A three-level examination of the cascading effects of ethical leadership on employee outcomes: A moderated mediation analysis

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ABSTRACT

Keywords:
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Trickle-down effects
Self-enhancement motive
Social loafing
Task performance

Based on social learning theory, we developed a moderated-mediation model of trickle-down effects to test how the ethical leadership of high-level leaders influences the ethical leadership of low-level leaders and the work outcomes of subordinate employees. Data were collected from 224 leader-employee dyads at six large companies in South Korea. The results of hierarchical regression analyses provided support for this model. Our results indicated that the ethical leadership of high-level leaders trickles down to low-level leaders, which then reduces the social loafing of employees while increasing their task performance. We also found that the self-enhancement motives of low-level leaders moderate the positive relationship between the ethical leadership of high and low-level leaders in a way that strengthens this relationship when the motives are low rather than high. This finding further suggests that low levels of self-enhancement motives strengthen the indirect effects of ethical, high-level leadership on employee social loafing and task performance.

1. Introduction

Various instances in which leaders have behaved unethically have resulted in a series of negative impacts on their respective firms and stakeholders. Varying from large corporate scandals to the less-sensational withholding behaviors of employees, these impacts reduce productivity and result in financial losses to firms (Bello, 2012). Beyond these direct harms (Kacmar, Bachrach, Harris, & Zlomuska, 2011), the proliferation of unethical behaviors in one organization can, like a proverbial “rotten apple,” potentially spread to other organizations and then into society as a whole (Treviño & Youngblood, 1990). For this reason, ethical leadership, which is conceptualized as a leader’s display of normatively appropriate conduct and the promotion of such conduct among his or her followers (Brown, Treviño, & Harrison, 2005), has become an increasingly important and popular topic in both the media and academia (Treviño, Weaver, & Reynolds, 2006).

Over the past decade, the study of ethical leadership has grown rapidly (cf., Ng & Feldman, 2015), with one research branch focusing on the effects of ethical leadership on the positive or negative organizational behaviors of followers. According to a recent meta-analysis by Hoch, Bommer, Dulebohn, and Wu (2018), ethical leadership improves desirable employee outcomes, such as organizational citizenship behaviors, job satisfaction, employee engagement, and organizational commitment, and also reduces employee deviance and turnover intentions. Although these studies contribute to our understanding of the significance of ethical leadership for achieving desirable performance outcomes, much less is known about the specific processes through which ethical leadership elicits these effects. Researchers have only developed a preliminary understanding of how the influence of ethical leadership trickles down through the organizational hierarchy to influence performance outcomes. Indeed, many researchers have called for studies along this developing line of inquiry (Bedi, Alpaslan, & Green, 2016; Brown & Treviño, 2006a; Ng & Feldman, 2015).

According to social learning theory (Bandura, 1977), individuals learn norms and appropriate behaviors by observing the behaviors of others who are credible and attractive. Several researchers have suggested that the ethical behaviors of leaders play a key role in efforts to foster positive, value-driven behaviors in employees (Bedi et al., 2016; Bums, 1978). A number of leadership constructs, such as transformational leadership (Bass, 1985; Bums, 1978), servant leadership (Greenleaf, 1977), and authentic leadership (Avolio & Gardner, 2005), contain elements of ethics. However, these constructs focus on a range of leadership behaviors that do not categorically include clear ethical components, and that therefore may not fully explain the effects of the ethical behaviors and choices of leaders and how those behaviors influence employees (Brown & Treviño, 2006a).
In contrast, ethical leadership focuses on a range of behaviors with an ethical conceptual focus. Ethical leaders embody integrity and help establish and reinforce ethical standards set for themselves and their subordinates (Bandura, 1977; Brown & Treviño, 2006a). As a result, leaders at lower levels of the organizational hierarchy can emulate and internalize the ethical values and standards of higher-level leaders. This internalization of values and standards within lower-level leaders then enhances the desirable behaviors of subordinate employees and decreases their harmful conduct through a role-modeling process. These effects have been referred to as the “trickle-down” or “cascading” effects of leadership (Bass, Waldman, Avolio, & Bebb, 1987).

Research has provided empirical evidence for the effect of high-level ethical leadership on the ethical behaviors of lower-level leaders, which helps to support the existence of cascading effects (Mayer, Kuenzi, Greenbaum, Bardes, & Salvador, 2009; Ruiz, Ruiz, & Martinez, 2011b). However, these studies have mainly focused on the effect of top managerial leadership styles on organizational outcomes, but have not fully established the mediating processes, moderating variables, or boundary conditions. Previous studies have also relied on the ratings of general employees in measuring the ethical behavior of leaders. Such practices can obscure the trickling-down of ethical leadership across organizational layers during the influencing process (Mayer et al., 2009; Ruiz et al., 2011b). Yet, ethical leadership across the organizational hierarchy might be most accurately measured by assessing the perceptions that direct subordinates have about their leaders across multiple leadership levels. Therefore, to ascertain the effects of multi-layered ethical leadership on performance, the field requires further studies constructed to identify the key variables of the influencing process and that use an appropriate strategy for testing these subtleties.

To partially address these concerns, the current study examines one particular process through which ethical leadership influences the work outcomes of employees across the organizational hierarchy by using data collected from leaders and employees at multiple levels. In particular, we investigated how ethical leadership trickles down across the organizational hierarchy to reduce the social loafing of employees and improve task performance.

