by clicking that teammate's avatar (after the pass, a new turn started). Each time a player gave an answer, one point was added to the team score which was displayed on the upper-left corner of the screen. During their turn, players were given the option to skip their turn if they were not able to enter a legitimate answer. After they entered the word "pass" as their answer in the textbox, the textbox would disappear, and they would be told to pass the ball. Using the pass option would not add points to the team score; thus, players would skip their turn to contribute. Players were informed that it was important to use the pass option because the system was not able to differentiate legitimate answers from illegitimate ones. Further, players were able to interact with their teammates through the "talk" option. During their turn, players could enter the word "Talk" as their answer in the textbox to trigger a dialog box in which they could send a brief message to teammates. All messages would be displayed in the screen with a bell sound and the notification texts "Message to team:" to differentiate them from answers. The team score was not affected by the talk option. After the message was sent, the textbox would appear with a reminder of entering an answer. Therefore, using the talk option did not cause players to lose their chance to contribute. Players took turns to give answers and/or messages until the end of the game. They were then asked to answer a few questions about the game and presented with the final score.

Notably, except for the focal participant, all players in the Synergize game were virtual confederates who were designed to act as real participants (Erez et al., 2015; Schilpzand et al., 2016). Confederates' avatars, usernames, written answers, and talk messages were prescribed by the experimenters and displayed during the game. The prescribed usernames, answers,

and messages comprised colloquialisms, occasional misspellings, abbreviations, or even humorous components to increase believability (e.g., "wolverine!"). Procedural delay was incorporated such that thinking time delays occurred while confederates were "typing" answers or messages, further facilitating believability. In regard to leader selection, a specific confederate was always selected as the leader, and a text title "Leader" would appear above this confederate's avatar.

Experimental manipulations. Experimental manipulations were embedded into the second section of Synergize game, which was programmed to include two sequential but connected phases: the automated play phase and the free play phase. The automated play phase consisted of six turns that occurred among only confederates in a predetermined sequence with the purpose of manipulating (un)ethical leadership, while the free play phase involved all four players taking turns in a random order (i.e., participants could decide to whom to pass the ball, and confederates passed the ball in accordance with a randomness generator). The transition between two phases was unnoticeable to participants. The game ended after the focal participant took his or her sixth turn to enter an answer even though participants were told that the game would end after five minutes. Such setting enabled each participant to give the same number of answers so as to keep experimental conditions as constant as possible. Pilot testing showed that real players typically took four to six minutes to complete the game, and such setting was unlikely to cause suspicion.

Participants were randomly assigned to one of the three conditions (low/high ethical leadership and unethical leadership) in a between-subjects-design. Leader's ethics was manipulated in three ways: (a) the leader's expectation and instruction for players, (b) the leader's tolerance to players' unethical behavior, and (c) the leader's own visible ethical conduct. We also manipulated another two confederates' reactions to the leader's ethical behavior to simulate a dynamic and spontaneous workplace interaction between a leader and subordinates and to allow for the manipulation of the leader's tolerance to unethical behavior. In the following, to differentiate the three confederates, we label them as the leader, confederate A, and confederate B. Across three conditions, confederate B behaved consistently and gave legitimate answers throughout the task. The leader and confederate A behaved differently, depending on conditions, and their behavior represents the manipulation of (un)ethical leadership.

In the *high ethical leadership* condition, once the game started, the leader allegedly sent a message "hi all, looking forward to working together with you! Make sure to put only good (and valid!) answers so we get good and legitimate points!" Later, confederate A would give a gibberish answer (e.g., feqfweq) and sent a message "hey, I think we can get more points by sending quickly these nonsense words." Following that, the leader sent a warning message "stop sending nonsense words as you are ruining it for the rest of the team!" After that point, everyone in the team gave legitimate answers.

In the *low ethical leadership* condition, once the game started, the leader allegedly sent a message "hi all, looking forward to working together with you! Make sure to put answers so we get as many points as possible!" Later, confederate A gave the same illegitimate answer and sent the same message

as in the high ethical leadership condition. Following that, the leader stayed silent. After that point, the leader always gave legitimate answers but confederate A always gave illegitimate answers because the leader neither warned nor stopped the transgression.

In the *unethical leadership* condition, once the game started, the leader sent the same message as in the low ethical leadership condition. Then, confederate A gave the same illegitimate answer and sent the same message as in the other two conditions. According to the conceptualization of unethical leadership, unethical leaders not only tolerate but also actively instigate unethical behaviors themselves (Brown & Mitchell, 2010). Thus, in support of confederate A's behavior, the leader sent a message "This is a good idea! We can earn as many points as possible using this way." After that point, the leader themselves occasionally gave illegitimate answers (i.e., gibberish words), and confederate A always gave illegitimate answers because the leader supported the transgression.

Measures. We adopted the same scales used in Study 3 to assess moral ownership ($\alpha = .80$) and to check ethical leadership manipulation ($\alpha = .83$).

Moral responsibility relief. We generated two items to capture moral responsibility relief. Items included "Given the leader's behavior I feel it is less of my role to set ethical rules in the team" and "Given the leader's behavior I feel it is less of my responsibility to monitor ethical behavior of members in the team" ($\alpha = .82$; using scaling ranging from 1 = *strongly disagree* to 7 = *strongly agree*).¹³ Participants completed this measure right after the Synergize task and before completing the RAT creativity task.

Creativity. In this study, we used RAT-17 (Mednick, 1962) to assess participants' creativity in terms of identifying associations among apparently disparate words. As noted above, this is similar to the procedure used in Gino and Wiltermuth (2014), and represents a more objective measure of creativity (compared with subjective coding) as there are objective solutions to this creativity task.¹⁴ We provided participants with two examples (i.e., manners—round—tennis = table; playing—credit—report = card), and then asked them to find a word that is logically linked to all three of the words provided (e.g., blank—white—lines). We calculated how many correct answers participants gave; the more correct answers the higher their creativity.

In addition, in this study we also measured and examined a series of alternative predictors (reflective moral attentiveness, moral identity and cognitive flexibility) as well as alternative mediators (LMX and personal liking).¹⁵

Results

Table 7 summarizes descriptive statistics for variables in Study 4.

