

Trickle-Down Effects of Perceived Leader Integrity on Employee Creativity: A Moderated Mediation Model

He Peng¹ · Feng Wei²

Received: 14 September 2015 / Accepted: 22 May 2016
© Springer Science+Business Media Dordrecht 2016

Abstract This study explored the relationship between the integrity of the supervisor and the manager (i.e., the supervisor's immediate superior) and the creativity of employees who are below the supervisor. Drawing on social learning theory, we proposed a moderated mediation model for the trickle-down effects of perceived supervisor integrity. Using a sample of 716 employees and their supervisors, we found positive associations between both managers' and supervisors' integrity and employee creativity. Supervisors' integrity partially mediates the relationship between managers' integrity and employee creativity. In addition, supervisors' perceptions of professional ethical standards moderate the indirect effects of the managers' integrity on employee creativity. Theoretical and managerial implications are discussed.

Keywords Employee creativity · Leader integrity · Professional ethical standards · Social learning · Trickle-down

Introduction

Over the past decades, the far-reaching effects of an increasing number of business scandals (e.g., Enron, WorldCom) and the more recent global financial crisis of 2006–2009 have repeatedly highlighted the importance of ethical practices in corporations (Brenker 2010). During the recent financial crisis, nearly 26 million people in the US were out of work and US\$11 trillion of wealth disappeared (Dallas 2012). As leaders typically set the standards for behavior in the workplace and then create situations and cultures that influence employee and organizational outcomes, people usually attribute scandals and unethical behavior in corporations to the lack of leader integrity, both at the upper management level and at the lower work team level (Sims and Brinkmann 2002).

Scholars have demonstrated that leader integrity is not only effective in preventing ethical meltdowns in organizations (Sims and Brinkmann 2003), but is also the key to leadership and organizational effectiveness and growth (Kannan-Narasimhan and Lawrence 2012). Studies have shown that leader integrity is positively related to subordinates' positive attitudes (e.g. organizational commitment, job satisfaction, and well-being. See Simons et al. 2015; Davis and Rothstein 2006; Prottas 2008, 2013), organizational citizenship behavior (e.g. Dineen et al. 2006), and performance (e.g. Simons et al. 2015; Palanski and Yammarino 2011; Leroy et al. 2012b), and negatively related to subordinates' tendencies toward deviant behavior (e.g. Dineen et al. 2006) and absenteeism (Prottas 2008). One study even found that integrity is the single best predictor of ratings of trust in leaders (Morgan 1989).

However, empirical research on leader integrity is in its infancy. Integrity is a new and promising area for research (Simons et al. 2011). The relationship between leader

He Peng and Feng Wei have contributed equally to this project, and thus the order of authorship is alphabetical.

✉ Feng Wei
fwei@tongji.edu.cn

He Peng
fdpenghe@gmail.com

¹ Department of Business Administration, Fudan University, Shanghai, China

² Department of Business Administration, Tongji University, Shanghai, China

integrity and employee creativity has rarely been discussed. Today's organizations heavily depend on creative ideas from employees to build a competitive edge as work becomes increasingly knowledge-based and dynamic (George 2007). Scholars and practitioners share a strong interest in understanding how leadership fosters or prohibits employee creativity (Hennessey and Amabile 2010). Therefore, it is of both theoretical and empirical importance to illuminate the influence of leader integrity—an axiomatic characteristic of effective leadership (Simons 2002; Palanski and Yammarino 2009)—on employee creativity as well as the buffering factors for this influence. Thus, the first purpose of this study is to integrate and extend research on leadership and creativity to investigate whether leader integrity fosters employee creativity in teams.

In addition, regardless of the management level, the atmosphere or culture that a leader sets has an effect on the behavior of his/her followers (White and Lean 2008). The integrity of leaders at all levels of a hierarchy is critical for overall organizational health and reputation (Kannan-Narasimhan and Lawrence 2012; Simons et al. 2007). As an emerging perspective, the cascading effect of role modeling from higher-level leaders to lower-level leaders has received considerable empirical support in the leadership literature (e.g. Mayer et al. 2009). For example, Liu et al. (2012) demonstrated that department leader abusive supervision triggers team leader abusive supervision and subsequently influences employee creativity. Social learning theory (SLT) provides a solid rationale for this trickle-down effect, whereby leaders at a lower level of a hierarchy may mimic and display the behavior of leaders at a higher hierarchical level. Thus, a second purpose of this study is to extend the idea that leader integrity may have a cascading effect, and to investigate whether supervisor integrity may be a function of manager integrity.¹ Specifically, we test a trickle-down model to investigate how perceived integrity flows from managers to supervisors and eventuates in employee creativity.

Researchers have identified individual and contextual characteristics that enhance or limit the trickle-down effect of leadership (e.g. Liu et al. 2012). In their review on leader integrity, Simons et al. (2013) suggested that an important future research direction would be to consider more deeply the role of follower expectations and values. In this study, we examine how supervisors' perceived professional

ethical standards influence the relationship between manager and supervisor integrity. We argue that professional ethical standards may increase the value salience of leader integrity and thus the sensitiveness of the observer to the actor. Thus, we expect that those supervisors who perceive a higher level of professional ethical standards are more likely to respect, like, and take their leaders who are high in integrity as their role models than those who perceive low professional ethical standards. Hence, we propose a moderating effect of perceived professional ethical standards on the link between higher-level leader integrity and lower-level leader integrity. In sum, we test a moderated mediation model in this study. The research framework is shown in Fig. 1.

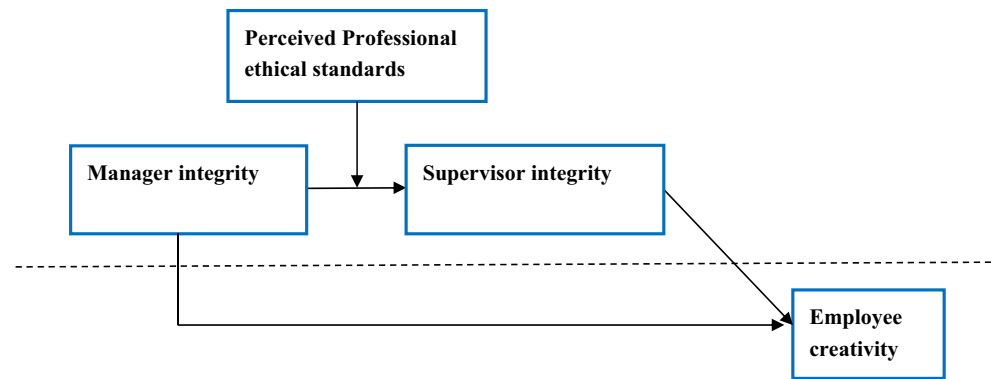
In this study, we build and test a multi-level theoretical model of the relationship between leader integrity and employee creativity. Our findings make three unique contributions to the literature on leader integrity and creativity. First, we offer an original empirical test of whether higher-level and lower-level leader integrity exerts a positive effect on employee creativity. Although Palanski and Vogelgesang (2011) once mentioned that leader integrity may correlate with tendencies to think creatively, they did not directly and rigorously examine/hypothesize and test this relationship. They also did not measure employee creativity directly, but only use four personality items to measure tendencies to think. This empirical test is important because it can advance our understanding of the relationship between leader integrity and creativity.

Second, we build a trickle-down model and investigate how leader integrity flows down through an organizational hierarchy from higher-level managers to lower-level managers, and manifests in employee creativity. Although Simons et al. (2007) found a positive correlation between higher-level and lower-level leader integrity, they did not examine how the higher-level leader integrity influences the distant follower behavior nor tested the cascading model fully. They only employed the regression between the two levels of leader integrity. Our multi-level examination of leader integrity on creativity is important because it can help us to understand how leader integrity at different hierarchical levels affects employee behavior.

Third, we extend the current leader integrity theories by demonstrating the contingent role of perceived professional ethical standards in the diffusion of leader integrity down the organizational hierarchy. Simons (2002) suggested that the salience of the espoused value or behavior pattern will moderate the impact of leader actual integrity on outcomes. On the basis of Simons' (2002) theorization, we further argue professional ethical standards, important values espoused by the profession and community, will increase the salience of leader integrity, and subsequently influence the impact of leader integrity on outcomes. This study

¹ In this paper, we labeled three hierarchical levels as manager, supervisor, and employee in accordance with Mawritz et al. (2012) usage. Specifically, the term supervisor refers to front-line managers who hold in lower-level management positions. The term employee refers to the supervisor's subordinates who report to the supervisor and typically at the lowest level in the company. The term manager refers to the supervisor's immediate boss.