Social loafing is often prevalent during team and group work, and results in decreased employee motivation and effort that falls below the level that can be achieved during individual work activities (Karau & Williams, 1993). This can pose a potent barrier to productivity and team performance (Erez & Somech, 1996; Steiner, 1972). Therefore, the identification of corrective methods to social loafing is valuable to both management scholars and practitioners. Effective leader behaviors may provide such a category of potent corrective methods. Unfortunately, the current literature on social loafing has largely disregarded leadership influences (for notable exceptions see Ellemers, De Gilder, & Haslam, 2004; Kerr & Stanfel, 1993). Thus, ethical leadership with its strong normative implications for promoting behaviors with positive implications for collective organizational outcomes provides a promising area of study for this inquiry. Therefore, our study also aims to fill another prominent research gap by examining the potential for ethical leadership across multiple organizational layers to serve as a corrective method for the social loafing of employees.

Additionally, in social learning processes, individuals may respond differently to role models depending on the types and strengths of their motives. Indeed, the differential levels of subordinates’ specific motives are associated with differential levels of their adherence to and imitation of ethical leadership behaviors (Brown & Treviño, 2006a). Accordingly, the strength of low-level leaders’ learning and imitation of the ethical behaviors of high-level leaders can vary (Mayer et al., 2009). Among various core social motives, the self-enhancement motive involves the improvement of one’s self-image (Yun, Takeuchi, & Liu, 2007), and has been found to deliver a strong impact on the social learning process (Fiske, 2003; Yun et al., 2007). As such, this motive may serve as a potential moderator for the trickle-down process of ethical leadership that involves social learning. However, the extent literature on the cascading effect of leadership has focused on the influence of certain extraneous factors, such as the general organizational climate (Ling, Lin, & Wu, 2016; Mawritz, Mayer, Hoolber, Wayne, & Marinova, 2012; Shin, 2012), on the transmission process. Current literature has paid insufficient attention to the role of self-enhancement motives, especially as an intrinsic factor that arises from individuals involved in the interpersonal learning process. Therefore, our study also seeks to provide insight into the potential influence of the self-enhancement motives of lower-level leaders in their acquisition of ethical leadership behaviors from higher-level leaders.

In summary, this study makes three unique and important contributions. First, it proposes that ethical leadership can trickle down across two leadership levels to reduce social loafing and improve the task performance of subordinates. This multi-level model of the antecedents and outcomes of ethical leadership improves our understanding of the dynamics of ethical leadership across multiple levels of the organizational hierarchy. Second, this study examines the additional subtleties of this cascading process by incorporating and testing the role of self-enhancement motives. The potential roles of individual motives have been widely acknowledged, but not explicitly examined in previous studies on the trickle-down effects of ethical leadership (Mayer et al., 2009; Mayer, Kuenzi, & Greenbaum, 2010; Ruiz et al., 2011b; Schaumbroeck et al., 2012). Therefore, our results concerning the moderating role of self-enhancement motives may help researchers uncover further intricacies in the cascading process and provide practical implications to managers who are interested in fostering ethical behaviors among their subordinates. Finally, this study assists in further developing the social loafing literature by examining ethical leadership as a new corrective method to social loafing. Thus, this study highlights the potential for further linkages between the literature on leadership and that on social loafing and also highlights the potential for field investigations that intend to identify certain under-explored antecedents of social loafing, particularly those embedded in organizational relationships.

2. Literature review and theoretical development

2.1. Ethical leadership and employee work outcomes

Ethical leadership is defined as a leader’s “demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and his or her promotion of such conduct to followers through two way communication, reinforcement, and decision-making” (Brown et al., 2005; p. 120). Based on the social learning perspective (Bandura, 1977), Brown and Treviño (2006a) suggested three processes through which the ethical leadership behaviors of top managers influence employee outcomes: modeling, communication, and the performance management system. First, the normatively appropriate behaviors of ethical leaders are generally perceived as attractive and such leaders are seen as credible role models for their employees. Second, ethical leaders can continually communicate the importance of ethical standards to employees, who are then influenced to conduct themselves ethically. Third, employees adhere to high ethical standards in the performance management systems developed by ethical leaders (Fig. 1).

Ethical leadership has been found to influence the work attitudes and outcomes of employees (Brown & Treviño, 2006a), including job satisfaction (Tsai & Huang, 2008), organizational commitment (Tsai & Huang, 2008), turnover intentions (Mulki, Jaramillo, & Locander, 2008), organizational citizenship behaviors (Mayer et al., 2009), intrinsic motivation (Piccolo, Greenbaum, Den Hartog, & Folger, 2010), task performance (Piccolo et al., 2010), and the willingness to report problems (Brown et al., 2005). Although the extant literature shows that ethical leadership can contribute to organizational and individual effectiveness (Brown & Treviño, 2006a; Piccolo et al., 2010), it has not equally investigated the potential of ethical leadership to mitigate
undesirable workplace behaviors of employees. In particular, Mayer and colleagues (Mayer et al., 2009; Mayer et al., 2010) examined the relationship between the ethical climate in organizations and employee misconduct. However, these studies focused mainly on the normatively sanctioned behaviors of employees, such as misconduct, but have not clarified the influence of ethical leadership on more discretionary aspects of employee behaviors that may be less subject to immediate sanction, such as the willingness to work hard and contribute to collective tasks. Additionally, although several researchers have suggested that ethical leadership is positively related to organizational citizenship behavior that is discretionary but important to organizational performance (Piccolo et al., 2010; Ruiz, Ruiz, & Knörr, 2011), they have not examined the relationship between the ethical leadership of superiors and the in-role behaviors of subordinates, such as social loafing, and the associated performance implications.