Manipulation checks. First, the analysis of variance (ANOVA) on ratings of ethical leadership was significant, $F(2, 364) = 65.87$, $p < .001$. Participants in the high ethical leadership conditions rated ethical leadership higher ($M = 4.60$, $SD = 1.34$) than those in the low ethical leadership condition ($M = 3.58$, $SD = 1.28$), $t(239) = 6.06$, $p < .001$. In addition, the ratings in the low ethical leadership condition was higher than those in the unethical leadership condition

($M = 2.65$, $SD = 1.38$), $t(245) = 5.49$, $p < .001$. Thus, our manipulation was effective.

Hypotheses testing.

Test of main effect. As shown in Table 8 employee moral ownership was negatively related to employee creativity ($B = -.29$, $p = .03$; Model 2). Thus, Hypothesis 1 was supported.

Test of moderation effect. The ANOVA results revealed that the interaction term of employee moral ownership and ethical leadership conditions (unethical = 1, low = 2, high = 3) on employee creativity was significant, $F(2, 361) = 7.23$, $\eta_p^2 = .04$, $p = .0008$. The regression results in Table 8 showed that, compared with the interaction term of employee moral ownership and low ethical leadership condition, the interaction term of employee moral ownership and high ethical leadership condition on employee creativity was significant ($B = .96$, $p = .003$; Model 3), but the interaction term of employee moral ownership and unethical leadership condition on employee creativity was nonsignificant ($B = -.23$, $p = .49$; Model 3).¹⁶ Furthermore, tests of simple slopes and the interaction plot (see Figure 4) showed that employee moral ownership was negatively related to employee creativity in both the unethical leadership condition ($B = -.76$, $p = .004$) and the low ethical leadership condition ($B = -.53$, $p = .01$), but the slope became nonsignificant in the high ethical leadership condition ($B = .42$, $p = .07$). The results demonstrate that it is high ethical leadership, instead of low ethical leadership, that mitigates the negative effect of employee moral ownership on employee creativity. Thus, simply not being unethical (low ethicality) is not enough. Taken together, Hypothesis 2 and specifically the mitigating effect of ethical leadership (rather than the exacerbating effect of unethical leadership) was supported.

Test of mediated moderation effect. Hypothesis 3 proposed that employee moral responsibility relief mediates the interactive effects of employee moral ownership and ethical leadership on em-

¹³ Given that we self-developed the items of moral responsibility relief, we conducted a separate survey study to validate this scale. The detailed results are available at https://osf.io/v3qf2/?view_only=8a073a1c88304ca3a110f88356c035ea. This validation study, titled "Creativity ethical leadership" [1403163-2], was approved by the University of Maryland Institutional Review Board.

¹⁴ Though the Synergize Task in its original form is an alleged creativity task (usage of paperclips), something we retained in the programming, it is not intended to measure creativity (e.g., Erez et al., 2015; Schilpzand et al., 2016). The paperclip task is purely a cover story for the game. In fact, by definition, participants who cheat more in the task would be judged as less creative as they would type nonsensical words that would get low creativity scores, and would have fewer or none opportunities to show creativity if they cheat. Therefore, by definition, being more moral in this task would also mean being rated by others as more creative than those less moral. This is something that reflects structure rather than substance (in contrast to Study 3 in which people could choose not to adhere to regulations and by that actually create more creative slogans; e.g., by using plagiarism). This was another reason we chose to focus on a subsequent task of creativity using RAT that did not suffer from such limitation.

¹⁵ A full description of the measures as well as the results are available at https://osf.io/v3qf2/?view_only=8a073a1c88304ca3a110f88356c035ea.

¹⁶ We also used unethical leadership condition as the comparison group to analyze the data. The results showed that compared with the interaction term of employee moral ownership and unethical leadership condition (as the referent), the interaction term of employee moral ownership and high ethical leadership condition on employee creativity was significant ($B = 1.18$, $p < .001$), but the interaction term of employee moral ownership and low ethical leadership condition on employee creativity was nonsignificant ($B = .23$, $p = .49$).

Table 7

Means, Standard Deviations, Correlations, and Reliabilities Among Studied Variables, Study 4

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Employee gender	1.52	0.50	—							
2. Employee age	20.39	1.39	.01	—						
3. Employee year of work experience	2.88	1.76	.02	.05	—					
4. Employee moral ownership	5.07	1.06	.14**	.02	.11*	(.80)				
5. Ethical leadership conditions	1.98	0.82	.04	-.02	-.10	.03	—			
6. Ethical leadership (manipulation check)	3.59	1.55	-.001	.10	-.12*	.21***	.52***	(.83)		
7. Employee moral responsibility relief	4.07	1.37	-.13*	-.01	-.10	-.14**	.07	.15**	(.82)	
8. Employee creativity (RAT)	4.35	2.77	.05	-.03	.20***	-.11*	.06	-.004	.15**	—

Note. RAT = remote associates test; *N* = 367. Gender: male = 1, female = 2. Ethical leadership conditions: unethical = 1, low = 2, high = 3. Cronbach's α values for the variables are shown in bold and italics along the diagonal in the brackets.

* $p < .05$. ** $p < .01$. *** $p < .001$.

employee creativity. To test this mediated moderation effect, we first tested whether there was a significant interactive effect of employee moral ownership and ethical leadership on the mediator (i.e., employee moral responsibility relief), and examined whether the mediator is significantly related to employee creativity. Then, we used bootstrapping techniques with 20,000 bootstrap samples to compute the bias-corrected confidence intervals (CIs) of the conditional indirect effect for different levels of ethical leadership as well as the difference among the three conditions (Hayes, 2013; Preacher, Rucker, & Hayes, 2007).