Fig. 1 Research framework.
Note Manager here refers to the supervisor's boss



showed that not only managers' integrity is important, but also professional ethical standards (i.e., values espoused by the profession and community) and the alignment between managers' integrity and professional ethical standards (i.e., alignment between the values enacted by the manager and the values espoused by the profession and community) are important for role modeling to occur. Therefore, this study may contribute to the literature by describing a more fine-grained picture for how leader integrity is socially learned.

Theoretical Background and Hypotheses

Leader Integrity

In leadership literature, integrity has been regarded as a key component of theories on transformational leadership (Bass and Steidlmeier 1999), ethical leadership (Brown et al. 2005), authentic leadership (Avolio and Gardner 2005), spiritual leadership (Fry 2003), and implicit leadership (Lord et al. 1984). Just as Palanski and Yammarino (2007) argued, one of the main problems in integrity literature is "the confusion and disagreement" about the definition of integrity (p.171). Two perspectives are usually adopted by scholars. The first perspective defines integrity as a specific perception of the consistency between a leader's words and deeds. This is labeled behavioral integrity (Simons 1999; 2002). For example, Simons (2002) defined behavioral integrity as "the perceived pattern of alignment between an actor's words and deeds" (p. 19). Palanski and Yammarino (2007) posited integrity as an adjunctive virtue and defined it as the "consistency of an acting entity's words and actions" (p. 17). Behavioral integrity is thought to be focused, narrow, and easily operationalized (Palanski and Yammarino 2011). Note this perspective has no requirement that the words and deeds are moral.

The second perspective defines integrity as a general description of moral and ethical behavior. For example, Becker (1998) defined integrity as "commitment in action

to a morally justified set of principles and values" (p. 157). Following this logic, Craig and Gustafson (1998) created a scale to measure perceived leader integrity. Their items mainly measure the absence of unethical behavior. Compared to behavioral integrity, moral integrity does not require the actor to voice their values, but rather the values reflected in their actions are ethical. In contrast, behavioral integrity emphasizes the consistency between words and actions, but does not require the ethical content of values.

Neither perspective describes integrity completely. On the one hand, behavioral integrity emphasizes only the consistency of words and deeds, and does not require the words and deeds to be moral. Bauman (2013) once reviewed the historical, philosophical, and business discussions on integrity and argued that "abandoning the ethical meaning of integrity goes far beyond common usage and is not helpful to those who want to study integrity as a moral concept" (p. 424). He argued that we should avoid "a single, non-moral definition of integrity" (p. 418), and proposed the pursuit of moral integrity research. On the other hand, moral integrity has some overlap with ethical leadership (Bauman 2013).

Therefore, some scholars have begun to combine the two perspectives. For example, Mayer et al. (1995) combined both perspectives and defined integrity as "the trustor's perception that the trustee adheres to a set of principles that the trustor find acceptable" (p. 719). This definition is consistent with Merriam-Webster's Collegiate Dictionary (2003), which defined integrity as "firm adherence to a code of especially moral or artistic values." In line with this view and drawing on attribution theory and implicit leadership theory, Moorman et al. (2013) used a follower perspective and defined perceived leader integrity as "a multidimensional construct capturing both perceptions that the leader holds moral values and professes and enacts those values with an exceedingly high degree of consistency" (p. 19). They argued that leader integrity includes three dimensions: moral behavior, behavioral integrity, and consistency across situations. Moral behavior

refers to ethical behavior reflecting morals. Behavioral integrity refers to the alignment between enacted and espoused words/values. Consistency across situations refers to the alignment of contexts, especially consistency when leader's values are challenged.

In this study, we used the definition provided by Moorman et al. (2013) for several reasons. First, this definition is consistent with common usage in daily life and integrates both important perspectives. Second, it differentiates integrity from other constructs, such as ethical leadership. Third, based on their theoretical definition, Moorman et al. (2013) develop a scale to measure perceived leader integrity. Some scholars even argue that it may become "a dominant instrument in future leader integrity research" (Simons et al. 2013, p. 393).

Leader Integrity and Employee Creativity

Although leaders are traditionally thought to influence employee creativity (e.g. Amabile et al. 2004; Liao et al. 2010), few studies have investigated the effect of leader integrity on creativity. Creativity, defined as the development of novel and useful ideas about products, practices, services, or procedures (Amabile et al. 1996), has become increasingly important for the survival and competitiveness of organizations in this rapidly changing knowledge economy era. The importance of creativity and innovation in manufacturing sections cannot be emphasized enough.

Creativity is a risky endeavor for individuals (e.g. Janssen 2003). Previous studies have demonstrated that providing freedom to speculate (e.g. Robinson 2001), supervisory support (e.g. Mumford et al. 2002), and tolerance of mistakes or failure (Leonard and Swap 2002) are key situational factors to facilitate creativity in organizations. We argue that leaders who are high in integrity are the creators of the above situations. Since leader integrity mainly includes moral integrity and behavioral integrity (Moorman et al. 2013), we discuss how leader integrity influences employee creativity from the two perspectives.

From a moral perspective, integrity is a virtue, which is synonymous with honesty, socialized responsibility, and trustworthiness (Peterson and Seligman 2004; Winter and Barenbaum 1985; Ones et al. 1993). Moral integrity is associated with moral behavior or ethical behavior. We believe that leader moral integrity is related to employee creativity for several reasons.

First, leader moral integrity means being reliable (Peterson and Seligman 2004; Hoch 2013). Employees can have a quite stable expectation about the leader's response if the leader is high in reliability. Reliability is important for fostering creativity because followers will believe that if they contribute to creative performance they will be rewarded in return. In addition, followers are more likely to

contribute to creative performance in order to reciprocate to leaders who are reliable according to social exchange rules.

Second, moral integrity means trustworthiness (Peterson and Seligman 2004; Winter and Barenbaum 1985; Ones et al. 1993). If a leader is high in trustworthiness, followers are more willing to interact with him/her, share information (Ma et al. 2013), feel safe to take risk, and subsequently willing to put new ideas. Thus, mutual trust and respect can be easily developed between leaders with high moral integrity and their followers (Mayer et al. 1995).

Third, leaders with high integrity are found to be open, justice, and empathetic (Palanski and Yammarino 2007), therefore, they are more likely to evaluate their subordinates' new ideas favorably (Zhou and Woodman 2003) and are less likely to punish employees for unconventional ideas or failed innovations. They will shape a climate and culture, which does not punish failure or risk taking, but encourages people to challenge ideas. In part support of these reasoning, corporate ethical values (Valentine et al. 2011) and ethical leadership (Ma et al. 2013) are found to be positively related to employee creativity.

From a behavioral perspective, integrity refers to consistency between words and deeds, even in the face of adversity (Moorman et al. 2013). The leader alignment between word and deeds will send unequivocal and clear messages about what is valued to followers. Thus, leaders with high integrity will create an unambiguous and consistent environment, in which employees can focus on their own intrinsic motivation and creative contribution without worrying about environmental concerns (Leroy et al. 2012a). Empirically, Lee et al. (2004) have shown that inconsistency in organization contexts can inhibit experimentation behavior which is critical for organization innovation, because inconsistency may create uncertainty or ambiguity in which individuals do not know "which factor (e.g., normative values or instrumental rewards) will shape the organization's response to their actions" (p.312). Previous studies also have demonstrated that role ambiguity can lead to hindrance-oriented stress and negative affection, subsequently hamper creativity (e.g., Hon et al. 2013). Along the same logic, Simons et al. (2015) in their meta-analysis found that behavioral integrity can increase employee performance directly via the mechanism of communication clarity, which can reduce role ambiguity.

In addition, alignment between words and deeds can also make the leader more predictable and signal the leader is reliable and trustworthy (Simons 2002). As such, those leaders who are high in behavioral integrity may also provide a highly open, mutual-trust, supporting, and safe working environment just as those who are high in moral integrity. Empirically, employees whose leaders are high in behavioral integrity are found to be more likely to trust

their leaders (Simons et al. 2007; Kannan-Narasimhan and Lawrence 2012; Simons et al. 2015), accept the risk of being criticized (Simons, et al. 2007), admit personal mistakes (Leroy et al. 2012), and intend to think creatively (Palanski and Vogelgesang (2011)). Therefore, it is reasonable to believe that leader behavioral integrity will also be positively related to employee creativity.