Social loafing refers to the effort-withholding behaviors of employees during group tasks (Bennett & Naumann, 2005). Collective work effort is often found to be less than the sum of individual efforts when employees work alone (Kravitz & Martin, 1986). This represents a significant loss of organizational productivity. Therefore, many researchers have tried to identify factors that can reduce or eliminate social loafing (Karau & Williams, 2001). Most of the relevant research has focused on situational and contextual factors to explain the occurrence of social loafing (Price, Harrison, & Gavin, 2006; Witt, Andrews, & Kacmar, 2000). With few exceptions (e.g., George, 1995), the role of leadership as a potential explanatory factor has been long ignored by social loafing scholars. Yet, ethical leadership may play a significant role in reducing or eliminating social loafing based on the logic of three prominent theoretical perspectives.

First, according to social learning theory (Bandura, 1977), individuals learn and imitate the behavior of others to form or develop their own attitudes and behaviors (Kolk, Van Dolen, & Vock, 2010; Mayer et al., 2009). Ethical leaders represent attractive and legitimate role models for their employees. By imitating and following ethical leaders, employees can internalize and adopt their ethical standards and values. As a result, ethical leaders can serve as role models for their employees by exerting effort and upholding high performance standards. These leaders can enhance and maintain the efforts of their employees during group tasks by boosting their value systems. Furthermore, ethical leadership behaviors can elevate employees’ intrinsic motivation, which may contribute to improvements in collective task performance. This is accomplished by offering employees the opportunity to express their views and assuring them of more control over their own work (Piccolo et al., 2010). Thus, through the social learning and modeling processes, ethical leadership may reduce social loafing during collective tasks.

Second, the relationship between ethical leadership and employee social loafing can be further articulated in terms of social exchange theory (Blau, 1964). By definition, ethical leadership involves integrity, fairness, caring treatment, trust, and benevolence in the workplace (Brown & Treviño, 2006a). These elements allow leaders and employees to establish a high-quality social exchange relationship. Thus, employees reciprocally respond by holding positive attitudes toward jobs and exerting additional efforts. This is because social exchange relationships tend to be moderated by feelings of personal obligation and reciprocity (Blau, 1964). Such willingness to increase work efforts during group or collective tasks could reduce the likelihood of social loafing.

Finally, the Collective Effort Model (CEM) of individual motivation on group tasks (Karau & Williams, 2001) provides additional bases for predicting a relationship between ethical leadership and reduced employee social loafing. The CEM posits that individual effort during a collective task is influenced by the extent to which individuals believe that their efforts will lead to outcomes that they personally value and/or the extent to which such efforts will be recognized by others. In organizational contexts, employees evaluate contextual favorability (i.e., whether the context involves recognition and reward for employee efforts and inputs) primarily by observing their leaders (Burris, Detert, & Chiaburu, 2008; Van Dyne, Kamdar, & Joireman, 2008). In this regard, ethical leaders provide their employees with valuable clues about the appropriate level of effort, and influence employee evaluations of the likelihood that their own hard work and performance will be recognized and rewarded.

From this standpoint, ethical leadership can enhance individual effort during group tasks either by accentuating the importance of individual efforts in realizing group goals, or attaching value to individual efforts that lead to collective outcomes (Resick, Hanges, Dickson, & Mitchelson, 2006). The commitment of ethical leaders to two-way communication and listening to their employees (Brown & Treviño, 2006a) can help subordinate employees believe that their efforts are capable of making a difference, and will be adequately recognized and appreciated. Consistent with this logic, the signaling effects of ethical leaders have been found in the effects of ethical leadership on various positive employee behaviors, such as organizational citizenship and vocalization (e.g., Huang & Paterson, 2017; Mo & Shi, 2017). However, the specifics of each mechanism differ slightly from one another. Moreover, by setting standards of high performance, reinforcing the values of shared goals and teamwork, and modeling behaviors that serve group interests (Resick et al., 2006), ethical leaders can also strengthen the value attached to collective outcomes by individual employees. Taken together, our analysis of the social learning theory, social exchange theory, and CEM converge to form the following hypothesis:

H1a. Ethical leadership is negatively related to the social loafing of employees.

By adopting the ethical behaviors that employees observe from their leaders over time, employees can perceive themselves as more attractive and legitimate. Thus, their level of self-esteem can be improved. This positive increase in self-image can then increase self-efficacy.
during task accomplishment and when pursuing goals, which contributes to higher levels of task performance. Ethical leaders also treat their employees with trust and responsibility (Brown et al., 2005). Therefore, social exchange theory (Blau, 1964) suggests that employees are willing to reciprocate by improving task performance. Thus, we hypothesize the following:

**H1b.** Ethical leadership is positively related to the task performance of employees.

### 2.2. Trickle-down effects of ethical leadership

Individuals develop their attitudes and behaviors via social learning processes (Bandura, 1977). Leaders can similarly learn and develop their own leadership patterns by imitating the desirable behaviors of higher-ranking leaders, who often serve as notable and conspicuous role models in the organization (Schaubroeck et al., 2012). The power and status of high-level leaders enhances the attractiveness of their behaviors (Bandura, 1986). This encourages low-level leaders to value the ethical behaviors of high-level leaders, which can then be used as anchors and references for their own behaviors (Brown & Treviño, 2006a).

Beyond being role models, high-level leaders often actively demonstrate and teach ethical standards in their organizations, and can foster a general ethical climate across the organizational hierarchical ladder both by modeling and upholding ethical standards and via rewards and punishments (Mayer et al., 2010). Followers can also vicariously learn appropriate behaviors by observing the rewards or punishments elicited by the behaviors of other organizational members (Brown & Treviño, 2006a). Furthermore, managers' ethical decision-making can be influenced by the organization's ethical climate, as developed or influenced by higher-level managers (Flannery & May, 2000). Therefore, based on social learning theory and emerging empirical evidence regarding the transmission of ethical leadership behaviors across leadership levels, we hypothesize the following:

**H2.** The ethical leadership of high-level leaders is positively related to the ethical leadership of low-level leaders.