The ANOVA results revealed that the interaction term of employee moral ownership and ethical leadership conditions (unethical = 1, low = 2, high = 3) on employee moral responsibility relief was significant, $F(2, 361) = 4.76$, $\eta_p^2 = .03$, $p = .0091$. The regression results in Table 8 revealed that, compared with the interaction term of employee moral ownership and low ethical leadership condition, the interaction term of employee moral ownership and high ethical leadership condition on employee moral responsibility relief was significant ($B = .46$, $p = .004$; Model 1), but the interaction term of employee moral ownership and unethical leadership condition on employee moral responsibility relief was nonsignificant ($B = .06$, $p = .70$; Model 1). A simple slope test and the interaction plot (see Figure 5) showed that moral ownership was negatively related to moral responsibility relief in the unethical leadership (simple slope $B = -.30$, $p = .02$) and the low ethical leadership (simple slope $B = -.36$, $p = .002$) condition, but was not significantly related to moral responsibility relief in the high ethical leadership condition (simple slope $B = .10$, $p = .34$). Thus, these results supported our theorization that high ethical leadership mitigates the negative effect of moral ownership on moral responsibility relief.¹⁷ The relationship between employee moral responsibility relief and employee creativity was significant ($B = .22$, $p = .04$; Table 8, Model 4).

Furthermore, the bootstrapping results indicated that the indirect effect of moral ownership on creativity via moral responsibility relief was significant in the unethical leadership condition (indirect effect $B = -.09$, 95% CI $[-.23, -.01]$) and the condition of low ethical leadership (indirect effect $B = -.04$, 95% CI $[-.12, -.004]$); however, the indirect effect became nonsignificant in the high ethical leadership condition (indirect effect $B = .003$, 95% CI $[-.06, .08]$). In addition, it showed significant differences between the indirect effects of high and low ethical leadership conditions (Δ indirect effect $B = .05$, 95% CI $[.002, .15]$), and of high ethical and unethical leadership conditions

(Δ indirect effect $B = .09$, 95% CI $[.004, .30]$). Thus, Hypothesis 3 was supported.

Supplementary analyses results disclosed online supported the unique effect of moral ownership on creativity as well as the unique mediating effect of moral responsibility relief.

Summary of Results

We conducted a single paper meta-analysis to synthesize the results across two field studies and two experimental studies (McShane & Böckenholt, 2017). The results showed that the main effect of employee moral ownership on employee creativity across all studies was negative and significant (overall effect = $-.12$, 95% CI $[-.21, -.03]$) and the moderation effect for ethical leadership on the relationship between employee moral ownership and employee creativity was also significant (overall effect = $.31$, 95% CI $[.09, .52]$).

General Discussion

Building upon and extending role theory (Biddle, 1979; Katz & Kahn, 1978), our research proposed and empirically tested the relationship between employee moral ownership and employee creativity in the workplace. Using a series of studies in field and laboratory settings, our research reveals the negative relationship between employee moral ownership and employee creativity. It also documents an intervening factor, namely ethical leadership, which can mitigate such negative relationship. In addition, the

¹⁷ Moreover, in line with our theorization, we predicted that compared with low and unethical leadership, high ethical leadership leads to significantly higher moral responsibility relief in employees higher on moral ownership. Thus, we further tested the respective difference on moral responsibility relief across three manipulated conditions within low (1 *SD* below mean) and high (1 *SD* above mean) levels of moral ownership. The results showed that within low levels of moral ownership, moral responsibility relief was not significantly different across three conditions ($F(2, 179) = .98$, $\eta_p^2 = .01$, $p = .38$; $M = 4.26$, $SD = 1.42$ for the unethical leadership condition; $M = 4.45$, $SD = 1.24$ for the low ethical leadership condition; $M = 4.11$, $SD = 1.25$ for the high ethical leadership condition). In comparison, within high levels of moral ownership, moral responsibility relief in the high ethical leadership condition ($M = 4.31$, $SD = 1.30$) was significantly higher than those in the low ethical leadership ($M = 3.74$, $SD = 1.45$; $t(123) = 2.27$, $p = .02$) and the unethical leadership ($M = 3.63$, $SD = 1.38$; $t(115) = 2.75$, $p = .007$) conditions ($F(2, 182) = 4.09$, $\eta_p^2 = .04$, $p = .02$). These results supported our prediction.

Table 8
Results of Main and Moderation Effects, Study 4

Variables	Employee moral responsibility relief	Employee creativity (RAT)		
	M1	M2	M3	M4
Intercept	4.08*** (0.12)	5.83*** (0.71)	4.11*** (0.25)	3.20*** (0.50)
Independent variable				
Employee moral ownership	−0.36** (0.11)	−0.29* (0.14)	−0.53* (0.23)	−0.45* (0.23)
Manipulated conditions				
Unethical leadership condition	−0.14 (0.17)		0.13 (0.35)	0.17 (0.34)
High ethical leadership condition	0.12 (0.17)		0.58 (0.35)	0.55 (0.35)
Interaction				
Employee moral ownership × Unethical leadership condition	0.06 (0.16)		−0.23 (0.33)	−0.24 (0.33)
Employee moral ownership × High ethical leadership condition	0.46** (0.16)		0.96** (0.32)	0.85** (0.33)
Mediator				
Employee moral responsibility relief				0.22* (0.11)
R ²	0.05	0.01	0.06	0.07
ΔR ²	—	—	0.05	0.01

Note. RAT = remote associates test; $N = 367$. Low ethical leadership condition was set as the reference group. Unstandardized regression coefficients are reported. Standard errors are reported in parentheses.

* $p < .05$. ** $p < .01$. *** $p < .001$.

team-based laboratory study (Study 4) supported the mediating role of employee moral responsibility relief underlying the buffering effect of ethical leadership. The findings offer implications for both research and practice related to role theory, creativity, leadership, and ethicality at work.

Theoretical Implications

Role theory. Our research supports the core ideas of role theory (Biddle, 1979; Katz & Kahn, 1978) and further extends the theory by formally demonstrating the effects of *role shifts* in organizations. On the one hand, our findings support a critical historical viewpoint that personal disposition determines possible social roles that individuals play in social settings, which in turn influence behaviors at work such as showing creativity (cf. Mc-

Crae & Costa, 2003). Our research supports the premise of role theory that organization is a system of interdependent behaviors in which the conjunction of personal dispositions and external context affects individual behaviors (Biddle, 1979; Katz & Kahn, 1978). On the other hand, our research extends role theory by examining how roles taken by different parties such as the employee and the leader can shift, and such role shift (e.g., a leader taking the role of monitoring the ethical nature of the environment and thereby relieving employees higher on moral ownership from such role responsibilities) can bring benefits to the whole organization.