Hence, drawing the above discussions about the impacts of leader moral and behavioral integrity on employee creativity, we propose:

Hypothesis 1 The integrity of supervisors and managers will be positively associated with employee creativity.

The Trickle-down Effect of Leader Integrity in Organizational Hierarchy

To explain why people think and behave as they do, SLT (Bandura 1971) emphasizes the importance of observing and modeling the behavior, attitudes, and emotional reactions of others. Bandura (1971) argued that “most of the behaviors that people display are learned, either deliberately or inadvertently, through the influence of example” (p.5). Role modeling has been considered a key mechanism for leadership learning. In fact, role modeling has been discussed in some major leadership theories (e.g. charismatic leadership, transformational leadership, and ethical leadership. See Mayer et al. 2009; Bass et al. 1987). For example, Brown et al. (2005) argued that leaders may win ethical followers by intentionally acting as a role model and using reward systems as incentives for ethical behavior. Thus, extending the same logic of the trickle-down effect of leaders’ behavior (e.g. Mayer et al. 2009, Liu et al. 2012), we could argue that those leaders with higher-level integrity are more likely to attract followers with higher-level integrity.

According to SLT, observational learning consists of four components: attention, retention, motor reproduction, and motivation. Bandura (1969) identified three factors that affect responsiveness to modeling influences. The first factor is model characteristics. Individuals are more likely to imitate those with high status and power than models of low standing and power. Studies have shown that those who have demonstrated high competence, and who have high status, prestige, and power are imitated to a considerably greater degree than those who lack these qualities (Bandura 1971). Upper-level managers usually have higher status and power, and are often respected in organizations because they are in charge of the allotment of organizational resources. Thus, lower-level managers and employees are inclined to observe their leaders’ behavior and imitate the upper managers (Mayer et al. 2009).

The second factor is the attributes of the observer. People “who lack self-esteem, who feel incompetent, and

who are highly dependent are especially prone to pattern their behavior after successful models” (Bandura 1971, p. 19). Compared to upper leaders, first-line managers usually lack experience or abilities in some areas. Thus, first-line managers who want to improve themselves are more inclined to learn from their supervisors. In addition, individuals are more likely to imitate modeled behavior if the character of the model is similar to that of the observer. Compared with the subordinates who are low in integrity, those who are high in integrity are more likely to imitate their leaders. According to the Attraction-Selection-Attrition model (Schneider 1983; Schneider et al. 1995), those subordinates who are low in integrity will leave (voluntarily or involuntarily) over time if their leaders are high in integrity.

The third factor is the consequences associated with matching behavior. The functional value of modeled behavior is a very important factor. In particular, those who have been frequently rewarded for imitative behavior tend to imitate the models (Bandura 1971). Bandura (1971) even argued that this factor may override the influence of either model or observer characteristics. A leader can influence a follower’s integrity by setting a reinforcement mechanism for integrity. A manager who is high in integrity would prefer working with followers who behave with integrity, and subsequently send signals to indicate this preference. For example, a leader might publicly praise a subordinate’s integrity, or add integrity as a criterion for promotion. In addition, a manager with high integrity will usually set an “integrity tone” or climate in his organization or department. This norm or climate can set clear expectations and provide a reward and punishment system for integrity or lack thereof (Grojean et al. 2004). Therefore, via group norms for integrity, supervisors are encouraged to imitate their managers’ integrity (Palanski and Yammarino 2009). When supervisors observe their managers exhibiting integrity in the workplace, they recognize that it is acceptable to do so. In contrast, when supervisors observe unethical behavior from their managers, they may conclude that integrity is not the norm in their departments.

Taking the discussion above, we argue that the integrity of managers would likely be positively correlated with the integrity of supervisors. Empirically, Palanski and Yammarino (2011) have shown that leader behavioral integrity is positively related to follower behavioral integrity. Simons et al. (2007) also found that upper managers’ behavioral integrity can trickle down to middle managers. Hence, we propose:

Hypothesis 2 Managers’ integrity will be positively related to supervisors’ integrity.

Although both supervisors and managers can influence employees’ behavior (Amabile et al. 2004), the ways such

influence is exerted may be different. In the hierarchy of an organization, both managers and supervisors may interact with employees. Since the importance of creativity and innovation in manufacturing section is increasingly emphasized in this turbulent economy, almost all managers including top managers and first-line managers might involve innovation-related activities, such as knowledge exchange, new product improvement, and quality and procedure improvement.

However, due to the leader–follower distance is different (Chun et al. 2009), the nature and amount of interactions between managers (i.e., distant leaders) and employees (i.e., distant followers) will be different from those of interactions between supervisors (i.e., close leaders) and employees (i.e., close followers). Employees usually interact with their direct supervisors more frequently and more intimately than with their distant leaders (i.e., managers) (Weaver et al. 2005). Hierarchically close leaders are usually responsible for training, supporting, mentoring, appraising, and rewarding employees. In contrast, the interactions between managers and employees will be characterized by less personal relevance, low frequency of face-to-face communication, and less direct contact (Chun et al. 2009). Hence, compared to supervisors, managers are more likely to influence employee behavior indirectly.

A possible indirect influence mechanism by which managers can influence employees is via his immediate followers (i.e., supervisors) who are also the immediate leaders for the employees. Just as we discussed above, manager integrity may cascade down to supervisors because supervisors will desire to idolize and imitate their managers' behaviors. In addition, if a higher-level manager makes policies or wants to establish a value system or culture in his organization or department, he/she heavily relies on direct supervisors to enact his decisions. Immediate supervisors are usually viewed as representatives or surrogates of larger organizational processes (Kozlowski and Doherty 1989). Therefore, managers' integrity may influence employee creativity indirectly via supervisors. The above reasoning is supported by an increasing amount of empirical evidence. For example, Mayer et al. (2009) found that the effects of top management ethical leadership on employee deviance and organizational citizenship behavior are mediated by supervisory ethical leadership. Liu et al. (2012) found that team leader abusive supervision mediates the cross-level relationship between department leader abusive supervision and employee creativity.

However, except exerting their influence via supervisors, higher-level managers may impact distant followers at collective-level through other direct or indirect ways. That is, higher-level managers may exert their influence toward all followers as a whole (Chun et al. 2009). For example,

organization leaders are usually the subject of organizational stories, myths, and rituals which are important ways to shape organizational culture. Therefore, the audience including not only their direct followers but also distant followers can mimic their actions and values as a role model (Grojean et al. 2004; Waldman and Yammarino 1999). Besides set the example, higher-level managers can also influence employees by other ways such as establishing policies that set clear expectations in their departments, using values-based leadership, and being aware of individual differences among subordinates (Grojean et al. 2004).

In addition, since more and more companies emphasize flexible, team-based, and flattening design to correspond turbulent competition environment, higher-level managers also increase direct interactions with employees (Felekoglu and Moultrie 2014). For example, higher-level managers may participate in product development team meetings when the project is at important stage gates (Kleinschmidt et al. 2007). They involve the concrete innovation activities more than just indirect tasks such as providing access to resources (Kleinschmidt et al. 2007).

Therefore, taking the discussion above, we argue that managers' integrity will influence employee creativity only partly through supervisors' integrity. Hence, we propose:

Hypothesis 3 The supervisor's integrity partially mediates the cross-level relationship between the manager's integrity and employee creativity.

The Contingent Effects of Perceived Professional Ethical Standards

Professional ethical standards refer to the values expected of members of a profession (Valentine and Fleischman 2008). Once professional and organizational standards form, they regulate community members' conduct (DiMaggio and Powell 1991). The ethical standards of profession will likely influence the personal ethical values that are acquired and acted upon (Grojean et al. 2004). The most visible and explicit communication path through which professional ethical standards influence community members' conduct is professional codes. Frankel (1989) argued that professional ethical codes represent the moral norms that ought to govern professional behavior. He identified three elements of professional codes: the aspirational (ideals to which individuals should strive), the educational (which buttress understanding of its provisions with extensive commentary and interpretation.), and the regulatory (a set of detailed rules to govern conduct). Professional codes of conduct may deter unethical behavior in at least two ways: linking the codes to the threat of sanctions and "making it an affirmative duty for

professionals to report errant colleagues, thereby creating a monitoring system in which each professional assumes a responsibility for upholding the group's integrity" (Frankel 1989, p.112). In sum, professional ethical standards can not only enhance a company's ethical activities, but also influence employees' appreciation for ethics and social responsibility (Valentine and Fleischman 2008). Hence, it is reasonable to expect that those who applaud high professional ethical standards will be more likely to care about leader integrity and try to translate that values into action.