In investigating the prosocial and negative behaviors of employees, some studies have attributed the positive effects of ethical leadership on employee outcomes to contextual work variables (Brown et al., 2005; Mayer et al., 2009). For example, Piccolo et al. (2010) suggested that task significance mediates the relationship between ethical leadership and task performance. However, these studies have not examined the possibility that ethical leadership could trickle down through the corporate leadership hierarchy to influence employee task performance.

In fact, the cascading effects of leadership styles across the corporate hierarchy imply that low-level leaders may have the ability to mediate the relationship between the same leadership style of their superiors and certain employee behaviors and outcomes. The direct and indirect effect of leadership on the outcomes of lower-level employees has been labeled “the cascade of leadership,” “the trickle-down effect,” and “the falling dominoes effect” (Bass et al., 1987; Waldman & Yammarino, 1999). A number of studies have provided evidence to support the presence of these cascading effects in certain types of leadership (Mayer et al., 2009; Ruiz, Ruiz, & Martinez, 2011a; Ruiz et al., 2011b). For instance, the leadership styles of high-level leaders directly or indirectly influence their subordinates through the subordinate imitation of those leadership styles (Bass et al., 1987). As another example, abusive supervision leadership trickle down across hierarchical levels and affects the organizational citizenship behaviors of employees (Aryee, Chen, Sun, & Debrah, 2007).

Within an organizational hierarchy, higher-level leaders can exert influence on employee behaviors (Mayer et al., 2009; Schneider, Goldstein, & Smith, 1995). However, immediate leaders tend to exert even stronger influences on employee behaviors because these leaders maintain more frequent, direct, and immediate contact with their employees (Brander, Dhawadkar, & Wheatley, 2004; Mayer et al., 2009). Both high-level and immediate leaders simultaneously affect employee behaviors through different mechanisms (Mayer et al., 2009). Specifically, high-level leaders tend to emphasize more general organizational values and provide more general guidance to employees, whereas low-level leaders tend to influence their immediate subordinates and other employees by following and disseminating the general values and guidance prompts of their high-level leaders. Thus, the influence of high-level ethical leadership is two-fold: (1) it influences lower-level leaders, who then influence their immediate subordinates; and (2) it generally influences the guidelines and values of the entire organization, which then influence subordinates. Specifically, the ethical leadership of high-level managers helps to develop a general atmosphere that improves the ethical standards and values of both low-level leaders and front-line employees, which encourages collaboration in the organization (Mayer et al., 2009). As a result, the ethical leadership of high-level managers fosters increased employee willingness to exert effort toward collective tasks that benefit work groups and the entire organization.

In Hypothesis 1b, we proposed that ethical leadership increases employee task performance. Based on the cascading effects of ethical leadership, we also posit that the ethical leadership of high-level leaders will also increase employee task performance through the ethical leadership of low-level leaders. Therefore, we hypothesize the following:

**H3a.** The ethical leadership of low-level leaders mediates the relationship between the ethical leadership of high-level leaders and the social loafing of employees.

**H3b.** The ethical leadership of low-level leaders mediates the relationship between the ethical leadership of high-level leaders and the task performance of employees.

### 2.3. Role of self-enhancement motives

Few studies have examined the possible factors that amplify or reduce the magnitude of trickle-down effects. The few exceptions have examined the influences of extraneous factors, such as the general organizational climate (Ling et al., 2016; Mawritz et al., 2012; Shin, 2012). In this study, we focus on the self-enhancement motive as an intrinsic factor that influences the strength of the trickle-down effects of ethical leadership. The self-enhancement motive refers to an “individual employee's sensitivity to other people's perception of him or her and the employee's level of motivation to adapt his or her behavior in order to project a good self-image to others” (Yun et al., 2007, p. 749). As one of the core social motives (Fiske, 2003), the self-enhancement motive affects the interpersonal relationships of leaders (Tesser, 1988), as well as their ethical attitudes (Manley, Russell, & Buckley, 2001). The intrinsic social nature of the motive makes it especially capable of affecting the interpersonal learning processes underlying the cascading effects of ethical leadership.

Individuals with high self-enhancement motives tend to exert more effort to impress others (Bolino, Kacmar, Turnley, & Gilstrap, 2008) and also to maintain and enhance their own self-image (Yun et al., 2007). They do this by strictly and more frequently cultivating and displaying socially appropriate or desirable behaviors. Indeed, individuals with high self-enhancement motives were found to have an increased tendency to conform to social norms (Kruger & Gilovich, 2004) and to maintain a favorable self-image for others in the organization to observe (Swift, Balkin, & Matusik, 2010; Yun et al., 2007). In other words, the self-enhancement motive prompts individuals to engage in various normatively appropriate behaviors and patterns of communication and decision making that are central to ethical leadership. Thus, even when a high-level leader does not display sufficient ethical leadership, low-level leaders with high self-enhancement motives may still engage in appropriate and ethical behaviors, as these behaviors are instrumental...
to their goals of self-enhancement (Swift et al., 2010; Yun et al., 2007).