Creativity. Uncovering the moral ownership—creativity relationship also contributes to the literature on creativity by broadening the nomological network of this literature. On the one hand, our research suggests moral ownership as an important but unex-

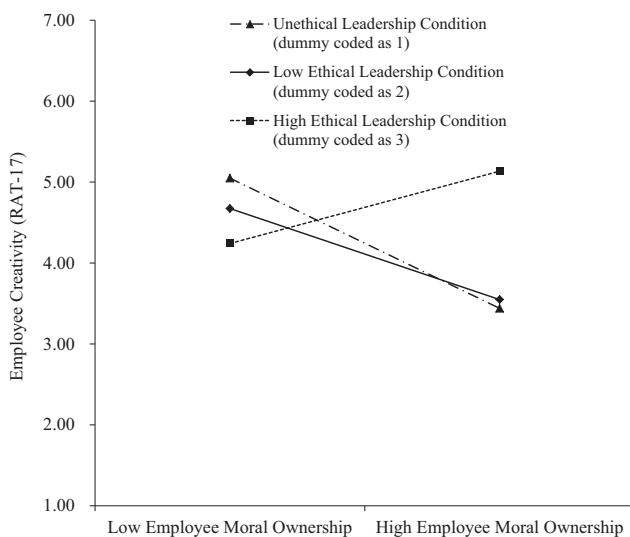


Figure 4. The interactive effect of employee moral ownership and ethical leadership on employee creativity, Study 4. RAT = remote associates test.

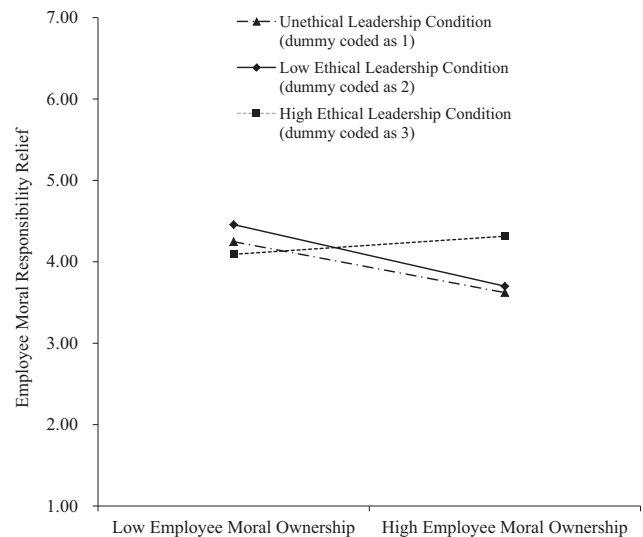


Figure 5. The interactive effect of employee moral ownership and ethical leadership on employee moral responsibility relief, Study 4.

plored predictor of creativity, in addition to previously explored predictors such as the big five personality measure (George & Zhou, 2001; Zhou & Hoever, 2014). Our research also shows that a specific contingency, ethical leadership, can unleash employee creativity from those who might otherwise not be creative because of role responsibilities, and by that supports the interactionist model of creativity that poses that individual creativity is a complex product of personal attributes and external contexts (Woodman & Schoenfeldt, 1989, 1990).

Ethical leadership. Our research further adds to prior work on ethical leadership by showing another potential benefit of ethical leadership. In extant studies, scholars have found that ethical leadership can facilitate employee positive attitudes such as affective commitment and job satisfaction (Brown et al., 2005; Neubert et al., 2009), promote employee positive behaviors such as citizenship behaviors and job performance (Avey et al., 2012; Chen & Hou, 2016), and reduce deviant and unethical behaviors (Mayer et al., 2012, 2009). Our findings show that ethical leadership can also help relieve employees with high morality from being preoccupied by moral role responsibilities and enable them to regain creativity. This finding expands our knowledge of ethical leadership and also offers a possible solution for practitioners to solve the morality—creativity conundrum.

In addition, existing studies have reported mixed findings on the direct effect of ethical leadership on employee creativity. For example, Chen and Hou (2016) found a positive relationship between ethical leadership and employee creativity. Feng, Zhang, Liu, Zhang, and Han (2018) revealed an inverted U-shaped relationship between ethical leadership and employee creativity, suggesting that very high-level ethical leadership has a suppression effect on employee creativity. Stouten et al. (2013) also suggested a curvilinear relationship between ethical leadership and organizational citizenship behavior. Given these findings, it is possible that too much of ethical leadership will reverse the relationship between employee moral ownership and employee creativity. We tested this possibility by conducting simple slope tests in Studies 1 and 2 as post hoc tests and we did not find this effect in our data.¹⁸ It seems, therefore, that the effects are different when ethical leadership is positioned as directly related to creativity, as opposed as a moderator connecting moral ownership and creativity. In this vein, we contribute to this conversation by positioning ethical leadership as a key boundary condition (as opposed to having a direct effect) in predicting employees' creativity, showing that (both high and very high) ethical leaders can offset the negative impact of morality on creativity. Therefore, we enrich the knowledge about the effects of ethical leadership on employees' creativity.

Moral ownership. Our research contributes to the literature on moral ownership, or broadly on morality, by suggesting that moral ownership is not always beneficial and may carry heavy moral agent role responsibilities and constrain employees' creativity. Although moral ownership is a relatively new construct, studies have shown its benefits in reducing unethical behaviors and maintaining ethical environment (Hannah & Avolio, 2010; Hannah et al., 2011; Treviño et al., 2014). However, little attention has been paid to examining the potential "dark side" of moral ownership in constraining employees' behaviors which are not in the domain of ethics. In this sense, our research

expands the portrait of moral ownership and enriches our knowledge of the consequences of morality.