According to Simons' (2002) initial theorization of behavioral integrity, the salience of the value or behavior pattern espoused to the perceivers (i.e., observers) is one of the important factors that may moderate the influence of leader actual integrity on outcomes. Those who care about the espoused value and are actively trying to translate that value into action will be more likely to use central cognitive processing and to notice the leader behavioral alignment or misalignment with the espoused value (Simons 2002). Since individuals who perceive high professional ethical standards will be more likely to care about leader integrity, they will pay more attention to notice the alignment or misalignment between leader integrity and professional ethical standards. When there is an alignment between leader enacted values and those values espoused by perceived ethical standards, individuals will experience a high level of value congruence (Tomlinson et al. 2014) and identify strongly with their leaders. According to social learning theory, effective role modeling heavily relies on attention to the model and the behavior being modeled and identification with the model (Wood and Bandura 1989; Brown et al. 2005). Hence, those individuals who experience a higher level of professional ethical standards are more likely to notice leader integrity, and thus are more likely to respect, like, and take the supervisors who are high in leader integrity as their role models. In contrast, those individuals who perceive a lower level of professional ethical standards are less likely to notice leader integrity, and then less likely to respect, like, and take the supervisors as their role models. Therefore, it is reasonable to expect that perceived professional ethical standards moderate the link between higher-level managers' integrity and lower-level supervisors' integrity.

Thus, we propose:

Hypothesis 4 Supervisors' perceived professional ethical standards moderate the positive relationship between managers' integrity and supervisors' integrity, specifically, the relationship is stronger when supervisors' perceived professional ethical standards are higher (vs. lower).

So far we have presented theoretical rationales for the mediating effect of supervisors' integrity and the moderating effect of supervisors' perceived professional ethical

standards for leader integrity at different hierarchical levels. These rationales suggest a moderated mediation model. Supervisors' perceived professional ethical standards may moderate the indirect effect of manager integrity on employee creativity through supervisor integrity. The theoretical underpinnings for Hypotheses 3 and 4 indicate that through augmenting the association between manager integrity and supervisor integrity, supervisors' perceived professional ethical standards influence the degree to which manager integrity flows down organizational levels to promote employee creativity. Hence, we propose:

Hypothesis 5 Supervisors' perceived professional ethical standards moderate the indirect positive effect of manager integrity on employee creativity via supervisor integrity: The indirect positive effect is stronger when supervisors perceive a higher (vs. lower) level of professional ethical standards.

Methods

Sample and Procedure

The participants were white-collar workers employed in the offices of a manufacturing company located in Shanghai, China. Questionnaires were distributed to 960 employees and 300 supervisors. A cover letter attached to each questionnaire explained the objectives of the survey and assured respondents that their participation was voluntary and their responses would remain confidential. The participants placed their completed surveys in envelopes and returned them to a box in the human resources department. The employees were asked about their immediate supervisors' integrity. The supervisors were asked to evaluate their perceived professional ethical standards, employee creativity, and their immediate leaders' integrity.

The final sample consists of 716 employees and 237 supervisors. The response rate for employees and their direct supervisors was 75 and 79 %, respectively. On average, a supervisor had 3.01 employees. The average supervisor-employee relationship length was 25.55 months (S.D. = 28.10). The average age of the employees was 31.51 years (S.D. = 6.34). The employees' average organizational tenure was 34.97 months (S.D. = 35.99). There were 369 male employees, accounting for 52 % of the sample.

Measures

Leader integrity and perceived professional ethical standards were rated on a scale from 1 (completely disagree) to

5 (completely agree). Creativity was rated from 1, “completely disagree,” to 6, “completely agree.”

Leader Integrity

We used Moorman et al. (2013) 16-item scale to measure perceived leader integrity because it can “reflect the way followers come to define integrity and judge its presence in leaders” (p. 428). This scale consists of three dimensions: moral behavior, behavioral integrity, and consistency. The sample items for moral behavior, behavioral integrity, and consistency are “Treats people with care and respect,” “Will do what he/she says,” and “Does right even when unpopular,” respectively. Since our hypotheses did not distinguish amongst them, we combined the three dimensions (moral behavior, behavioral integrity, and consistency) into a single, higher-order factor. The second-order confirmatory factor analysis for both supervisor integrity ($X^2[101] = 421.63, p < .01; CFI = .97; TLI = .97; RMSEA = .07; SRMR = .03$) and manager integrity ($X^2[101] = 272.07, p < .01; CFI = .96; TLI = .95; RMSEA = .08; SRMR = .03$) showed that the higher-order factor fitted the data well. The Cronbach’s α for lower-level and upper-level manager integrity are both .97.

Creativity

We asked supervisors to evaluate their followers’ creativity with five items from previously validated measures (e.g. George and Zhou 2001; Scott and Bruce 1994), which have been used in Zhang et al. (2014). The sample item is “this employee comes up with new and practical ideas to improve performance.” The Cronbach’s α for creativity is .92.

Perceived Professional Ethical Standards

We used Valentine and Fleischman’s (2008) five-item scale. The sample items are “I believe that my profession is guided by high ethical standards,” and “My profession reprimands individuals and companies that behave unethically.” The Cronbach’s α for perceived professional ethical standards is .83.

Analytical Strategy

Theoretically, our hypothesized model is a 2-2-1 cross-level moderated mediation model. Specifically, supervisor integrity and supervisors’ perceived professional ethical standards are group-level variables. Manager integrity, operationalized and evaluated as a perception of

supervisors, can also be treated as a group-level variable. The dependent variable, employee creativity, is an individual-level variable.

As supervisor integrity was measured using ratings provided by employees, we needed to assess whether we could aggregate this measure to the group level of analysis. We applied R_{wg} and intraclass correlation (ICC) statistics (James 1982). We found an average R_{wg} of .85 (Median = .88), an ICC(1) of .59, an ICC(2) of .81, and a significant amount of between-group variance, $F(236, 715) = 5.319, p < .01$. As all of the results exceeded the recommended cutoff points ($R_{wg} > .70; ICC(1) > .25; ICC(2) > .70$) for justifying aggregation (LeBreton and Senter 2008), our aggregation was appropriate.

To test our hypotheses, we conducted path modeling using Mplus 7.0 program (Muthen and Muthen 2010) because it can perform well in testing complex moderated mediation models.

Results

The means, standard deviations, and correlations are exhibited in Table 1.

Validity of Constructs

We conducted confirmatory factor analysis to examine the factor structure of the four key study variables: supervisor integrity, manager integrity, perceived professional ethical standards, and creativity. We used the survey items as indicators for all measures except for supervisor integrity and manager integrity. Considering the leader integrity measure includes a large number of items, we used the three sub-dimensions of leader integrity as reflective indicators for both supervisor integrity and manager integrity according to Kishton and Wildaman’s (1994) approach, which has been used by other scholars (e.g., Shepherd et al. 2011; Shalley et al. 2009; Grant et al. 2014). The predicted four-factor solution showed a much better fit with the data ($X^2[98] = 424.23, p < .01; CFI = .96; TLI = .95; RMSEA = .07$), than all possible alternative models, for example, the 3-factor model combining supervisor integrity and manager integrity ($X^2[101] = 846.11, p < .01; CFI = .92; TLI = .90; RMSEA = .10$). In addition, all factor loadings in the 4-factor solution were statistically significant (for supervisor integrity: .78–.91; for manager integrity: .79–.95; for perceived professional ethical standards: .58–.81; for Creativity: .79–.85). These results indicate that all the measurements utilized in this study do possess the adequate discriminant validity for use in hypotheses testing.

Table 1 Individual-level descriptive statistics, reliabilities, and Correlations

Variables	Mean	S.D.	1	2	3	4	5	6	7	8
1. Age	31.51	6.34								
2. Gender	1.48	.50	-.12**							
3. Education	4.78	1.04	.09*	.13**						
4. Dyad tenure	25.55	28.10	.18**	.06	-.28**					
5. Supervisor integrity	4.09	.75	.21**	-.01	.38**	-.18**	(.97)			
6. Manager integrity	3.97	.74	.25**	-.04	.33**	-.19**	.50**	(.97)		
7. Perceived professional ethical standards	4.14	.71	.24**	.03	.33**	-.15**	.45**	.68**	(.83)	
8. Employee's creativity	4.00	1.10	.26**	-.08*	.43**	-.17**	.41**	.52**	.46**	(.92)

* $p < .05$; ** $p < .01$. Two-tailed tests. $n = 716$ at individual level, $n = 237$ at the team level. Reliabilities are reported along the diagonal

Hypothesis Test

We used M-plus software to test our cross-level moderated mediation model and calculated the conditional direct and indirect effects simultaneously. Our proposed model achieved adequate overall fit ($X^2[5] = 16.51$, $p < .01$; CFI = .96; TLI = .89; RMSEA = .06; SRMR_{within} < .01; SRMR_{between} = .04). Table 2 presents the results.