However, individuals with low self-enhancement motives and low intrinsic motivation to enhance their self-image may only display ethical behaviors when situational or other extrinsic factors require this conduct, such as when their leaders are ethics-oriented and encourage, support, and demand ethical actions from their followers (Yun et al., 2007). Therefore, low-level leaders with high self-enhancement motives may behave (or at least appear to behave) ethically in a consistent way, whereas low-level leaders with low self-enhancement motives may behave ethically only when required to by extraneous factors, such as when a higher-level leader engages in ethical behaviors and expects the same from subordinates (Ling et al., 2016; Mawritz et al., 2012; Shin, 2012). Therefore, the ethical leadership of high-level leaders should have a stronger positive effect on the ethical leadership of low-level leaders with low (rather than high) self-enhancement motives. We thus hypothesize the following:

H5a. Self-enhancement motive moderates the negative and indirect effect of the ethical leadership of high-level leaders on employee outcomes through the ethical leadership of low-level leaders; this indirect linkage depends on the level of self-enhancement motives. That is, via the ethical leadership behaviors of low-level leaders, the self-enhancement motives of low-level leaders conditionally influence the strength of the indirect effect of the ethical leadership of high-level leaders on employee outcomes. Since we predict strong (weak) linkages between the ethical leadership of high-level leaders and that of low-level leaders when the self-enhancement motives of low-level leaders is low (high), we hypothesize the following:

H5b. Self-enhancement motive moderates the positive and indirect effect of the ethical leadership of high-level leaders on the social loafing of employees through the ethical leadership of low-level leaders, such that the mediated relationship is stronger for those who have low self-enhancement motives than for those who have high self-enhancement motives.

H5c. Self-enhancement motive moderates the positive and indirect effect of the ethical leadership of high-level leaders on the task performance of employees through the ethical leadership of low-level leaders, such that the mediated relationship is stronger for those who have low self-enhancement motives than for those who have high self-enhancement motives.

3. Method

3.1. Sample

Data were collected from full-time employees of six major national or international companies specializing in electronics, automobiles, and telecommunication in South Korea. In each company, the human resource (HR) manager randomly selected supervisor (i.e., team leader)-subordinate (i.e., employee) dyads for participation. We then sent separate questionnaires to each selected team leader and one of his or her subordinates if the team leader expressed willingness to participate. Before the survey was distributed, all participants were informed of the anonymity and confidentiality of the survey. In total, we distributed 335 pairs of surveys, which were all marked with unique matching numbers to ensure both identification for pairing purposes and anonymity. A total of 262 employee surveys and 244 team leader surveys were returned, resulting in response rates of 78.2% for employees and 72.8% for team leaders. After deleting unmatched data, we retained the data of 224 team leader-employee pairs for statistical analyses. Of the employees, 45.3% were male with an average age of 34.18 years (SD = 5.54), an average job tenure of 6.34 years (SD = 4.86), and an average tenure with their current team leader of 2.07 years (SD = 2.30). Among the team leaders, 54.7% were male with an average age of 41.96 years (SD = 6.15).

3.2. Measures

Employees evaluated the ethical leadership of their team leaders (low-level leaders). The team leaders evaluated 1) the social loafing and task performance of their employees, 2) the ethical leadership behaviors of their department leaders (high-level leaders), and 3) their own self-enhancement motives. All items were measured on seven-point Likert-type scales (ranging from 1 = strongly disagree to 7 = strongly agree).

3.2.1. Ethical leadership

Ethical leadership for both low- and high-level leaders was measured using ten items from Brown et al. (2005). A sample item reads, “My supervisor conducts his/her personal life in an ethical manner.”

3.2.2. Self-enhancement motive

Self-enhancement motive (of low-level leaders) was measured using six items from Yun et al. (2007). A sample item reads, “I am sensitive to the impressions that others have about me.”

3.2.3. Social loafing

Employee social loafing was measured using nine items from George (1992), with some items reworded slightly for the more general business context of our study. A sample item reads, “The employee puts forth less effort on the job when other employees are around to do the work.”

3.2.4. Task performance

Employee task performance was measured using seven items from Williams and Anderson (1991). A sample item reads, “This subordinate adequately completes assigned duties.”

We added several controls to this study, including the age, gender, and job tenure of subordinate employees, as well as the age and gender of low-level leaders. Age was measured in years, and gender was measured as a binary variable. We also controlled for the tenure of each subordinate with their current supervisor (measured in years) by considering that the length of time spent working with one’s current supervisor could affect the subordinate-supervisor relationship, and could thus affect the supervisor’s evaluation of the subordinate’s performance (Arnold, Turner, Barling, Kelloway, & McKee, 2007).

We tested our proposed model in two related steps. First, following Baron and Kenny (1986), we used SPSS 19.0 to run a hierarchical regression analysis to examine a simple mediation model (for Hypotheses 1a, 1b, 2, 3a, and 3b) and a moderation model (for Hypothesis 4). Recently, a more advanced bootstrap approach to obtain confidence intervals was recommended by a number of methodologists (Hayes & Preacher, 2010; Preacher & Hayes, 2004) to test mediation effects. Thus, we also tested the mediation hypothesis by using the bootstrapping method and a Sobel test. Second, we tested the overall moderated mediation hypothesis by using the related SPSS that was macro-developed by Preacher et al. (2007).

4. Results

Table 1 lists the Cronbach’s alpha coefficients of the variables and their correlation coefficients. None of the correlations were above the
Hierarchical regression of mediation test on employee outcomes.