Practical Implications

On the one hand, our research stresses the need for organizations to be aware of the morality—creativity conundrum, to value both morality and creativity at work, and to develop a balanced view toward morality and creativity. While creativity is undoubtedly important for organization's longevity and success, in the long run, companies that value creativity over ethics may ignore the importance of morality and unintentionally encourage unethical behaviors (Gino & Ariely, 2012; Keem et al., 2018; Zheng et al., 2019). In this situation, employees with high moral ownership may feel overwhelmed by others' unethical behaviors and even finally leave the unethical environment, which will end up being detrimental to the organization (Treviño et al., 2014). Thus, organizations should be clear about the benefits and costs of morality and creativity, encourage creativity but also outline the importance of morality at work. Organizations should also know that employees with high moral ownership have devoted themselves to ensuring the ethical nature of the workplace and may consider being tolerant of such employees' possible relatively lower creativity.

On the other hand, our research provides a possible solution to address the morality—creativity conundrum and help offset the negative effect of morality on creativity, or as our title suggests allowing them to stay in line and think out of the box. Our findings show that ethical leadership is a potential remedy for organizations to relieve the moral agent responsibility from and liberate creativity for employees high on moral ownership. Accordingly, organizations should take actions to develop ethical leadership (Brown & Treviño, 2006). For example, organizations can launch regular training programs to help develop and retain ethical leaders.

Strengths, Limitations, and Directions for Future Research

Our research has several notable strengths. First, we used mixed methods including a combination of field studies and laboratory experiments to strengthen the internal and external validity of our research. Second, we adopted an array of research designs with both dyadic and team-based field studies as well as both scenario-based and team-based experiments to boost confidence in our findings. Third, we collected data from different cultural backgrounds (i.e., United States and China) to increase the generalizability of our findings. Fourth, we conducted supplementary analyses to rule out alternative explanations regarding predictors and mediators.

In addition to the abovementioned strengths, our research has limitations that can inform future research. Our research mainly drew upon a role theory perspective to investigate the link between employee moral ownership and employee creativity and to further explore the moderating role of ethical leadership

¹⁸ A full description of the analyses and results appears in the online supplemental materials at https://osf.io/v3qf2/?view_only=8a073a1c88304ca3a110f88356c035ea.

and the mediating role of employee moral responsibility relief. We do see the use of role theory as a novel and appropriate framework to examine this phenomenon. However, we also acknowledge that other theoretical perspectives may explain the relationship. For example, future work can consider building upon conservation of resources (COR) theory (Hobfoll, 1988, 1989) and position moral ownership and creativity as resource-relevant constructs. In this way, employees higher on moral ownership would deplete many resources (i.e., *resource depletion* as a mediator) to regulate the ethicality of their own and others' at work. Based on COR theory, such depleted employees are motivated to conserve their limited resources and are less likely to engage in other discretionary behaviors including creativity. Along this line of reasoning, factors that can enrich employees' resources pool such as perceived organizational support (Eisenberger, Fasolo, & Davis-LaMastro, 1990) and job resources (Van Yperen & Hagedoorn, 2003) can mitigate the impact of employee moral ownership on employee creativity. All in all, we urge future studies to investigate other possibilities to explain the relationship between morality and creativity and make significant contributions to the literature.

Additionally, we took a dispositional approach to examine moral ownership and its relationship with creativity. We encourage future studies to diverge from the dispositional approach and investigate situational factors that elicit employees' higher concerns for morality and see how those relate to creativity at work. Moreover, although we propose that ethical leadership as a unique contingency can offset the negative effect of morality on creativity, our data cannot exclude the possibility that other positive types of leadership (e.g., servant leadership) can also have such mitigating effect, which merits further examinations. Finally, our self-developed measure of moral responsibility relief, though validated through a separate study, only contained two items and can be, therefore, further improved from a psychometric perspective.

Conclusion

As the global labor market becomes increasingly competitive, organizations are eager to promote employees' creativity and maintain a competitive advantage. However, given the concern about the dark side of creativity (Gino & Ariely, 2012; Keem et al., 2018; Zheng et al., 2019), it is imperative to stress the importance of ethics in organizations. Our research reveals that employees higher on moral ownership may be less creative. Further, we highlight ethical leadership can help employees higher on moral ownership maintain their core self of morality while also regaining their creativity. The hypotheses gained consistent support from four studies in both field and lab settings in different cultures. We hope our research stimulates future work to integrate the research on morality and creativity.