Hypothesis 1 predicted that the integrity of supervisors and managers would be positively associated with employee creativity. Our results demonstrated a positive relationship between supervisor integrity ($\gamma = .27$, $p < .01$) and manager integrity ($\gamma = .40$, $p < .01$) and employee creativity (see Table 2). Thus, Hypothesis 1 was supported.

Hypothesis 2 predicted that the integrity of managers would be positively associated with supervisors' integrity. Path modeling revealed a positive relationship between manager integrity and supervisor integrity ($\gamma = .34$, $p < .01$; see Table 2). Thus, Hypothesis 2 was supported.

Hypothesis 3 predicted that supervisor integrity would partially mediate the relationship between manager integrity and employee creativity. According to MacKinnon et al. (2002) recommendation, we calculated the product of coefficients of the independent variable and mediator. If

the indirect effect is statistically significant, we can say there is a mediating effect in the relationship between the antecedent and the outcome variable. Our results showed that the indirect effect was significant for the relationship between manager integrity and employee creativity (indirect = .09, $p < .05$). In addition, we used Bauer et al. (2006) method to calculate the confidence intervals for indirect effects because Mplus software cannot provide a sample bootstrapping approach for multilevel models. Our results showed that a 95 % confidence interval based on 20,000 repetitions for this indirect effect was [.02, .16]. As this confidence interval does not include zero, we conclude that the indirect effect of manager integrity on employee creativity through supervisor integrity is significant. Moreover, besides the significant indirect effect via supervisory integrity, manager integrity still has a significant direct effect on supervisory. Thus, Hypothesis 3 was supported.

Hypothesis 4 predicted that supervisors' perceived professional ethical standards moderated the positive relationship between manager integrity and supervisor integrity. As shown in Table 2, the product of supervisors' perceived professional ethical standards and manager integrity was positively related to supervisor integrity ($\gamma = .27$, $p < .01$). We plotted the interaction effects using

Table 2 Model estimation results

Dependent variables	Independent variables	Estimate(γ)	S.E.	P
Supervisor integrity	Manager integrity	.34	.06	.00
	perceived professional ethical standards	.23	.07	.00
	Manager integrity \times perceived professional ethical standards	.27	.05	.00
Employee creativity	Supervisor integrity	.27	.10	.01
	Manager integrity	.40	.10	.00
	perceived professional ethical standards	.30	.10	.00
	Manager integrity \times perceived professional ethical standards	.51	.11	.00

Aiken and West's (1991) procedure, computing slopes one standard deviation above and below the mean of moderator. Figure 2 shows that the relationship between manager integrity and supervisor integrity is stronger when supervisors' perceived professional ethical standards are higher than it is when perceived professional ethical standards are low. Thus, Hypothesis 4 was supported.

Hypothesis 5 predicted that supervisors' perceived professional ethical standards would moderate the indirect positive effect of manager integrity on employee creativity via supervisor integrity. To test this Hypothesis, we calculated the indirect effects of manager integrity on employee creativity through supervisor integrity when the moderator is high (Mean + 1 SD) and low (Mean - 1 SD). We also calculated the difference of the indirect effects when the moderator is high and low. The results in Table 3 show that the indirect positive effect is much stronger when supervisors perceive a high level of professional ethical standards (.14, $p < .01$) than it is when supervisors perceive a low level of professional ethical standards (.04, $p > .05$). The difference between the size of indirect effect at high and low levels of perceived professional ethical standards was .10 ($p < .05$). In addition, the 95 % confidence interval based on 20,000 repetitions for this indirect effect difference was [.02, .19], which excluded zero.

We also calculated the index of linear moderated mediation study because Hayes (2015) proposed that this index is a good indicator for testing moderated mediation effects. Our results showed that the index of moderated mediation was .07, with the 95 % confidence intervals computed using the bootstrap estimates excluding zero ([.02, .14]). Therefore, we conclude that the indirect effect of manager integrity on employee creativity through supervisor integrity is strongly moderated by supervisors'

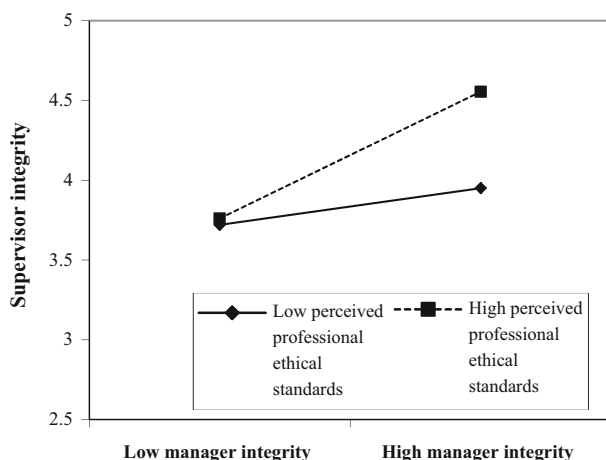


Fig. 2 Moderating effect of perceived professional ethical standards

perceived professional ethical standards. Thus, Hypothesis 5 was supported.

Discussion

This study investigated how different levels of leader integrity influence employee creativity. We proposed a trickle-down model in which leader integrity flows through multiple levels of management and finally influences employee creativity. Consistent with our hypotheses derived from social learning theory, supervisor integrity partially mediates the relationship between manager integrity and employee creativity. We also found that the supervisors' perceived professional ethical standards moderate the manager integrity and supervisor integrity link. In addition, we found that supervisors perceived professional ethical standards moderate the indirect effect of manager integrity on employee creativity through supervisor integrity.

Our results clearly address how different levels of leader integrity influence employee behavior. Davis and Rothstein (2006), in their meta-analysis, found that the distance between manager and respondent was a key moderator for the integrity-employee attitude link. Specifically, they found that the immediate leader integrity-employee attitude link ($r = .50$) was much stronger than the top leader integrity-employee attitude link ($r = .29$) and the 95 % confidence intervals of the two groups did not overlap. Their findings implied that supervisory behavioral integrity was proximal to organizational outcomes. However, they did not discuss why and how the differences exist and matter. Kannan-Narasimhan and Lawrence (2012) further investigated how leader integrity of different referents affects outcomes, and found that the behavioral integrity of both senior management and immediate supervisors was important, but its effect was different. Only senior management behavioral integrity was related to organizational commitment, and only supervisory behavioral integrity was related to organizational citizenship behavior. Both senior management and supervisor integrity were relevant to organizational cynicism. However, they did not examine the relationship between senior management and supervisory integrity. Our results support the idea that both levels of leader integrity are critical for employee creativity, and suggest that higher-level leader integrity may influence employee creativity indirectly through supervisory integrity.

An interesting finding in our study is that the relationship between manager integrity and employee creativity is stronger than the relationship between supervisor integrity and employee creativity. This finding is contradictory to Davis and Rothstein's (2006) result. In fact, how leaders at

Table 3 Results of the indirect effect analysis

Moderator	Indirect effect	S.E.	P	95 % Confidence Interval LL	95 % Confidence Interval UL
Low PPES (−1 SD)	.04	.02	.09	−.01	.09
High PPES (+1 SD)	.14	.06	.01	.03	.25
Differences between low and high	.10	.04	.02	.02	.19

Low PPES refers to one standard deviation below the mean of perceived professional ethical standards; High PPES refers to one standard deviation above the mean of perceived professional ethical standards. 95 % Confidence Interval LL-UL was calculated using parameter bootstrapping method. * $p < .05$; ** $p < .01$. Two-tailed tests

different hierarchical levels influence employee behavior is a critical and controversial question. Although some scholars and empirical research suggest that the immediate supervisor may have a greater influence on employee behavior, some other scholars argued that organizations are a reflection of their top managers and top managers should have greater influence on employee behavior (e.g. Schneider et al. 1995). For example, Lawler (1992) argued that the larger and encompassing collectivity is the primary source of individual empowerment and constraint (i.e., “distant rule”). Following this logic, high-status leaders are more likely viewed as representative of their organization and subsequently have greater impact on employees than lower-level managers. In line with this reasoning, Basford et al. (2012) found that senior management support shows a greater impact on followers’ intentions to stay than immediate supervisor support.