Table 2
Descriptive statistics and correlations.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
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<th>10</th>
<th>11</th>
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</thead>
<tbody>
<tr>
<td>1. Employee age</td>
<td>34.18</td>
<td>5.54</td>
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<td>2. Employee gender</td>
<td>1.55</td>
<td>0.50</td>
<td>0.03</td>
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<td>3. Employee tenure</td>
<td>6.34</td>
<td>4.86</td>
<td>0.65</td>
<td>0.09</td>
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<td>4. Tenure with low-level leader</td>
<td>2.07</td>
<td>2.30</td>
<td>0.28</td>
<td>0.07</td>
<td>0.37</td>
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<td>5. Low-level leader age</td>
<td>41.96</td>
<td>6.15</td>
<td>0.25</td>
<td>-0.08</td>
<td>0.23</td>
<td>0.02</td>
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<td>6. Low-level leader gender</td>
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<td>0.50</td>
<td>0.16</td>
<td>0.59</td>
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<td>0.12</td>
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<td>7. High-level leader ethical leadership</td>
<td>5.20</td>
<td>1.23</td>
<td>0.07</td>
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<td>0.06</td>
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<tr>
<td>8. Low-level leader self-enhancement motive</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>9. Low-level leader ethical leadership</td>
<td>5.17</td>
<td>1.03</td>
<td>0.03</td>
<td>0.07</td>
<td>-0.05</td>
<td>0.09</td>
<td>0.09</td>
<td>0.23</td>
<td>0.17</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Employee social loafing</td>
<td>2.19</td>
<td>1.07</td>
<td>-0.06</td>
<td>-0.19</td>
<td>-0.15</td>
<td>-0.05</td>
<td>-0.07</td>
<td>-0.22</td>
<td>-0.23</td>
<td>-0.34</td>
<td>-0.21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Employee task performance</td>
<td>5.76</td>
<td>0.88</td>
<td>0.11</td>
<td>0.17</td>
<td>0.18</td>
<td>0.03</td>
<td>0.06</td>
<td>0.18</td>
<td>0.27</td>
<td>0.35</td>
<td>0.26</td>
<td>-0.59</td>
<td>0.93</td>
</tr>
</tbody>
</table>

Note. N = 224. Reliabilities are on the diagonal in parentheses.

* These variables were measured from employee.

** These variables was measured from the low-level leader.

*** p < 0.01

0.69 threshold suggested by Cohen and Cohen (1983) or the 0.90 threshold suggested by Hair, Black, Babin, Anderson, and Tatham (2006), indicating minimal multicollinearity in the data. The reliabilities of all measures are above 0.93, thus passing the 0.70 threshold considered acceptable for research use (Nunnally, 1978).

We mean-centered all variables and then created the interaction terms (i.e., team leader, ethical leadership, and the self-enhancement motive) (Aiken & West, 1991). In Table 2, Model 2A shows the results concerning Hypothesis 1a, which proposes a negative relationship between ethical leadership and employee social loafing. As predicted, ethical leadership is negatively related to employee social loafing (β = -0.23, p < 0.001), which lends support for Hypothesis 1a. Hypothesis 1b proposes a positive relationship between ethical leadership and employee task performance. As shown in Model 5A in Table 2, the ethical leadership of team leaders is positively associated with employee task performance (β = 0.27, p < 0.001), which supports Hypothesis 1b.

Hypothesis 2 predicts that the ethical leadership of high-level leaders positively contributes to the ethical leadership of low-level leaders. As shown in Model 2 in Table 4, the ethical leadership of high-level leaders is positively related to the ethical leadership of low-level leaders (β = 0.23, p < 0.001). Therefore, Hypothesis 2 is supported.

Hypotheses 3a and 3b propose a trickle-down effect of ethical leadership on employee outcomes (i.e., that the ethical leadership of low-level leaders serves as a mediator for the relationship between the ethical leadership of high-level leaders and employee outcomes (i.e., social loafing and task performance)). Model 2B in Table 2 shows a significant negative influence of the ethical leadership of low-level leaders on social loafing (β = -0.21, p < 0.01). In Model 3 and Model 2A, the significance of the effect of the ethical leadership of high-level leaders on social loafing is reduced with the strong presence of the ethical leadership of low-level leaders (β = -0.20, p < 0.01 in Model 3 vs. β = -0.23, p < 0.001 in Model 2A). Both increases in F value and R² from Model 2A to Model 3 are significant (ΔF = 6.14, p < 0.05, ΔR² = 0.02). The results indicate that the ethical leadership of low-level leaders serves as a partial mediator for the relationship between the ethical leadership of high-level leaders and employee social loafing (Baron & Kenny, 1986). Model 6 in Table 2 shows a positive effect of the ethical leadership of team leaders on employee task performance (β = 0.21, p < 0.01), and the significance of the effect of the ethical

Table 2
Hierarchical regression test on employee outcomes.

<table>
<thead>
<tr>
<th>Step 1: Control variables</th>
<th>Social loafing</th>
<th>Task performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee age</td>
<td>0.07</td>
<td>0.08</td>
</tr>
<tr>
<td>Employee gender</td>
<td>-0.08</td>
<td>-0.08</td>
</tr>
<tr>
<td>Employee education</td>
<td>-0.10</td>
<td>-0.10</td>
</tr>
<tr>
<td>Tenure with low-level leader</td>
<td>-0.01</td>
<td>0.02</td>
</tr>
<tr>
<td>Low-level leader age</td>
<td>-0.10</td>
<td>-0.09</td>
</tr>
<tr>
<td>Low-level leader gender</td>
<td>-0.18</td>
<td>-0.20</td>
</tr>
</tbody>
</table>

Step 2: Main effects

High-level leader ethical leadership | -0.23<sup>***</sup> | -0.20 | 0.27<sup>**</sup> | 0.22<sup>**</sup>

Step 3: Main effects

Low-level leader ethical leadership |

Overall F | 2.94<sup>**</sup> | 4.56<sup>**</sup> | 4.11<sup>**</sup> | 4.85<sup>**</sup> | 2.48<sup>**</sup> | 4.84<sup>**</sup> | 4.75<sup>**</sup> | 5.84<sup>***</sup> |

R² | 0.08 | 0.13 | 0.12 | 0.15 | 0.06 | 0.14 | 0.13 | 0.18 |

Change in F | 13.25<sup>**</sup> | 10.32<sup>**</sup> | 6.14 | 17.96<sup>**</sup> | 17.25<sup>**</sup> | 11.11<sup>**</sup> |

Change in R² | 0.05 | 0.04 | 0.02 | 0.07 | 0.07 | 0.04 |

Note. N = 224.