References

- Amabile, T. M. (1983). The social psychology of creativity: A componential conceptualization. *Journal of Personality and Social Psychology*, 45, 357–376. <http://dx.doi.org/10.1037/0022-3514.45.2.357>
- Amabile, T. M. (1996). *Creativity in context: Update to "the social psychology of creativity."* Boulder, CO: Westview Press.
- Anderson, N., Potočník, K., & Zhou, J. (2014). Innovation and creativity in organizations: A state-of-the-science review, prospective commentary, and guiding framework. *Journal of Management*, 40, 1297–1333. <http://dx.doi.org/10.1177/0149206314527128>
- Aritzeta, A., Swailes, S., & Senior, B. (2007). Belbin's team role model: Development, validity and applications for team building. *Journal of Management Studies*, 44, 96–118. <http://dx.doi.org/10.1111/j.1467-6486.2007.00666.x>
- Avey, J. B., Wernsing, T. S., & Palanski, M. E. (2012). Exploring the process of ethical leadership: The mediating role of employee voice and psychological ownership. *Journal of Business Ethics*, 107, 21–34. <http://dx.doi.org/10.1007/s10551-012-1298-2>
- Baas, M., De Dreu, C. K., & Nijstad, B. A. (2011). When prevention promotes creativity: The role of mood, regulatory focus, and regulatory closure. *Journal of Personality and Social Psychology*, 100, 794–809. <http://dx.doi.org/10.1037/a0022981>
- Baer, M., Leenders, R. T. A., Oldham, G. R., & Vadera, A. K. (2010). Win or lose the battle for creativity: The power and perils of intergroup competition. *Academy of Management Journal*, 53, 827–845. <http://dx.doi.org/10.5465/amj.2010.52814611>
- Balkin, D. B., Roussel, P., & Werner, S. (2015). Performance contingent pay and autonomy: Implications for facilitating extra-role creativity. *Human Resource Management Review*, 25, 384–395. <http://dx.doi.org/10.1016/j.hrmr.2015.07.001>
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1991). Social cognitive theory of moral thought and action. In W. M. Kurtines & J. L. Gewirtz (Eds.), *Handbook of moral behavior and development* (Vol. 1, pp. 45–103). Hillsdale, NJ: Erlbaum.
- Bandura, A. (1999). Moral disengagement in the perpetration of inhumanities. *Personality and Social Psychology Review*, 3, 193–209. http://dx.doi.org/10.1207/s15327957pspr0303_3
- Baucus, M. S., Norton, W. I., Jr., Baucus, D. A., & Human, S. E. (2008). Fostering creativity and innovation without encouraging unethical behavior. *Journal of Business Ethics*, 81, 97–115. <http://dx.doi.org/10.1007/s10551-007-9483-4>
- Biddle, B. J. (1979). *Role theory: Expectations, identities, and behaviors*. New York, NY: Academic Press.
- Biddle, B. J. (1986). Recent developments in role theory. *Annual Review of Sociology*, 12, 67–92. <http://dx.doi.org/10.1146/annurev.so.12.080186.000435>
- Bliese, P. D. (2000). Within-group agreement, non-independence, and reliability: Implications for data aggregation and analysis *Multilevel theory, research, and methods in organizations: Foundations, extensions, and new directions* (pp. 349–381). San Francisco, CA: Jossey-Bass.
- Brislin, R. W. (1986). The wording and translation of research instruments. In W. J. Lonner & J. W. Berry (Eds.), *Field methods in cross-cultural research* (pp. 137–164). Beverly Hills, CA: Sage.
- Brown, M. E., & Mitchell, M. S. (2010). Ethical and unethical leadership: Exploring new avenues for future research. *Business Ethics Quarterly*, 20, 583–616. <http://dx.doi.org/10.5840/beq201020439>
- Brown, M. E., & Treviño, L. K. (2006). Ethical leadership: A review and future directions. *The Leadership Quarterly*, 17, 595–616. <http://dx.doi.org/10.1016/j.leaqua.2006.10.004>
- Brown, M. E., Treviño, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behavior and Human Decision Processes*, 97, 117–134. <http://dx.doi.org/10.1016/j.obhdp.2005.03.002>
- Bryk, A. S., & Raudenbush, S. W. (1992). *Hierarchical linear models: Applications and data analysis methods*. Thousand Oaks, CA: Sage