Our results suggest that in terms of employee creativity, higher-level leader integrity also plays a more important role. One possible reason is that compared to the lower-level team climate, the higher-level department climate for risk taking has a stronger effect on employee creativity. Therefore, higher-level leaders, who are the makers of the unit’s climate, have a stronger influence on employee behavior. Another possible reason lies in our sample source. Just as Lawler (1992) noted, the larger group tends to have greater impacts on individuals than subgroups especially in highly centralized environments. Our sample comes from a Chinese company. In Chinese culture, patriarchal or centralized style is a dominant management style in state-owned and private sectors. Thus, it is not unusual to find that managers have a greater influence on employee behavior because supervisors dare not exert their own personal influence in an organization.

Our results also showed that manager integrity still has a significant direct effect on employee creativity besides the indirect effect via supervisor integrity. This finding suggests there may be other mechanisms underlying the manager integrity-employee creativity link. For example, Kannan-Narasimhan and Lawrence (2012) found that trust in the senior management mediated the relationship between the behavioral integrity of the senior management and organizational commitment. Scholars have argued that

leader integrity can foster trust (e.g. Simons 2002, 2008). When leaders keep their promises and accurately represent their values, employees may trust them and feel safer. Following this logic, manager integrity may generate trust in the senior management, which leads to employee creativity. Therefore, future research could investigate the mediating effect of trust in senior management. In addition, Palanski and Vogelgesang (2011) suggested that psychological safety was positively related to subordinates’ perceptions of their leaders’ integrity, risk taking, and tendencies to creatively think. Thus, future research might also examine the possible mediating effect of psychological safety on the link between manager integrity and employee creativity. Moreover, Yidong and Xinxin (2013) revealed that intrinsic motivation may mediate the link between ethical leadership and innovative work behavior. Future research could assess the possible mediating effect of intrinsic motivation on the manager integrity-employee creativity link.

Theoretical Implications

This study has quite a few theoretical implications. First, it may contribute to the creativity literature by linking leader integrity and employee creativity directly. Leadership is a key antecedent for creativity; however, lots of studies mainly discussed transformational, authentic, ethical leadership on employee creativity. To the best of our knowledge, only Palanski and Vogelgesang (2011) once mentioned the relationship between leader integrity and employees’ tendencies to think creatively. However, they did not directly and rigorously examine this relationship. In addition, since creative thinking (which is more like a trait) is not the same as actual creativity (which is more like a state), their using four personality items from the Abridged Big-Five Dimensional Circumplex creativity subscale to measure creative thinking is inappropriate. A real creativity measure to rigorously and directly test the relationship between leader integrity and employee creativity is still needed. Our study filled this empirical gap by directly testing the relationship between leader integrity and employee creativity using a validated supervisor-rated creativity measure.

Second, the present study may contribute to the leadership literature on the cascading effect of leader behavior in that it demonstrates that leader integrity flows down through an organizational hierarchy from higher-level managers to lower-level managers, and finally manifests in employee creativity. Although Simons et al. (2007) found a positive correlation between higher-level and lower-level leader integrity, they did not examine how higher-level leader integrity influences distant followers' behaviors nor tested the cascading model fully, as only calculating the regression between the two levels of leader integrity. In addition, although considerable empirical research (e.g. Dineen et al. 2006; Palanski and Yammarino 2011) has investigated leader integrity and employee behavior, we still do not understand clearly the mechanism underlying the relationship between leader integrity and employee creativity. In particular, we know very little about how leader integrity at different hierarchical level interacts in different organizational settings. In this study, we find that supervisor integrity mediates the relationship between manager integrity and employee creativity.

Third, via introducing the moderator of perceived professional ethical standards, the present study contributes to the social learning literature by describing a more fine-grained picture about how followers learn from their leaders' integrity. Our study showed that if organizations want to shape supervisors' leader integrity, there are three important factors: managers' integrity (i.e., values enacted by the leader), professional ethical standards (i.e., values espoused by the profession and community), and the alignment between managers' integrity and professional ethical standards (i.e., alignment between the values enacted by the leader and the values espoused by the profession and community). Although the first factor has been studied in previous works (e.g., Simons et al. 2007), the present study is the first to provide evidence for the latter two factors. Simons (2002) suggested that the salience of the espoused value or behavior pattern will moderate the impact of leader actual integrity on outcomes. Based on his work, we argue that professional ethical standards will increase the salience of leader integrity and thus those who experience higher level of professional ethical standards will be more likely to mimic their leaders' integrity. Our study did support this reasoning. We found that if a supervisor has higher professional ethical standards, he/she may be more likely to imitate his/her leader's integrity. In addition, supervisors' perceived professional ethical standards strengthened the indirect effect of manager integrity on employee creativity via supervisor integrity. By demonstrating these relationships, we highlighted that the association between manager integrity and supervisor integrity is complex and cannot be fully unravelled without considering the moderating effects of perceived social ethic norms.

Implications for Practice

This study has a number of practical implications. First, considering the benefits of leader integrity at different levels in encouraging employee creativity, organizations should try to foster leader integrity throughout the hierarchy. For example, organizations can seek to select, recruit, and promote managers who are high in integrity by adding integrity as a criterion in the appraisal system. Organizations should also try to improve leader integrity through training programs. It is especially important for CEOs to create a culture of integrity and honesty in their organizations to encourage this behavior. A culture of integrity, rather than a compliance-oriented organizational culture, encourages employees not only to take risks and give opinions (Verhezen 2010), but also to be more willing to propose new and useful ideas.

Second, organizations should put more effort into fostering the integrity of higher-level leaders because our results indicate that this plays a more important role in encouraging employee creativity through processes, such as establishing the right climate or modeling. Therefore, the weight of "integrity" in appraisal and promotion systems should be increased and applied higher up the organizational hierarchy. Top managers or higher-level managers should pay more attention to the importance of their ethical behavior and ensure consistency between their values and words. This finding is quite consistent with the ideas of Chinese Confucianism, as represented by the saying, "to run a country with morality wins a ruler the respect that the Pole Star gets, circled by numerous other stars."

Third, given the influence of professional ethical standards, organizations should strengthen professional ethical education. Our results showed that supervisors who discern a high level of professional ethical standards are more likely to mimic their leaders' integrity. Thus, organizations should develop employees' professional ethical standards through training and corporate social responsibility activities. In addition, Higgs-Kleyn and Kapelanianis (1999) have revealed that the majority of respondents would adhere to a professional code of conduct over a corporate code in the event of a conflict between the two. Therefore, organizations should develop corporate ethical codes that are better synchronized with professional criteria (Valentine and Fleischman 2007).

Strengths, Limitations, and Future Research

This study has several strengths. First, whereas previous research mainly focused on leader integrity and employee behavior at the individual level, we examined the trickle-down model of leader integrity across levels. Second, we investigated the direct effects of leader integrity on

employee creativity. Third, this study avoids common method bias because we collected data from different sources. We assessed employee creativity and manager integrity from immediate supervisors, and supervisor integrity from employees.

Despite the strengths, there are still several limitations of this study. First, although our results are consistent with our theory that leader integrity flows from managers to supervisors and then manifests in employee creativity, we still cannot draw conclusions about the causality between the variables because of the study's cross-sectional design. Future research may replicate our study using an experimental or time-lagged design. Second, we assessed manager integrity only through immediate managers. The validity of the measure could be improved by asking several direct subordinates of managers to complete the questionnaire on manager integrity.

With regard to future directions, our study has several implications. First, although we used SLT to explain the trickle-down effect of leader integrity, we did not directly measure any modeling variables. Future studies may measure the mechanism variables directly to assess the explanatory power of social learning theory. Second, our study only investigated one possible mechanism linking manager integrity to employee creativity. Future research may investigate other possible mechanisms, for example, the mediating role of psychological safety (Palanski and Vogelgesang 2011) and leader trust (Kannan-Narasimhan and Lawrence 2012). Third, we investigated the moderating effect of professional ethical standards only. Future studies may examine other moderating variables. Finally, our study investigated only the effect of leader integrity on employee creativity. However, Gino and Ariely (2012) found that creativity may have negative side effect on integrity, that is, an increase in dishonesty. If this happens in some specific contexts, we may speculate that leader integrity may foster employee creativity, and subsequently encourage employee dishonesty. Thus, future research could investigate the possible complex relationships between these variables.