* p < 0.05.

** p < 0.01.

*** p < 0.001 (two-tailed).
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leadership of high-level leaders on employee task performance is reduced in comparison to the effect in Model 5A (β = 0.22, \( p < 0.01 \) in Model 6 vs. \( \hat{\beta} = 0.27, \ p < 0.001 \) in Model 5A). The \( F \) change is significant (\( \Delta F = 11.11, \ p < 0.01 \)), and the change in \( R^2 \) was small, but significant (\( \Delta R^2 = 0.04 \)). These results indicate that the ethical leadership of low-level leaders partially mediates the relationship between the ethical leadership of high-level leaders and the task performance of employees.

Additionally, we conducted a Sobel test to further assess the indirect effect of the ethical leadership of high-level leaders on the social loafing and task performance of employees. The results in Table 3 show that the mediating effect of the ethical leadership of low-level leaders on social loafing is significant (\( \hat{\beta} = 0.04 \)). Similarly, the mediation for the relationship between the ethical leadership of high-level leaders and the task performance of employees is also significant (\( \hat{\beta} = 0.01 \)). Furthermore, we used bootstrapping methods to test the significance of the indirect effects. This method estimates a 95% bias-corrected confidence interval by bootstrapping 10,000 samples (Preacher et al., 2007). The confidence interval of social loafing is from \(-0.07\) to \(-0.01\), which excludes zero, and thus indicates that the indirect effect of the ethical leadership of high-level leaders on the social loafing of employees is statistically significant. The confidence interval of task performance is between \(0.01\) and \(0.07\), which suggests that the ethical leadership of high-level leaders has a significant influence on the task performance of employees. Taken together, Hypotheses 3a and 3b are thus supported. These results indicate that the ethical leadership of high-level leaders both directly and indirectly affects the social loafing and task performance of employees through the ethical leadership of low-level leaders.

Hypothesis 4 predicts that the self-enhancement motives of low-level leaders moderate the positive relationship between the ethical leadership of high- and low-level leaders. The results of Model 4 in Table 4 indicate that the coefficient for the interaction term involving the ethical leadership of high-level leaders and the self-enhancement motives of low-level leaders is negative and statistically significant (\( \hat{\beta} = -0.13, \ p < 0.05 \), \( R^2 = 0.02 \)), and that the incremental variance accounted for by the interaction term is significant (\( \Delta F = 3.98, \ p < 0.05 \)). To further explore this interaction effect, we plotted the results by using the procedure suggested by Aiken and West (1991). In Fig. 2, the positive relationship between the ethical leadership of low-level leaders and high-level leaders becomes stronger when self-enhancement motives are low rather than high. These results provide support for Hypothesis 4.

Hypotheses 5a and 5b propose that self-enhancement motives conditionally influence the strength of the indirect effect of the ethical leadership of high-level leaders on employee outcomes via the ethical leadership of low-level leaders. As previously stated, we used the SPSS macro developed by Preacher et al. (2007) to test this moderated mediation hypothesis. Table 5 presents the results concerning the moderated mediation effect. Consistent with Hypothesis 5a, the effect of the ethical leadership of high-level leaders on employee social loafing via the ethical leadership of low-level leaders is conditional on the level of self-enhancement motives. This indirect effect is stronger...
(−0.04) and significant (with a confidence interval ranging from −0.10 to −0.01 and not crossing zero) for low self-enhancement motives. However, the indirect effect is weaker (−0.01) and insignificant for high self-enhancement motives (with a confidence interval ranging from −0.05 to 0.02, crossing zero). Therefore, Hypothesis 5a is supported.

The results in Table 5 suggest that the indirect effect on employee task performance is stronger (0.04) and significant (with a confidence interval ranging from 0.01 to 0.07 and not crossing zero) for low self-enhancement motives. However, this indirect effect becomes weaker (0.01) and insignificant (with a confidence interval ranging from −0.02 to 0.04 and crossing zero) for high self-enhancement motives. Therefore, Hypothesis 5b is also supported.

5. Discussion

Our study identified a moderated mediation process that embodies the flow of ethical leadership across the hierarchical levels of organizations. Specifically, ethical leadership flows down from high-level leaders to low-level leaders, and results in desirable employee outcomes in the form of reduced social loafing and improved task performance. Furthermore, the self-enhancement motives of low-level leaders moderate the trickle-down process. That is, the effects of the ethical leadership of high-level leaders on that of low-level leaders are more prominent when low-level leaders have low (rather than high) levels of self-enhancement motives. Taken as a whole, these findings illustrate the vital roles that ethical leadership plays across multiple hierarchical levels in achieving desirable performance outcomes.