- Carton, A. M., Murphy, C., & Clark, J. R. (2014). A (blurry) vision of the future: How leader rhetoric about ultimate goals influences performance. *Academy of Management Journal*, 57, 1544–1570. <http://dx.doi.org/10.5465/amj.2012.0101>
- Carver, C. S. (2009). Threat sensitivity, incentive sensitivity, and the experience of relief. *Journal of Personality*, 77, 125–138. <http://dx.doi.org/10.1111/j.1467-6494.2008.00540.x>
- Chen, A. S.-Y., & Hou, Y.-H. (2016). The effects of ethical leadership, voice behavior and climates for innovation on creativity: A moderated mediation examination. *The Leadership Quarterly*, 27, 1–13. <http://dx.doi.org/10.1016/j.leaqua.2015.10.007>
- Chen, M., Chen, C. C., & Sheldon, O. J. (2016). Relaxing moral reasoning to win: How organizational identification relates to unethical pro-organizational behavior. *Journal of Applied Psychology*, 101, 1082–1096. <http://dx.doi.org/10.1037/apl0000111>
- Chua, R. Y. (2013). The costs of ambient cultural disharmony: Indirect intercultural conflicts in social environment undermine creativity. *Academy of Management Journal*, 56, 1545–1577. <http://dx.doi.org/10.5465/amj.2011.0971>
- Derfler-Rozin, R., Baker, B., & Gino, F. (2018). Compromised ethics in hiring processes? How referrers' power affects employees' reactions to referral practices. *Academy of Management Journal*, 61, 2. <http://dx.doi.org/10.5465/amj.2015.1355>
- Dittmar, H. (1992). *The social psychology of material possessions: To have is to be*. Hemel Hempstead, England: Harvester Wheatsheaf.
- Eisenberger, R., Fasolo, P., & Davis-LaMastro, V. (1990). Perceived organizational support and employee diligence, commitment, and innovation. *Journal of Applied Psychology*, 75, 51–59. <http://dx.doi.org/10.1037/0021-9010.75.1.51>
- Erez, A., Schilpzand, P., Leavitt, K., Woolum, A. H., & Judge, T. A. (2015). Inherently relational: Interactions between peers' and individuals' personalities impact reward giving and appraisal of individual performance. *Academy of Management Journal*, 58, 1761–1784. <http://dx.doi.org/10.5465/amj.2011.0214>
- Feng, J., Zhang, Y., Liu, X., Zhang, L., & Han, X. (2018). Just the right amount of ethics inspires creativity: A cross-level investigation of ethical leadership, intrinsic motivation, and employee creativity. *Journal of Business Ethics*, 153, 645–658. <http://dx.doi.org/10.1007/s10551-016-3297-1>
- Florida, R., & Goodnight, J. (2005). Managing for creativity. *Harvard Business Review*, 83, 124–131.
- Fredrickson, B. L. (1998). What good are positive emotions? *Review of General Psychology*, 2, 300–319. <http://dx.doi.org/10.1037/1089-2680.2.3.300>
- Fredrickson, B. L., Mancuso, R. A., Branigan, C., & Tugade, M. M. (2000). The undoing effect of positive emotions. *Motivation and Emotion*, 24, 237–258. <http://dx.doi.org/10.1023/A:1010796329158>
- George, J. M. (2007). Creativity in organizations. *The Academy of Management Annals*, 1, 439–477. <http://dx.doi.org/10.5465/078559814>
- George, J. M., & Zhou, J. (2001). When openness to experience and conscientiousness are related to creative behavior: An interactional approach. *Journal of Applied Psychology*, 86, 513–524. <http://dx.doi.org/10.1037/0021-9010.86.3.513>
- Gino, F., & Ariely, D. (2012). The dark side of creativity: Original thinkers can be more dishonest. *Journal of Personality and Social Psychology*, 102, 445–459. <http://dx.doi.org/10.1037/a0026406>
- Gino, F., & Willemuth, S. S. (2014). Evil genius? How dishonesty can lead to greater creativity. *Psychological Science*, 25, 973–981. <http://dx.doi.org/10.1177/0956797614520714>
- Griffin, M. A., Neal, A., & Parker, S. K. (2007). A new model of work role performance: Positive behavior in uncertain and interdependent contexts. *Academy of Management Journal*, 50, 327–347. <http://dx.doi.org/10.5465/amj.2007.24634438>
- Griskevicius, V., Cialdini, R. B., & Kenrick, D. T. (2006). Peacocks, Picasso, and parental investment: The effects of romantic motives on creativity. *Journal of Personality and Social Psychology*, 91, 63–76. <http://dx.doi.org/10.1037/0022-3514.91.1.63>
- Guilford, J. P. (1968). *Intelligence, creativity, and their educational implications*. New York, NY: Knapp.
- Hannah, S. T., & Avolio, B. J. (2010). Moral potency: Building the capacity for character-based leadership. *Consulting Psychology Journal*, 62, 291–310. <http://dx.doi.org/10.1037/a0022283>
- Hannah, S. T., Avolio, B. J., & May, D. R. (2011). Moral maturation and moral conation: A capacity approach to explaining moral thought and action. *Academy of Management Review*, 36, 663–685.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: Guilford Press.
- Hobfoll, S. E. (1988). *The ecology of stress*. Washington, DC: Hemisphere.
- Hobfoll, S. E. (1989). Conservation of resources. A new attempt at conceptualizing stress. *American Psychologist*, 44, 513–524. <http://dx.doi.org/10.1037/0003-066X.44.3.513>
- Hofmann, D. A., & Gavin, M. B. (1998). Centering decisions in hierarchical linear models: Implications for research in organizations. *Journal of Management*, 24, 623–641. <http://dx.doi.org/10.1177/014920639802400504>
- Isen, A. M. (1987). Positive affect, cognitive processes, and social behavior. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 20, pp. 203–253). San Diego, CA: Academic Press. [http://dx.doi.org/10.1016/S0065-2601\(08\)60415-3](http://dx.doi.org/10.1016/S0065-2601(08)60415-3)
- James, L. R., Demaree, R. G., & Wolf, G. (1984). Estimating within-group interrater reliability with and without response bias. *Journal of Applied Psychology*, 69, 85–98. <http://dx.doi.org/10.1037/0021-9010.69.1.85>
- Janssen, O. (2001). Fairness perceptions as a moderator in the curvilinear relationships between job demands, and job performance and job dissatisfaction. *Academy of Management Journal*, 44, 1039–1050.
- Katz, D., & Kahn, R. L. (1978). *The social psychology of organizations* (2nd ed.). New York, NY: Wiley.
- Keem, S., Shalley, C. E., Kim, E., & Jeong, I. (2018). Are creative individuals bad apples? A dual pathway model of unethical behavior. *Journal of Applied Psychology*, 103, 416–431. <http://dx.doi.org/10.1037/apl0000290>
- Leavitt, K., Qiu, F., & Shapiro, D. L. (2019). Using electronic confederates for experimental research in organizational science. *Organizational Research Methods*. Advance online publication. <http://dx.doi.org/10.1177/1094428119889136>
- LeBreton, J. M., & Senter, J. L. (2008). Answers to 20 questions about interrater reliability and interrater agreement. *Organizational Research Methods*, 11, 815–852. <http://dx.doi.org/10.1177/1094428106296642>
- Liao, H., & Chuang, A. (2007). Transforming service employees and climate: A multilevel, multisource examination of transformational leadership in building long-term service relationships. *Journal of Applied Psychology*, 92, 1006–1019. <http://dx.doi.org/10.1037/0021-9010.92.4.1006>
- Liu, D., Chen, X. P., & Yao, X. (2011). From autonomy to creativity: A multilevel investigation of the mediating role of harmonious passion. *Journal of Applied Psychology*, 96, 294–309. <http://dx.doi.org/10.1037/a0021294>
- Mayer, D. M., Aquino, K., Greenbaum, R. L., & Kuenzi, M. (2012). Who displays ethical leadership, and why does it matter? An examination of antecedents and consequences of ethical leadership. *Academy of Management Journal*, 55, 151–171. <http://dx.doi.org/10.5465/amj.2008.0276>
- Mayer, D. M., Kuenzi, M., Greenbaum, R., Bardes, M., & Salvador, R. B. (2009). How low does ethical leadership flow? Test of a trickle-down