Conclusions

In this knowledge-based era, organizations are paying more and more attention to business ethics and creativity. We examined the link between leader integrity and employee creativity and showed that leader integrity at all hierarchical levels is important for fostering employee creativity. Leader integrity may flow from top to bottom, along the organization levels via imitation or modeling. Perceived professional ethical standards may strengthen this trickle-down effect.

Acknowledgments We would like to thank the National Natural Science Foundation of China (Grant No. 71272070) and the National Social Science Foundation of China (Grant No. 1509093) for their financial support.

References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). Assessing the work environment for creativity. *Academy of Management Journal*, *39*, 1154–1184.
- Amabile, T. M., Schatzel, E. A., Moneta, G. B., & Kramer, S. J. (2004). Leader behaviors and the work environment for creativity: Perceived leader support. *The Leadership Quarterly*, *15*, 5–32.
- Avolio, B. J., & Gardner, W. L. (2005). Authentic leadership development: Getting to the root of positive forms of leadership. *The Leadership Quarterly*, *16*, 315–338.
- Bandura, A. (1969). Social-learning theory of identificatory processes. In D. A. Goslin (Ed.), *Handbook of socialization theory and research* (pp. 213–262). Chicago: Rand McNally.
- Bandura, A. (1971). *Social learning theory*. New York: General Learning Press.
- Basford, T. E., Offermann, L. R., & Wirtz, P. W. (2012). Considering the source: The impact of leadership level on follower motivation and intent to stay. *Journal of Leadership & Organizational Studies*, *19*(2), 202–214.
- Bass, B. M., & Steidlmeier, P. (1999). Ethics, character, and authentic transformational leadership behavior. *The Leadership Quarterly*, *10*, 181–217.
- Bass, B. M., Waldman, D. A., Avolio, B. J., & Webb, M. (1987). Transformational leadership and the falling dominoes effect. *Group and Organization Studies*, *12*, 73–87.
- Bauer, D. J., Preacher, K. J., & Gil, K. M. (2006). Conceptualizing and testing random indirect effects and moderated mediation in multilevel models: New procedures and recommendations. *Psychological Methods*, *11*, 142–163.
- Bauman, D. C. (2013). Leadership and the three faces of integrity. *The Leadership Quarterly*, *24*, 414–426.
- Becker, T. (1998). Integrity in organizations: Beyond honesty and conscientiousness. *Academy of Management Review*, *23*, 154–161.
- Brenkert, G. C. (2010). The limits and prospects of business ethics. *Business Ethics Quarterly*, *20*(4), 703–709.
- Brown, M. E., Trevino, 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.
- Chun, J. U., Yammarino, F. J., Dionne, S. D., Sosik, J. S., & Moon, H. K. (2009). Leadership across hierarchical levels: Multiple levels of management and multiple levels of analysis. *The Leadership Quarterly*, *20*, 689–707.
- Craig, S. B., & Gustafson, S. B. (1998). Perceived leader integrity scale: An instrument for assessing employee perceptions of leader integrity. *The Leadership Quarterly*, *9*, 127–145.
- Dallas, L. L. (2012). Short-termism, the financial crisis, and corporate governance. *Journal of Corporation Law*, *37*(2), 265–364.
- Davis, A. L., & Rothstein, H. R. (2006). The effects of the perceived behavioral integrity of managers on employee attitudes: A meta-analysis. *Journal of Business Ethics*, *67*, 407–419.
- DiMaggio, P. J., & Powell, W. W. (1991). Introduction. In W. W. Powell & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 1–41). Chicago: The University of Chicago Press.

- Dineen, B. R., Lewicki, R. J., & Tomlinson, E. C. (2006). Supervisory guidance and behavioral integrity: Relationships with employee citizenship and deviant behavior. *Journal of Applied Psychology, 91*, 622–635.
- Felekoglu, B., & Moultrie, J. (2014). Top management involvement in new product development: A review and synthesis. *Journal of Product Innovation Management, 31*, 159–175.
- Frankel, M. S. (1989). Professional codes: Why, how and with what impact? *Journal of Business Ethics, 8*, 109–115.
- Fry, L. W. (2003). Toward a theory of spiritual leadership. *The Leadership Quarterly, 14*, 693–727.
- George, J. M. (2007). Creativity in organizations. In J. P. Walsh & A. P. Brief (Eds.), *Academy of management annals* (Vol. 1, pp. 439–477). New York: Erlbaum.
- 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.
- Gino, F., & Ariely, D. (2012). The dark side of creativity: Original thinkers can be more dishonest. *Journal of Personality and Social Psychology, 102*(3), 445–459.
- Grant, A. M., Berg, J. M., & Cable, D. M. (2014). Job titles as identity badges: How self-reflective titles can reduce emotional exhaustion. *Academy of Management Journal, 57*(4), 1201–1225.
- Grojean, M. W., Resick, C. J., Dickson, M. W., & Smith, D. B. (2004). Leaders, values, and organizational climate: Examining leadership strategies for establishing an organizational climate regarding ethics. *Journal of Business Ethics, 55*(3), 223–241.
- Hayes, A. F. (2015). An index and test of linear moderated mediation. *Multivariate Behavioral Research, 50*, 1–22.
- Hennessey, B. A., & Amabile, T. M. (2010). Creativity. *Annual Review of Psychology, 61*, 569–598.
- Higgs-Kleyn, N., & Kapelians, D. (1999). The role of professional codes in regulating ethical conduct. *Journal of Business Ethics, 19*, 363–374.
- Hoch, J. E. (2013). Shared leadership and innovation: The role of vertical leadership and employee integrity. *Journal of Business Psychology, 28*, 159–174.
- James, L. R. (1982). Aggregation bias in estimates of perceptual agreement. *Journal of Applied Psychology, 67*, 219–229.
- Janssen, O. (2003). Innovative behaviour and job involvement at the price of conflict and less satisfactory relations with co-workers. *Journal of Occupational and Organizational Psychology, 76*, 347–364.
- Kannan-Narasimhan, R., & Lawrence, B. S. (2012). Behavioral integrity: How leader referents and trust matter to workplace outcomes. *Journal of Business Ethics, 111*, 165–178.
- Kishton, J. M., & Widaman, K. F. (1994). Unidimensional versus domain representative parceling of questionnaire items: An empirical example. *Educational and Psychological Measurement, 54*, 757–765.
- Kleinschmidt, E. J., De Brentani, U., & Salomo, S. (2007). Performance of global new product development programs: A resource-based view. *Journal of Product Innovation Management, 24*, 419–441.
- Kozlowski, S. W. J., & Doherty, M. L. (1989). Integration of climate and leadership: Examination of a neglected issue. *Journal of Applied Psychology, 74*, 546–553.
- Lawler, E. J. (1992). Affective attachments to nested groups: A choice-process theory. *American Sociological Review, 57*, 327–339.
- LeBreton, J. M., & Senter, J. L. (2008). Answers to 20 questions about interrater reliability and interrater agreement. *Organizational Research Methods, 11*(4), 815–852.
- Lee, F., Edmondson, A. C., Thomke, S., & Worline, M. (2004). The mixed effects of inconsistency on experimentation in organizations. *Organization Science, 15*(3), 310–326.
- Leonard, D., & Swap, W. (2002). How managers can spark creativity. In F. Hesselbein & R. Johnston (Eds.), *On creativity, innovation, and renewal: A leader to leader guide* (pp. 55–66). San Francisco: Jossey-Bass.
- Leroy, H., Dierynck, B., Anseel, F., Simons, T., Halbesleben, J. R., McCaughey, D., et al. (2012a). Behavioral integrity for safety, priority of safety, psychological safety, and patient safety: A team-level study. *Journal of Applied Psychology, 97*(6), 1273–1281.
- Leroy, H., Palanski, M. E., & Simons, T. (2012b). Authentic leadership and behavioral integrity as drivers of follower commitment and performance. *Journal of Business Ethics, 107*, 255–264.
- Liao, H., Liu, D., & Loi, R. (2010). Looking at both sides of the social exchange coin: A social cognitive perspective on the joint effects of relationship quality and differentiation on creativity. *Academy of Management Journal, 53*, 1090–1109.
- Liu, D., Liao, H., & Loi, R. (2012). The dark side of leadership: A three-level investigation of the cascading effect of abusive supervision on creativity. *Academy of Management Journal, 55*, 1187–1212.
- Lord, R. G., Foti, R. J., & De Vader, C. L. (1984). A test of leadership categorization theory: Internal structure, information processing, and leadership perceptions. *Organizational Behavior and Human Performance, 34*(3), 343–378.
- Ma, Y., Cheng, W., Ribbens, B., & Zhou, J. (2013). Linking ethical leadership to employee creativity: Knowledge sharing and self-efficacy as mediators. *Social Behavior and Personality: An International Journal, 41*(9), 1409–1419.
- MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods, 7*, 83–104.
- Mawritz, M. B., Mayer, D. M., Hoobler, J. M., Wayne, S. J., & Marinova, S. V. (2012). A trickle-down model of abusive supervision. *Personnel Psychology, 65*, 325–357.
- Mayer, D. M., Kunenzi, M., Greenbaum, R., Bardes, M., & Salvador, R. (2009). How low does ethical leadership flow? Test of a trickle-down model. *Organizational Behavior and Human Decision Processes, 108*, 1–13.
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integration model of organizational trust. *Academy of Management Review, 20*, 709–734.
- Moorman, R. H., Darnold, T. C., & Priesemuth, M. (2013). Perceived leader integrity: Supporting the construct validity and utility of a multi-dimensional measure in two samples. *The Leadership Quarterly, 24*, 427–444.
- Morgan, R. B. (1989). Reliability and validity of a factor analytically derived measure of leadership behavior and characteristics. *Educational and Psychological Measurement, 49*, 911–919.
- Mumford, M. D., Scott, G. M., Gaddis, B., & Strange, J. M. (2002). Leading creative people: Orchestrating expertise and relationships. *The Leadership Quarterly, 13*(6), 705–750.
- Muthen, L. K., & Muthen, B. O. (2010). *MPlus: Statistical analysis with latent variables. User's guide*. Los Angeles: Muthen and Muthen.
- Ones, D. S., Viswesvaran, C., & Schmidt, F. L. (1993). Meta-analysis of integrity tests validities. *Journal of Applied Psychology, 78*, 679–693.
- Palanski, M. E., & Vogelgesang, G. R. (2011). Virtuous creativity: The effects of leader behavioural integrity on follower creative thinking and risk taking. *Canadian Journal of Administrative Sciences, 28*, 259–269.
- Palanski, M. E., & Yammarino, F. J. (2007). Integrity and leadership: Clearing the conceptual confusion. *European Management Journal, 25*(3), 171–184.