5.1. Theoretical implications

Our results expand the literature on leadership and social loafing in several ways. First, in responding to calls for identifying a broader range of the possible consequences of ethical leadership (Brown & Treviño, 2006a), we established a link bridging two important but previously unconnected fields of study (i.e., the literature on ethical leadership and the literature on social loafing). The extant literature in ethical leadership has focused on its effects on normatively sanctioned behaviors that may be both less frequent and less visible in organizations (Mayer et al., 2009; Mayer et al., 2010; Ng & Feldman, 2015). However, the literature has long ignored the potential impact of ethical leadership on social loafing, which is a frequently occurring and pervasive phenomenon that arises from distinctive motivations and concerns related to group tasks (Karau & Williams, 1993). Our findings suggest that ethical leadership may exert influence on a wider range of subordinate motivations, behaviors, and outcomes than those suggested by past research. In particular, our study extends the effects of ethical leadership to motivation on group tasks by showing that ethical leadership can reduce social loafing, which is a pervasive phenomenon that can pose a significant barrier to team performance.

Second, this study used multi-level data to more comprehensively uncover a mechanism channeling the effects of ethical leadership from high-level leaders to low-level leaders, and then to employee outcomes. Over the past decade, there has been an accumulation of studies on the effects of ethical leadership in the organization (Bhal & Dadhich, 2011; Brown et al., 2005; Kacmar et al., 2011; Piccolo et al., 2010; Shin, 2012). However, only a limited number of studies were devoted to exploring the “black box” linking ethical leadership and these outcomes (e.g., Mayer et al., 2009; Mayer et al., 2010; Ruiz et al., 2011b; Schaubroeck et al., 2012). Therefore, researchers have been calling for studies to uncover the “black box” by examining the mediating and moderating processes (Brown & Treviño, 2006a; Ng & Feldman, 2015). Of the few studies that did examine the trickle-down effects of ethical leadership on subordinate OCBs and deviant behaviors, almost all relied exclusively on data about the ethical leadership of both top and field managers as rated by lower-level employees. Such an approach to data collection has been criticized for having a high likelihood of common method bias (Schaubroeck et al., 2012). In our study, the multi-level leadership data collected from immediate subordinates at two different levels allowed us to more accurately ascertain the trickle-down effects of ethical leadership across different levels in reducing the social loafing of employees and improving their task performance.

Furthermore, our study reveals additional subtleties of the trickle-down process by identifying how the self-enhancement motive moderates the trickle-down process. The extant literature shows that extraneous contextual factors can influence the strength of the transmission of ethical leadership across the organizational hierarchy (Ling et al., 2016; Mawritz et al., 2012; Shin, 2012). However, these studies have not given due attention to the effects of the intrinsic factors (such as motives involved in the interpersonal learning process) on the trickle-down effects of ethical leadership. The mediated moderation framework used in this study enabled us to more accurately observe the role of one particular motive (i.e., the self-enhancement motive) in this process.

5.2. Practical implications

This research has a number of practical implications. First, our study highlights the cascading effects of ethical leadership across multiple hierarchical levels in reducing employee social loafing and improving task performance. Most leadership studies have focused on the effects leaders have on their immediate subordinates (Kacmar et al., 2011; Mayer et al., 2010; Piccolo et al., 2010). However, our research suggests that (apart from organized seminars and training sessions designed to directly foster the ethical behaviors of front-line employees) high-level managers can indirectly achieve the same goal. That is, they can set high ethical standards and then adhere to those standards themselves, which influences the behaviors and attitudes of field managers, who then further influence the behaviors and attitudes of front-line employees.

Second, our study indicates that ethical leadership behaviors can reduce employee social loafing and improve task performance. Many field managers remain suspicious of the possibility that ethical leadership can realistically result in substantive, positive outcomes for organizations (Brown & Treviño, 2006b). Our findings provide evidence counter to this suspicion. Indeed, the ethical behavior of high-level leaders motivates employees to work hard and perform well during both individual and group tasks.

Our study also suggests that the ethical leadership of high-level leaders has the strongest impact on the ethical behaviors of low-level
leaders with low (rather than high) self-enhancement motives. Leaders with low self-enhancement motives tend to be less motivated to develop and maintain a favorable self-image (Yun et al., 2007), and thus may have lower baseline motivations to develop ethical leadership behaviors. Fortunately, our findings suggest that high-level leaders can foster the ethical leadership behavior of their subordinate leaders by serving as role models and standard-bearers.

5.3. Limitations and future directions

Despite its empirical, theoretical, and practical contributions, our study has three limitations that could be addressed in future research. First, we only used survey data to measure the perception of ethical leadership and employee outcomes. Future studies may use objective data for performance or outcomes to more accurately examine the effects of ethical leadership on the outcome variables, such as social loafing and task performance. Second, the cross-sectional design of this study does not allow for causal inferences. Thus, future studies could adopt longitudinal or experimental designs to establish the causal relationships examined in our study, and further confirm the trickle-down effects of ethical leadership. Third, this study identified only one moderator (i.e., the self-enhancement motive) for the trickle-down effect of ethical leadership. However, other individual characteristics or situational factors may also facilitate or inhibit these trickle-down effects. For example, Den Hartog and Belschak (2012) suggested that the effects of ethical leadership on employee work behaviors are not as strong when ethical leaders are high (rather than low) in Machiavellianism. In another instance, Kacmar et al. (2011) suggested that the association between ethical leadership and employee citizenship behaviors depends on employee perception of organizational politics. Additional individual characteristics, such as exchange ideology and core self-evaluations, and situational factors, such as job demands or the organizational climate, may generate the same moderation effects. Further research examining these factors would aid in uncovering the subtleties involved in the trickle-down processes of ethical leadership.

References

Bandura, A. (1986). The explanatory and predictive scope of self-evaluations. Fortunately, our findings suggest that high-level leaders can foster the ethical leadership behavior of their subordinate leaders by serving as role models and standard-bearers.