- model. *Organizational Behavior and Human Decision Processes*, 108, 1–13. <http://dx.doi.org/10.1016/j.obhdp.2008.04.002>
- McCrae, R. R., & Costa, P. T. (2003). *Personality in adulthood: A five factor theory perspective*. New York, NY: Guilford Press.
- McShane, B. B., & Böckenholt, U. (2017). Single paper meta-analysis: Benefits for study summary, theory-testing, and replicability. *Journal of Consumer Research*, 43, 1048–1063. <http://dx.doi.org/10.1093/jcr/ucw085>
- Mednick, S. A. (1962). The associative basis of the creative process. *Psychological Review*, 69, 220–232. <http://dx.doi.org/10.1037/h0048850>
- Neubert, M. J., Carlson, D. S., Kacmar, K. M., Roberts, J. A., & Chonko, L. B. (2009). The virtuous influence of ethical leadership behavior: Evidence from the field. *Journal of Business Ethics*, 90, 157–170. <http://dx.doi.org/10.1007/s10551-009-0037-9>
- Ng, T. W., & Feldman, D. C. (2015). Ethical leadership: Meta-analytic evidence of criterion-related and incremental validity. *Journal of Applied Psychology*, 100, 948–965. <http://dx.doi.org/10.1037/a0038246>
- Ng, T. W. H., & Yam, K. C. (2019). When and why does employee creativity fuel deviance? Key psychological mechanisms. *Journal of Applied Psychology*, 104, 1144–1163. <http://dx.doi.org/10.1037/apl0000397>
- Pierce, J. L., Kostova, T., & Dirks, K. T. (2003). The state of psychological ownership: Integrating and extending a century of research. *Review of General Psychology*, 7, 84–107. <http://dx.doi.org/10.1037/1089-2680.7.1.84>
- Podsakoff, P. M., & MacKenzie, S. B. (1989). *A second generation measure of organizational citizenship behavior* (Unpublished manuscript). Indiana University, Bloomington, IN.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879–903. <http://dx.doi.org/10.1037/0021-9010.88.5.879>
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, 42, 185–227. <http://dx.doi.org/10.1080/00273170701341316>
- Roskes, M., De Dreu, C. K., & Nijstad, B. A. (2012). Necessity is the mother of invention: Avoidance motivation stimulates creativity through cognitive effort. *Journal of Personality and Social Psychology*, 103, 242–256. <http://dx.doi.org/10.1037/a0028442>
- Rousseau, D. M. (1998). The “problem” of the psychological contract reconsidered. *Journal of Organizational Behavior*, 19, 665–671.
- Saucier, G. (1994). Mini-markers: A brief version of Goldberg’s unipolar Big-Five markers. *Journal of Personality Assessment*, 63, 506–516.
- Schaubroeck, J. M., Hannah, S. T., Avolio, B. J., Kozlowski, S. W. J., Lord, R. G., Treviño, L. K., . . . Peng, A. C. (2012). Embedding ethical leadership within and across organizational levels. *Academy of Management Journal*, 55, 1053–1078. <http://dx.doi.org/10.5465/amj.2011.0064>
- Schilpzand, P., Leavitt, K., & Lim, S. (2016). Incivility hates company: Shared incivility attenuates rumination, stress, and psychological withdrawal by reducing self-blame. *Organizational Behavior and Human Decision Processes*, 133, 33–44. <http://dx.doi.org/10.1016/j.obhdp.2016.02.001>
- Schwepker, C. H., Jr. (2001). Ethical climate’s relationship to job satisfaction, organizational commitment, and turnover intention in the sales force. *Journal of Business Research*, 54, 39–52. [http://dx.doi.org/10.1016/S0148-2963\(00\)00125-9](http://dx.doi.org/10.1016/S0148-2963(00)00125-9)
- Shalley, C. E., Zhou, J., & Oldham, G. R. (2004). The effects of personal and contextual characteristics on creativity: Where should we go from here? *Journal of Management*, 30, 933–958. <http://dx.doi.org/10.1016/j.jm.2004.06.007>
- Sternberg, R. J., & Lubart, T. I. (1999). The concept of creativity: Prospects and paradigms. In R. J. Sternberg (Ed.), *Handbook of creativity* (Vol. 1, pp. 3–15). New York, NY: Cambridge University Press.
- Stouten, J., van Dijke, M., Mayer, D. M., De Cremer, D., & Euwema, M. C. (2013). Can a leader be seen as too ethical? The curvilinear effects of ethical leadership. *The Leadership Quarterly*, 24, 680–695. <http://dx.doi.org/10.1016/j.leaqua.2013.05.002>
- Treviño, L. K., Brown, M. E., & Hartman, L. P. (2003). A qualitative investigation of perceived executive ethical leadership: Perceptions from inside and outside the executive suite. *Human Relations*, 56, 5–37. <http://dx.doi.org/10.1177/0018726703056001448>
- Treviño, L. K., den Nieuwenboer, N. A., & Kish-Gephart, J. J. (2014). (Un)ethical behavior in organizations. *Annual Review of Psychology*, 65, 635–660. <http://dx.doi.org/10.1146/annurev-psych-113011-143745>
- Treviño, L. K., Weaver, G. R., & Reynolds, S. J. (2006). Behavioral ethics in organizations: A review. *Journal of Management*, 32, 951–990. <http://dx.doi.org/10.1177/0149206306294258>
- Van Yperen, N. W., & Hagedoorn, M. (2003). Do high job demands increase intrinsic motivation or fatigue or both? The role of job control and job social support. *Academy of Management Journal*, 46, 339–348.
- Welbourne, T. M., Johnson, D. E., & Erez, A. (1998). The role-based performance scale: Validity analysis of a theory-based measure. *Academy of Management Journal*, 41, 540–555.
- Woodman, R. W., & Schoenfeldt, L. F. (1989). Individual differences in creativity: An interactionist perspective. In J. A. Glover, R. R. Ronning, & C. R. Reynolds (Eds.), *Handbook of creativity* (pp. 77–91). New York, NY: Plenum Press. http://dx.doi.org/10.1007/978-1-4757-5356-1_4
- Woodman, R. W., & Schoenfeldt, L. F. (1990). An interactionist model of creative behavior. *The Journal of Creative Behavior*, 24, 279–290. <http://dx.doi.org/10.1002/j.2162-6057.1990.tb00549.x>
- Zheng, X., Qin, X., Liu, X., & Liao, H. (2019). Will creative employees always make trouble? Investigating the roles of moral identity and moral disengagement. *Journal of Business Ethics*, 157, 653–672. <http://dx.doi.org/10.1007/s10551-017-3683-3>
- Zhou, J., & George, J. M. (2001). When job dissatisfaction leads to creativity: Encouraging the expression of voice. *Academy of Management Journal*, 44, 682–696.
- Zhou, J., & Hoever, I. J. (2014). Research on workplace creativity: A review and redirection. *Annual Review of Organizational Psychology and Organizational Behavior*, 1, 333–359. <http://dx.doi.org/10.1146/annurev-orgpsych-031413-091226>
- Zhou, J., & Shalley, C. E. (2003). Research on employee creativity: A critical review and directions for future research. In J. J. Martocchio & G. R. Ferris (Eds.), *Research in personnel and human resources management* (Vol. 22, pp. 165–217). Oxford, UK: Elsevier Science Ltd. [http://dx.doi.org/10.1016/S0742-7301\(03\)22004-1](http://dx.doi.org/10.1016/S0742-7301(03)22004-1)

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