- Palanski, M. E., & Yammarino, F. J. (2009). Integrity and leadership: A multi-level conceptual framework. *The Leadership Quarterly*, 20, 405–420.
- Palanski, M. E., & Yammarino, F. J. (2011). Impact of behavioral integrity on follower job performance: A three-study examination. *The Leadership Quarterly*, 22, 765–786.
- Peterson, C., & Seligman, M. E. P. (2004). *Character strengths and virtues: A handbook and classification*. New York: Oxford University Press.
- Prottas, D. J. (2008). Perceived behavioral integrity: Relationships with employee attitudes, well-being, and absenteeism. *Journal of Business Ethics*, 81, 313–322.
- Prottas, D. J. (2013). Relationships among employee perception of their manager's behavioral integrity, moral distress, and employee attitudes and well-being. *Journal of Business Ethics*, 113, 51–60.
- Robinson, K. (2001). *Out of our minds: Learning to be creative*. West Sussex: Capstone Publishing Limited.
- Schneider, B. (1983). Interactional psychology and organizational behavior. In L. L. Cummings & B. M. Staw (Eds.), *Research in organizational behavior* (Vol. 5, pp. 1–31). Greenwich, CT: JAI Press.
- Schneider, B., Goldstein, H. W., & Smith, D. B. (1995). The ASA framework: An update. *Personnel Psychology*, 48(4), 747–773.
- Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of Management Journal*, 37(3), 580–607.
- Shalley, C. E., Gilson, L. L., & Blum, T. C. (2009). Interactive effects of growth need strength, work context, and job complexity on self-reported creative performance. *Academy of Management Journal*, 52(3), 489–505.
- Shepherd, D. A., Patzelt, H., & Wolfe, M. (2011). Moving forward from project failure: Negative emotions, affective commitment, and learning from the experience. *Academy of Management Journal*, 54(6), 1229–1259.
- Simons, T. (1999). Behavioral integrity as a critical ingredient for transformational leadership. *Journal of Organizational Change Management*, 12(2), 89–104.
- Simons, T. (2002). Behavioral integrity: The perceived alignment between managers' words and deeds as a research focus. *Organization Science*, 13, 18–35.
- Simons, T. (2008). *The integrity dividend: Leading by the power of your word*. San Francisco, CA: Jossey Bass.
- Simons, T., Friedman, R., Liu, L., & Parks, J. M. (2007). Racial differences in sensitivity to behavioral integrity: Attitudinal consequences, in-group effects, and “trickle down” among black and non-black employees. *Journal of Applied Psychology*, 92, 650–665.
- Simons, T., Leroy, H., Collewaert, V., & Masschelein, S. (2015). How leader alignment of words and deeds affects followers: A meta-analysis of behavioral integrity research. *Journal of Business Ethics*, 132, 831–844.
- Simons, T., Palanski, M., & Trevino, L. (2013). Toward a broader—but still rigorous—definition of leader integrity: Commentary. *Leadership Quarterly*, 24, 391–394.
- Simons, T., Tomlinson, E. C., & Leroy, H. (2011). Research on behavioral integrity: A promising construct for positive organizational scholarship. In K. Cameron & G. Spreitzer (Eds.), *Handbook of positive organizational scholarship* (pp. 325–339). Oxford: Oxford University Press.
- Sims, R. R., & Brinkmann, J. (2002). Leaders as Moral Role Models: The Case of John Gutfreund at Salomon Brothers. *Journal of Business Ethics*, 35(4), 327–339.
- Sims, R. R., & Brinkmann, J. (2003). Enron ethics (Or: Culture matters more than codes). *Journal of Business Ethics*, 45, 243–256.
- Tomlinson, E. C., Lewicki, R. J., & Ash, S. R. (2014). Disentangling the moral integrity construct: Values congruence as a moderator of the behavioral integrity-citizenship relationship. *Group and Organization Management*, 39, 720–743.
- Valentine, S., & Fleischman, G. (2008). Professional ethical standards, corporate social responsibility, and the perceived role of ethics and social responsibility. *Journal of Business Ethics*, 82, 657–666.
- Valentine, S., Godkin, L., Fleischman, G. M., & Kidwell, D. (2011). Corporate ethical values, group creativity, job satisfaction and turnover intention: The impact of work context on work response. *Journal of Business Ethics*, 98, 353–372.
- Verhezen, P. (2010). Giving voice in a culture of silence: From a culture of compliance to a culture of integrity. *Journal of Business Ethics*, 96, 187–206.
- Waldman, D. A., & Yammarino, F. J. (1999). CEO charismatic leadership: Levels-of-management and levels-of-analysis effects. *Academy of Management Review*, 24, 266–285.
- Weaver, G. R., Trevino, L. K., & Agle, B. (2005). Somebody I look up to: Ethical role models in organizations. *Organizational Dynamics*, 34, 313–330.
- White, D. W., & Lean, E. (2008). The impact of perceived leader integrity on subordinates in a work team environment. *Journal of Business Ethics*, 81, 765–778.
- Winter, D. G., & Barenbaum, N. B. (1985). Responsibility and the power motive in women and men. *Journal of Personality*, 53, 335–355.
- Wood, R., & Bandura, A. (1989). Social cognitive theory of organizational management. *Academy of Management Review*, 14, 361–384.
- Yidong, T., & Xinxin, L. (2013). How ethical leadership influence employees' innovative work behavior: A perspective of intrinsic motivation. *Journal of Business Ethics*, 116, 441–455.
- Zhang, Y., Lepine, J., Buckman, B., & Wei, F. (2014). It's not fair... or is it? The role of justice and leadership in explaining work stressor–job performance relationships. *Academy of Management Journal*, 57, 675–697.
- Zhou, J., & Woodman, R. W. (2003). Managers' recognition of employees' creative ideas. In L. V. Shavinina (Ed.), *International handbook on innovation* (pp. 631–640). Hillsdale, NJ: Lawrence Erlbaum.